



A COLLECTIVE INDEX

OF THE

TRANSACTIONS, PROCEEDINGS AND ABSTRACTS

THE CHEMICAL SOCIETY

1903-1912

PART I—INDEX OF AUTHORS

13122114

LONDON:

GURNEY AND JACKSON (Successors to J. VAN VOORST), 33 PATERNOSTER ROW, E.C.

RICHARD CLAY & SONS, LIMITED,
BRUNSWICK STREET, STAMFORD STREET, S.E.,
AND BUNGAY, SUFFOLK.

Andrew Jan Land Section of the Poster.

QD 166 Index A. 1903-12 cop.3

ABBREVIATIONS.

T. = Transactions.	d	= dextro.
P. = Proceedings.	1	= lævo.
A., i. = Abstracts, vol. I.	i	= inactive.
A., ii. = Abstracts, vol. II.	r	= racemic.
		= symmetrical.
o = ortho.	as	= unsymmetrical.
m = meta.	b.p.	= boiling point.
p = para.	m.p.	= melting point.
$n = \text{normal.}^*$	N	= attached to nitrogen.
prim. = primary.	0	=attached to oxygen.
sec. = secondary.	C	= attached to carbon.
tert. = tertiary.	S	= attached to sulphur.
vic. = vicinal.	ar.	= aromatic.
ψ = pseudo	ac.	=alicyclic.

^{*} Except in the term, n-rays.

SERVICE STATES

Accounts the second of the control o

INDEX OF AUTHORS.

Abadie, Jean. See J. Sellier.

Abati, Gino, influence of the position of the ethylene linking on the electroaffinity and characters of unsaturated alicyclic acids, 1906, A., i,

hydrophthalic acids. II. Affinity constants of two new anhydrides, 1906,

A., i, 959.

hydrophthalic acids. IV. A2:5-cyclo-Hexadiene-1:2-dicarboxylic acid; constitution of the A2:5- and A1:3acids, 1907, A., i, 419.

the addition of bromine to unsaturated compounds. I. Allyl and propenyl derivatives of benzene, 1910,

A., i, 732.

Abati, Gino, and Luigi de Bernardinis, hydrophthalic acids. I. Two new hydrophthalic anhydrides, 1905, A.,

i. 599.

Abati, Gino, and Andrea Contaldi, hydrophthalic acids. III. Transformation by heat of the new dihydrophthalic anhydrides; characters of the pmethoxyphenylhydrophthalimides, 1906, A., i, 959.

Abati, Gino, and Paolo Gallo, action of phenylcarbamide on certain phenyl-

amic acids, 1906, A., i, 944.

Abati, Gino, and Cesare de Horatiis, hydrophthalic acids. VII. Resolution of the racemic form of the fumaroid △4-tetrahydrophthalic acid, 1909, A., i, 386.

Abati, Gino, and Salvatore Minerva, hydrophthalic acids. V. Reduction of phthalic acid by means of sodium

amalgam, 1907, A., i, 420.

Abati, Gino, and F. de Notaris, relations between the chemical and physical characters and the constitution of isomeric amino-derivatives of camphoric acid, 1909, A.,i, 783.

Abati, Gino, and Mauro Solimene, hydrophthalic acids. VI. Velocity of addition of bromine to the tetrahydrophthalic anhydrides, 1909, A., i, 104.

Abati, Gino, and Ernesto Vergari, hydrophthalic acids. VIII. Influence of presence and position of the ethylene grouping on the refraction and dispersion of hydrophthalic anhydrides, 1909, A., i, 386.

Abati, Gino. See also Arnaldo Piutti. Abbott, George Alonzo, rate of hydration of pyrophosphoric acid in aqueous solution, 1909, A., ii, 661; 1911, A.,

ii, 108.

Abbott, George Alonzo, and William Crowell Bray, ionisation relations of ortho- and pyro-phosphoric acids and their sodium salts, 1909, A., ii, 660.

Abbott, Howe, electrolytic preparation of iodoform from acetone, 1903, A.,

Abbott, James Francis, and Andrew Creamore Life, galvanotropism in bacteria, 1908, A., ii, 614.

Abderhalden, Emil, hydrolysis of crystallised oxyhemoglobin from horses'

blood, 1903, A., i, 587.

hydrolysis of crystallised serumalbumin from horses' blood, 1903, A., i, 588.

hydrolysis of edestin, 1903, A., i, 588; 1904, A., i, 211.

formation of carbamide by the oxidation of albumin with permanganate according to Jolles, 1903, A., i, 588, 779.

the blood in high altitudes, 1903, A., ii, 161.

cystin diathesis in families, 1903, A., ii, 564.

monoamino-acids from salmine, 1904, A., i, 463.

protein chemistry and physiology, 1905, A., i, 498; 1908, A., ii, 460.

Abderhalden, Emil, proteolysis and protein synthesis in the animal organism, 1905, A., ii, 334.

the importance of the digestion of proteins for their assimilation, 1905,

A., ii, 334.

cystine occurring in urinary calculi, 1907, A., i, 476.

proteoses in blood, 1908, A., ii, 305. monoamino-acids of byssus, 1908, A., ii, 517.

the degradation of 2:5-diketopiperazines in the organism of the rabbit, 1908, A., ii, 521.

albumose in the blood, 1908, A., ii,

605.

the nutritive value of protein cleavage products, 1908, A., ii, 1051; 1909, A., ii, 817.

composition of different silks, 1909, A., i, 275; 1911, A., i, 1050.

polypeptides containing l-tryptophan, 1909, A., i, 603.

protein metabolism, 1909, A., ii, 413. partial hydrolysis of proteins, 1909, A., i, 273, 859; 1910, A., i, 211, 447; 1911, A., i, 589.

the amino-acids obtainable by the total hydrolysis of proteins, 1910,

A., i, 792.

the detection of peptolytic enzymes in animal and vegetable tissues, 1910, A., ii, 666.

a-aminobutyric acid, 1911, A., i, 955. cholesterol obtained from the skull contents of an Egyptian mummy, 1911, A., ii, 1006.

peptolytic enzymes in parasitic worms,

1911, A., ii, 1009.

free amino-acids in the intestinal contents of certain mammals, 1911, A., ii, 1011.

preparation and estimation of tyrosine and glutamic acid, 1912, A., i, 261. melting point of 3:5-di-iodotyrosine, 1912, A., i, 261.

notes: [tryptophan; selective absorption; nomenclature], 1912, A.,

i, 521.

feeding investigation with completely digested nutriment; solution of the problem of the artificial preparation of nutritive material, 1912, A., ii, 363.

estimation of tyrosine and glutamic

acid, 1912, A., ii, 395.

the fate of protein cleavage products in the intestine; the occurrence of individual amino-acids in different parts of the intestinal canal, 1912, A., ii, 574.

Abderhalden, Emil, feeding experiments with the amino-acids derived from protein, and with ammonium salts, 1912, A., ii, 575.

the occurrence of peptolytic enzymes,

1912, A., ii, 576.

formation of homogentisic acid after the administration of large quantities of l-tyrosine by the mouth.

1912, A., ii, 585.

isolation of glycyl-l-phenylalanine from the chyme of small intestine: biological studies with the help of different protein cleavage products and synthetically prepared polypeptides, 1912, A., ii, 1190. anaphylaxis, 1912, A., ii, 1194.

Abderhalden, Emil, and Boris P. Babkin, the monoamino-acids of legumin, 1906, A., i, 546.

the fate of leucylglycine in the organism of the dog, 1906, A., ii, 464.

Abderhalden, Emil, and Lewellus Franklin Barker, amino-acids in urine, 1904, A., ii, 753.

Abderhalden, Emil, and Louis Baumann. the monoamino-acids of crystallised oxyhæmoglobin, 1907, A., i, 572. tryptophan, 1908, A., i, 488.

polypeptides containing tryptophan,

1908, A., i, 932.

derivatives of amino-acids. IV. Compounds with glycerol, 1911, A., i, 543.

Abderhalden, Emil, Louis Baumann, and Efim Semen London, normal protein digestion in the dog's alimentary canal, 1907, A., ii, 489.

Abderhalden, Emil, and Lotte Behrend. composition of different silks. II. The monoamino-acids of Canton silk, 1909,

A., i, 343.

Abderhalden, Emil, and Peter Bergell, degradation of peptides in the organism, 1903, A., ii, 666.

occurrence of monoamino-acids in the after phosphorus rabbit's urine poisoning, 1903, A., ii, 742.

adrenaline, 1904, A., i, 791.

Abderhalden, Emil, Peter Bergell, and Theodor Dörpinghaus, the carbohydrate group in serum-globulin, serum-albumin, and egg-albumin, 1904, A., i, 640. condition of the body protein in

inanition, 1904, A., ii, 272.

Abderhalden, Emil, and Oscar Berghausen, monoamino-acids of the crystalline protein from pumpkin seeds, 1906, A., i, 999.

Abderhalden, Emil, and Bruno Bloch, metabolism in alcaptonuria, 1908,

A., ii, 54.

Abderhalden, Emil, Bruno Bloch, and Peter Rona, the cleavage of certain dipeptides derived from tyrosine and phenylalanine during a case of alcaptonuria, 1907, A., ii, 800.

Abderhalden, Emil, and Paul Blumberg, derivatives of amino-acids, 1910, A., i,

371.

Abderhalden, Emil, and Carl Brahm, fermentative cleavage of polypeptides. VI., 1909, A., i, 73.

monoamino-acids in the muscular substances of Egyptian mummies, 1909,

A., i, 750.

composition of different silks. III. The monoamino-acids of Shantung tussore silk, 1909, A., i, 750.

metabolism of different classes of animals. II., 1909, A., ii, 904. serological studies by the help of the optical method. VIII., 1910, A.,

ii, 319. is the assimilation of fat in the body-

cells dependent on the composition of the fat in the food ? 1910, A., ii, 520. Abderhalden, Emil, Carl Brahm, and

Alfred Schittenhelm, metabolism in various classes of animals. I., 1909, A., ii, 327.

Abderhalden, Emil, and G. Alessandro Brossa, synthesis of polypeptides: derivatives of p-iodophenylalanine, 1909, A., i, 800.

composition of different silks. Monoamino-acids from Nièt ngō tsam silk from China, 1909, A., i, 859.

Abderhalden, Emil, Gottfried Caemmerer, and Ludwig Pincussohn, fermentative cleavage of polypeptides. VII., 1909, A., i, 345.

Abderhalden, Emil, and Hsing Lang Chang, polypeptides containing daminobutyric acid, 1912, A., i, 338.

Abderhalden, Emil, Hsing Lang Chang, and Erich Wurm, synthesis of polypeptides; derivatives of a-aminobutyric acid and their behaviour towards peptolytic ferments, 1911, A., i, 526.

Abderhalden, Emil, and Karl Dammhahn, peptolytic ferments in germinating and ungerminated seeds of various

plants, 1908, A., ii, 1065.

Abderhalden, Emil, and H. R. Dean, formation of silk, 1909, A., ii, 418.

Abderhalden, Emil, and Heinrich Dee-

tjen, the cleavage of polypeptides by the red corpuscles and platelets of the horse, 1907, A., ii, 486, 889.

Abderhalden, Emil, and Erich Ebstein. monoamino-acids of the membrane of hens' eggs, 1906, A., ii, 781.

Abderhalden, Emil, and Hans Einbeck. the cleavage of histidine in the dog's

organism, 1909, A., ii, 906.

Abderhalden, Emil, Hans Einbeck, and Julius Schmid, cleavage of histidine in the organism of the dog, 1910, A., ii. 974.

Abderhalden, Emil, and Oskar Emmerling, cleavage of gliadin by Bacillus mesentericus vulgatus, 1907, A., ii, 497.

Abderhalden, Emil, and Wilhelm Falta, the blood proteins in a case of alcap-

tonuria, 1903, A., ii, 663.

Abderhalden, Emil, and Andor Fodor. the possible isomeric tripeptides from the three monoaminocarboxylic acids: glycine, d-alanine, and l-leucine, 1912, A., i, 950.

Abderhalden, Emil, Franz Frank, and Alfred Schittenhelm, the value of protein-cleavage products in the human organism, 1909, A., ii, 1033.

Abderhalden, Emil, and Oskar Frank, the nutritive value of protein cleavage products. XII., 1910, A., ii, 322.

Abderhalden, Emil, and Friedrich Friedel, action of pepsin. IV., 1911, A., ii, 506.

Abderhalden, Emil, and Dénes Fuchs, glutamic acid in various keratins,

1908, A., i, 1029. Abderhalden, Emil, and Casimir Funk, the products obtained by boiling casein with 25 % sulphuric or concentrated hydrochloric acid, 1907, A., i, 1095.

estimation of sulphur in urine, 1909,

A., ii, 263, 343.

the new formation of amino-acids in the animal organism, 1909, A., ii,

derivatives of amino-acids. II. Compounds with aliphatic acids, 1910, A., i, 226.

partial hydrolysis of proteins, 1910, A., i, 320.

Abderhalden, Emil, Casimir Funk, and Efim Semen London, assimilation of protein in animals, 1907, A., ii, 487.

Abderhalden, Emil, Alberto Furno, Erich Goebel, and Paul Strübel, the value of different amino-acids in the organism of the dog under different circumstances, 1911, A., ii, 1002.

Abderhalden, Emil, and Heinrich Geddert, preparation of optically active polypeptides from racemic compounds,

1911, A., i, 842.

Abderhalden, Emil, and Alfred Gigon, fermentative cleavage of polypeptides, 1907, A., ii, 892.

the cleavage of edestin (from hemp seed) by pancreatic juice alone, and by gastric and pancreatic juices,

1907, A., ii, 893.

Abderhalden, Emil, Alfred Gigon, and Efim Semen London, the behaviour of d-alanine in the organism of the dog, 1907, A., ii, 891.

Abderhalden, Emil, Alfred Gigon, and Eduard Strauss, the part played by certain amino-acids in different

animals, 1907, A., ii, 488.

Abderhalden, Emil, and Fidel Glamser, the value of protein cleavage products in the animal organism. XIII., 1910, A., ii, 521.

Abderhalden, Emil, and Emil Gressel. the behaviour of iodo-fat derivatives of cholesterol in the dog's body, 1911,

A., ii, 1015.

- Abderhalden, Emil, and Markus Guggenheim, the action of tyrosinase from Russula delica on tyrosine, tyrosine-containing polypeptides, and other compounds, 1908, A., i, 237.
 - synthesis of polypeptides; derivatives of 2:5-di-iodo-l-tyrosine, 1908, A., i, 420, 886.
 - synthesis of polypeptides, 1908, A., i, 535.
 - the action of tyrosinase from Russula delica on polypeptides which contain tyrosine and on suprarenine, 1908, A., 1, 1030.

detection of glycine, 1909, A., ii,

448.

- derivatives of amino-acids. I. Compounds with glycerol, 1910, A., i,
- Abderhalden, Emil, and Juho Hämäläinen, monoamino-acids from avenine, 1907, A., i, 831.
- Abderhalden, Emil, and Paul Hahn, comparative investigations on the rotatory properties of the plasma and serum of dog's blood under varying conditions. II., 1910, A., ii, 1081.

and Rudolf Abderhalden. Emil, Hanslian, the use of the ester method for the detection of monoamino-acids in the presence of polypeptides,

1912, A., ii, 500. behaviour of inorganic constituents of nutriments in the alimentary canal. I. The behaviour of the iron and calcium of flesh in digestion, 1912, A., ii, 956.

- Emil, and Rudolf Abderhalden. Hanslian, composition of bladder stones in the natives of Asia Minor, 1912, A., ii, 962.
 - the behaviour of a-pyrrolidonecarboxylic acid in the animal organism, 1912, A., ii, 1196.
- Abderhalden, Emil, and Robert Heise, the occurrence of peptolytic enzymes in invertebrates, 1909, A., ii, 907.
- Abderhalden, Emil, and James Bryan Herrick, composition of conglutin from lupin seeds, 1905, 846.
- Abderhalden, Emil, and Paul Hirsch, synthesis of polypeptides; derivatives of isoleucine. III., 1910, A., i. 720.
 - [physiological action of iodo-fatty acid derivatives], 1911, A., ii, 1119.

the formation of glycine in the animal organism, 1912, A., ii, 579.

synthetic capacity of cells in mammalia; protein need in dogs fed on ammonium salts and single aminoacids, 1912, A., ii, 957.

feeding experiments with gelatin, ammonium salts, completely hydrolysed flesh, and a mixture of aminoacids on young dogs, 1912, A., ii, 1189.

synthetic powers of animal cells; the value of nitrogen from different sources in the dog's organism, 1912, A., ii, 1190.

Abderhalden, Emil. Paul Hirsch, and Markus Guggenheim, preparation of iodo-fatty acid compounds and their behaviour in the animal, 1911, A., i, 954.

Abderhalden, Emil, Paul Hirsch, and Josef Schuler, synthesis of polypeptides: derivatives of isoleucine. 1909, A., i, 769.

Abderhalden, Emil, and Alfred Hirszowski, synthesis of polypeptides. XXVIII. Derivatives of glycine, dalanine, l-leucine, and l-tyrosine, 1908, A., i, 887.

Abderhalden, Emil, and Andrew Hunter, the amount of glycine in milk pro-

teins, 1906, A., i, 545.

hydrolysis of vitellin, 1906, A., i,

- action of proteolytic ferments of the animal organism, 1906, A., ii, 782.
- Abderhalden, Emil, and Kurt Benno Immisch, serological studies by the help of the optical method. V., 1910, A., ii, 319.

Abderhalden, Emil, and Ryngo Inouye, composition of different kinds of silk. XIV. Total and partial hydrolysis of the cocoon of the Ailanthus spinner and of Tailung silk, 1912, A., i, 751.

Abderhalden, Emil, and Arthur Israël, serological studies by the help of the optical method. VI., 1910, A., ii, 319.

Abderhalden, Emil, and Ernst Kämpf, serological studies by the help of the optical method. XVI., 1911, A., ii, 505.

Abderhalden, Emil, and Georg Kapfberger, serological studies by the help of the optical method. XI. Parenteral administration of carbohy-

drates, 1910, A., ii, 1093.

Abderhalden, Emil, and T. Kashiwado, the nuclein of the thymus, and anaphylaxis studies with nuclear materials (nucleo-proteins, nucleins, and nucleic acids), 1912. A., ii, 1192.

Abderhalden, Emil, and Karl Kautzsch, the decomposition of dl-leucylglycine and dl-leucylglycyl-glycine in the organism of rabbits, 1906, A., ii, 778.

comparative investigations on the elimination of iodine after administration of potassium iodide and saiodin, 1908, A., ii, 611.

physiological action of l- and d-adrenaline. IV., 1909, A., ii, 751.

glutamic acid and pyrrolidinecarboxylic acid, 1910, A., i, 230.

derivatives of amino-acids. III.
Compounds with cholesterol, 1910,
A., i, 253.

glutamic acid and pyrrolidonecarboxylic acid, 1910, A., i, 768.

methylated polypeptides, 1911, A., i, 528.
methylated polypeptides; betaine of

diglycylglycine, 1911, A., i, 954. detection of *l*-proline as a primary product of protein hydrolysis, 1912,

A., i, 492. esterification of the monoamino-acids by means of ethyl iodide; separation of pyrrolidinecarboxylic acid from glutamic acid, 1912, A., i,

492.
glutamic and pyrrolidonecarboxylic acids. III. Mercury salts, pyrrolidonecarboxyl chloride, and pyrrolidonecarboxylamide, 1912, A., i, 492.

putrefaction researches with dglutamic acid and studies on γaminobutyric acid, 1912, A, i, 952. Abderhalden, Emil, Karl Kautzsch, and Effim Semen London, digestion of proteins in the dogs alimentary canal, 1906, A., ii, 778.

Abderhalden, Emil, Karl Kautzsch, and Franz Müller, physiological behaviour of l- and d-adrenaline. V., 1909, A.,

ii, 1041.

Abderhalden, Emil, and Paul Kawohl, comparative investigations on the rotatory properties of the plasma and serum of dog's blood under varying conditions. I., 1910, A., ii, 1081.

Abderhalden, Emil, and Martin Kempe, synthesis of polypeptides. XX, Derivatives of tryptophan, 1907,

A., i, 652.

tryptophan and its derivatives, 1907, A., i, 808.

tyrosine, glycine, and glutamic acid in different developmental periods

in the fertilised hen's egg, 1907, A., ii, 895.

Abderhalden, Emil, and Karl Kiesewetter, the use of elastin for the detection of proteolytic enzymes, 1911, A., ii, 999.

Abderhalden, Emil, Wilhelm Klingemann, and Theodor Pappenhusen, the cleavage of proteins in the alimentary canal of different kinds of animals, 1911, A., ii, 508.

Abderhalden. Emil, and Arthur Heinrich Koelker, the use of optically active polypeptides for estimating the activity of proteolytic enzymes, 1907, A., ii, 488.

the course of the fermentative degradation of polypeptides, 1908, A., i,

238, 488.

Abderhalden, Emil, Arthur Heinrich Koelker, and Florentin Medigreeeanu, the peptolytic enzymes in different forms of cancer and other tumours. 11., 1909, A., ii, 915.

Abderhalden, Emil, Kornel von Körösy, and Efim Semen London, normal digestion of protein in the alimentary tract of dogs. III., 1907, A., ii,

893.

Abderhalden, Emil, and Friedrich Kramm, the cleavage of the milk proteins by gastric juice under various conditions, 1912, A., ii, 573.

the cleavage of proteins in the intestinal canal, 1912, A., ii,

574

Abderhalden, Emil, and Arno Ed. Lamp6, the fat-splitting properties of blood and plasma under various conditions, 1912, A., ii, 572. Abderhalden, Emil, and Arno Ed. Lampé, the replacement of protein, or an equivalent mixture of aminoacids, by gelatin and ammonium salts, 1912, A., ii, 956.

the fate of individual amino-acids, mixtures of amino-acids, peptones, and proteins in the alimentary canal, 1912, A., ii, 1189.

synthetic powers of animal cells; the value of nitrogen from different sources in the dog's organism, 1912, A., ii, 1190.

Abderhalden, Emil, and Bernaura Landau, the composition of the material spun by Occeticus platensis, 1911, A., ii, 509.

monoamino-acids of the whalebone of the north whale, 1911, A., ii, 509.

Abderhalden, Emil, and Leo Langstein, comparative investigation on the composition of caseinogen from human and cow's milk, 1910, A., ii, 633.

Abderhalden, Emil, and Edwin R. Le Count, the monoamino-acids of keratin from goose feathers, 1906, A., i, 56.

Abderhalden, Emil, and Efim Semen London, value of ultimate protein cleavage products in the organism; experiments on a dog with Eck's fistula, 1908, A., ii, 51.

protein metabolism, 1909, A., ii,

905.

the synthesis and cleavage of proteins in the animal organism, 1910, A., ii, 425.

Abderhalden, Emil, Efim Semen London, and Berthold Oppler, digestion of proteins in the alimentary canal of the dog. IV., 1908, A., ii, 514.

Abderhalden, Emil, Efim Semen London, and Ludwig Pincussohn, the situation of kynurenic acid formation in the dog's organism, 1909, A., ii, 913.

Abderhalden, Emil, Efim Semen London, and E. B. Reemlin, normal digestion of proteins in the dog's alimentary canal. V., 1909, A., ii, 326. Abderhalden, Emil, Efim Semen London,

and Alfred Schittenhelm, nuclein metabolism in a dog with an Eck's

fistula, 1909, A., ii, 818.

Abderhalden, Emil, Efim Semen London, and Carl Voegtlin, cleavage of diglycylglycine and the biuret base in the dog's alimentary canal, 1907, A., ii,

Abderhalden, Emil, and Filippo Lussana. action of the juices expressed from cells on polypeptides, 1908, A., i, 489.

Abderhalden, Emil, and James S. McLester, the behaviour of certain polypeptides towards the plasma of ox-blood, 1908, A., ii, 511.

Abderhalden, Emil, and Fernand Malengreau. monoamino-acids

gluten, 1906, A., i, 914.

Abderhalden, Emil, and Dimitrie Manoliu, the value of protein cleavage products in the animal organism. XIV., 1910, A., ii, 521.

Abderhalden, Emil, and Wilfred H. Manwaring, the behaviour of certain polypeptides towards the red corpuscles and platelets of ox-blood, 1908. A., ii, 510.

Abderhalden, Emil, and Joseph Markwalder, the value of individual aminoacids in the dog's organism under various conditions, 1911, A., ii, 634.

and Abderhalden, Emil, Rudolf Massini, the behaviour of monopalmityl-l-tyrosine, distearyl-1-tyrosine, and p-aminotyrosine in the organism of an alcaptonuric person, 1910, A., ii, 638.

Abderhalden, Emil, and Florentin Medigreceanu, peptolytic ferments in the stomach contents, 1908, A.,

ii. 1049.

oxyhemoglobin of different animals. I., 1900, A., i, 342.

peptolytic enzymes in cancer and other tumours. III., 1910, A., ii, 636. fundamental constituents of tumour cells, 1910, A., ii, 1093.

Abderhalden, Emil, Florentin Medigreceanu, and Efim Semen London, normal digestion of proteins in the dog's alimentary canal. VI., 1909, A., ii, 326.

Abderhalden, Emil, Florentin Medigreceanu, and Ludwig Pincussohn, comparative hydrolysis of silk by boiling, fuming hydrochloric acid, 25 per cent. sulphuric acid, 20 per cent. aqueous sodium hydroxide, and hot saturated baryta solution, 1909, A., i, 751.

Abderhalden, Emil, Emil Messner, and Heinrich Windrath, the value of protein cleavage products in metabolism.

IX., 1909, A., ii, 327.

Abderhalden, Emil, and Otto Meyer, the detection of active pepsin in the intestinal contents by means of elastin. 1911, A., ii, 999.

Abderhalden, Emil, and Leonor Michaelis, the course of the decomposition of polypeptides by ferments, 1907, A., ii, 677.

Abderhalden, Emil, and Franz Müller, effect on blood-pressure of l., d., and al-suprarenine (adrenaline), 1909, A., ii, 159.

the action of choline on blood-pressure, 1910, A., ii, 530, 725; 1911,

A., ii, 994.

Abderhalden, Emil, and Josef Olinger, the value of protein cleavage products in the animal organism. VII., 1908, A., ii, 961.

Abderhalden, Emil, and Carl Oppenheimer, albumoses in blood, 1904, A.,

ii, 623.

Abderhalden, Emil, and Berthold Oppler, the value of protein cleavage products in the dog's organism, 1907, A., ii, 369.

the behaviour of the blood-plasma and -serum of the horse towards certain polypeptides, 1907, A., ii,

889.

1040.

Abderhalden, Emil, and Chauncey J. Vallette Pettibone, the influence of the physical condition of proteins on the rapidity of their cleavage by enzymes; the importance of peptic digestion on the further cleavage of proteins by trypsin; the degree of cleavage of proteins by enzymes, 1912, A., i,

Abderhalden, Emil, and Ludwig Pincussohn, the amount of peptolytic ferments in rabbits' and dogs' plasma [and in the red blood corpuscles of these animals] under various conditions, 1909, A., ii, 816.

the amount of peptolytic enzymes in dog's blood-serum under various conditions. III., 1909, A., ii, 904.

serological studies by the help of the optical method, 1910, A., ii, 318, 319, 736; 1911, A., ii, 410.

peptolytic enzymes in cancer and other tumours. IV., 1910, A., ii, 636. Abderhalden, Emil, Ludwig Pincussohn,

Abderhalden, Emil, Ludwig Pincussohn, and Adolf R. Walther, the enzymes in different bacteria, 1910, A., ii, 989.

Abderhalden, Emil, and Fritz Pregl, a non-dialysable protein-like constituent of human urine, 1905, A., ii, 843.

the monoamino-acids of crystallised egg-albumin, 1906, A., i, 53.

Abderhalden, Emil, and Hugo Přibram, monoamino-acids of lactalbumin, 1907, A., i, 570.

Abderhalden, Emil, and Hans Hugo Pringsheim, specificity of peptolytic enzymes in different fungi, 1900, A., ii, 423, Abderhalden, Emil, and Hans Hugo Pringsheim, detection of intracellular ferments, 1910, A., ii, 437.

Abderhalden, Emil, and Oscar Prym, liver autolysis, 1907, A., ii, 897.

Abderhalden, Emil, Oscar Prym, and Efim Semen London, absorption of monoamino-acids in the alimentary canal, 1907, A., ii, 892.

Abderhalden, Emil, and E. Rathsmann, serological studies by the help of the optical method. XIV., 1911, A., ii,

505.

Abderhalden, Emil, and Béla Reinbold, monoamino-acids from the edestin of sunflower seeds, 1905, A., i, 620.

action of pancreatic juice on edestin from cotton seeds, 1905, A., ii, 838.

Abderhalden, Emil, and Auguste Rilliet, action of the juice of Psalliota campestris on polypeptides, 1908, A., i, 489.

composition of different silks. I. Neuchang silk, 1909, A., i, 275.

Abderhalden, Emil, and Peter Rona, decomposition products of thymushiston, 1904, A., i, 540.

formation of sugar from fat, 1904, A.,

ii, 423.

feeding experiments with hydrolysed casein, 1904, A., ii, 749.

the composition of the protein of Asper-

yillus niger, 1905, A., i, 954.
the value of the cleavage products of casein in the animal organism, 1905, A., ii, 467.

behaviour of glycyl-*l*-tyrosine in the dog's organism after subcutaneous injection, 1905, A., ii, 839.

the proteolytic ferments of the pyloric and duodenal juices, 1906, A., ii, 462.

assimilation of proteins in animals, 1906, A., ii, 464.

the behaviour of leucylphenylalanine, leucylglycylglycine, and alanylglycylglycine toward the liver-juice of the ox. 1906. A., ii, 873.

the behaviour of blood-serum and urine towards glycyl-l-tyrosine, 1907, A.,

ii, 890.

the value in the dog of protein cleavage products, 1907, A., ii, 892.

peptolytic enzymes in cancer, 1909, A., ii, 688.

utilisation in the animal organism of protein cleavage products, 1910, A., ii, 877.

the fat-splitting properties of the blood and serum of the dog under different conditions, 1911, A., ii, 1108. Abderhalden. Emil. and Otto Rostoski. monoamino-acids of edestin from cotton seeds and their behaviour with gastric juice, 1905, A., i, 619.

the Bence-Jones protein, 1905, A., i,

954.

Abderhalden, Emil, and Ernst Ruehl. the influence of large quantities of water on the optical properties of blood-plasma and serum, 1910, A., ii, 1081.

metabolism experiments with elastin,

1910, A., ii, 1084.

Abderhalden, Emil, and Franz Samuely, composition of gliadin from wheat, 1905, A., i, 620.

behaviour of cystine, dialanylevstine, and dileneylcystine in the organism of the dog, 1905, A., ii, 839.

assimilation of protein in animals,

1905, A., ii, 840.

fate of leucine and leucyl-leucine in the organism of the dog, 1906, A., ii, 464.

Abderhalden, Emil, and Takaoki Sasaki, monoamino-acids from syntonin prepared from ox-flesh, 1907, A., i, 573.

Abderhalden, Emil, and Benomar Schilling, serological studies by the help of the optical method. XV., 1911, A., ii, 513.

Abderhalden, Emil, and Alfred Schittenhelm, decomposition products of

elastin, 1904, A., i, 539.

excretion of leucine and tyrosine in a case of cystinuria, 1905, A., ii, 741. metabolism of nucleic acids in the animal organism, 1906, A., ii, 465.

comparison of the caseinogen of various

milks, 1906, A., ii, 467.

the amount of amino-acids in normal human urine, 1906, A., ii, 470.

excretion of amino-acids in diabetic urine, 1906, A., ii, 693.

phosphorus poisoning, 1906, A., ii, 878. the action of proteolytic ferments of germinating seeds of wheat and lupins on polypeptides, 1907, A., i,

the decomposition of racemic aminoacids in the dog's organism, 1907,

A., ii, 489.

peptolytic enzymes in the stomach. II., 1909, A., ii, 414.

detection of peptolytic enzymes, 1909, A., ii, 840.

Abderhalden, Emil, and Julius Schmid, comparative investigations on the composition and cleavage of different kinds of silk. VIII. The monoamino-acids from Tai-Tsao-Tsam silk (China), 1910, A., i, 289.

Abderhalden, Emil. and Julius Schmid. the estimation of the quantity of blood by means of the "optical method," 1910, A., ii, 724.

Abderhalden, Emil, and Hubert Schmidt, the use of triketohydrindene hydrate for the detection of proteins and their cleavage products, 1911, A., ii, 674. Abderhalden, Emil, and Josef Schuler,

synthesis of polypeptides; derivatives of isoleucine. II., 1910, A., i, 304.

Abderhalden, Emil, and James Sington, composition of different silks. Monoamino-acids from Bengal silk, 1909, A., i, 750.

Abderhalden, Emil, and Gr. Slavu, the serum proteins of different animals.

1909, A., i, 340.

physiological action of l-, d-, and dladrenalines. III., 1909, A., ii,

excretion of iodine from the dog's organism, when given in the form 3:5-di-iodo-l-tyrosine, 3:5-diiodoglycyl-l-tyrosine, 3:5-di-iodo-diodopropionyl-l-tyrosine, and 3,5di-iodopalmityl-l-tyrosine, 1909, A.,_ ii, 820.

Abderhalden, Emil, and J. G. Sleeswyk, serological studies by the help of the optical method. VII., 1910, A., ii,

Abderhalden, Emil, and Donald D. van Slyke, estimation of amino-nitrogen in polypeptides by van Slyke's method, 1912, A., ii, 105.

Abderhalden, Emil, and Wladimir Spack, composition of different silks. Monoamino-acids from Indian

tussore silk, 1909, A., i, 859.

Abderhalden, Emil, and Eugen Steinbeck, action of pepsin and hydrochloric acid, 1910, A., i, 795.

further investigations on the use of silk peptone for the detection of peptolytic enzymes, 1910, A., ii, 980.

Abderhalden, Emil, and Friedrich Wilhelm Strauch, action of the enzymes of gastric juice. II., 1911, A., i, 511.

Abderhalden, Emil, and Eduard Strauss, the cleavage products of spongin with acids, 1906, A., i, 547.

monoamino-acids of keratin from the eggs of Testudo græca, 1906, A., ii,

Abderhalden, Emil, and Akikazu Suwa, cleavage products obtained by the partial hydrolysis of proteins, 1910, A., i, 529.

Abderhalden, Emil, and Akikazu Suwa, synthesis of polypeptides; derivatives of pyrrolidonecarboxylic acid, 1910, A., i, 637.

the value of the cleavage products of protein in the animal organism.

XVI., 1910, A., ii, 975.

Abderhalden, Emil, and Yutaka Teruuchi, composition of protein from pine seeds, 1905, 846.

preparation of tyrosine from silk, 1906,

A., i, 852.

the fate of certain amino-acids and peptides in the organism of the dog, 1906, A., ii, 293.

the behaviour of certain peptides towards organ-extracts, 1906, A., ii,

464.

culture researches with Aspergillus niger and certain amino-acids and peptides, 1906, A., ii, 479.

proteolytic action of animal tissue juices and of intestinal juice, 1906,

A., ii, 873.

comparative investigations of vegetable proteolytic ferments, 1907, A., i,

Abderhalden, Emil, and Friedrich Thies, physiological actions of l-, d-, and dl- adrenaline. II., 1909, A., ii, 333.

Abderhalden, Emil, and Carl Voegtlin, the cleavage of casein by pancreatic

juice, 1907, A., ii, 893.

Abderhalden, Emil, and Wilhelm Völtz. composition of the membrane of the fat particles of milk, 1909, A., ii, 330.

Abderhalden, Emil, and Arthur Voitinovici, hydrolysis of ichthylepidin and fibrin, 1907, A., i, 805.

hydrolysis of keratin from horn and

wool, 1907, A., i, 807.

Abderhalden, Emil, and Franz Wachsmuth, action of pepsin and hydrochloric acid on elastin and other proteins. III., 1911, A., i, 511.

Abderhalden, Emil, and Leonhard Wacker, the cleavage of 2:5-diketopiperazines in the organism of the rabbit. II., 1908, A., ii, 1052.

Abderhalden, Emil, and Lothar E. Weber. synthesis of polypeptides; derivatives of l-leucine, 1910, A., i, 719.

Abderhalden, Emil, and Wolfgang Weichardt, formation of silk, 1909, A., ii, 418.

the amount of peptolytic enzymes in rabbit's serum under varying conditions. II., 1909, A., ii, 903.

Abderhalden, Emil, and Arthur Weil. losses in the isolation of monoamino-acids [from proteins] by the ester method. I., 1911, A., i, 1049; 1912, A., i, 323.

proteins and protein cleavage products in Egyptian mummies, 1911, A., ii,

630.

resolution of racemic histidine into the optically active components, 1912, A., i, 383.

derivatives of monoamino-acids; picrolonates of glycine, d-alanine, and

dl-leucine, 1912, A., i, 422.

losses in the isolation of the monoaminoacids by the ester method. III. Liberation of the esters by means of lead hydroxide, 1912, A., i, 950.

the rotatory power of blood plasma and serum of different animals of varying age and sex, 1912, A., ii,

1185.

comparative investigations on the amount of amino-acids in various constituents of the nervous system. I. The amino-acids of peripheral nerves, and the white matter of the spinal cord, 1912, A., ii, 1191.

Abderhalden, Emil, and Ernst Welde, The monoamino-acids

Chefoo silk, 1910, A., i, 289.

Abderhalden, Emil, and Harry Gideon Wells, the monoamino-acids of keratin from horse-hair, 1906, A., i, 55.

Abderhalden, Emil, and Wladimir W. Worms, composition of different silks. VII. Monoamino-acids from the gelatin (leim) of Canton silk, 1909, A., i, 859.

Abderhalden, Emil, and Géza Zemplén, partial hydrolysis of tunicate cellulose: formation of cellobiose, 1911, A., i,

Abderhalden, Emil. See also Otto Diels. Oskar Emmerling, and Emil Fischer. Abe, Ryuji, acid sodium acetates, 1911,

A., i. 599.

the hydrates of potassium acetate, their solubility and transition point, 1911, A., i, 946.

Abe, Ryuji. See also Yukichi Osaka. Abegg, Erwin. See Hans Rupe.

Abegg, Fritz. See Friedrich Wilhelm

Küster.

Abegg, Richard [Wilhelm Heinrich]. theory of valency and of molecular compounds, 1903, A., ii, 536; 1905, A., ii, 155.

stability of salts with oxidisable cations and anions, 1903, A., ii, 628.

formation of complexes, 1904, A., ii,32.

- Abegg, Richard [Wilhelm Heinrich], valency and the periodic system; attempt to formulate a theory for molecular compounds, 1904, A., ii,
 - order of magnitude of the time of formation of complex molecules, equilibrium constants, and atomic dimensions, 1904, A., ii, 713.

the eighth group of the periodic system, 1905, A., ii, 380.

periodic classification of the elements, 1905, A., ii, 514.

theory of the Grignard reactions, 1906, A., i, 57.

influence of temperature on vital processes, 1906, A., ii, 95.

new electrical arrangement of the Breslau University Chemical Laboratory, 1906, A., ii, 266.

capacity of the elements for entering into chemical combination, 1906, A., ii, 738.

intermediary potentials, 1907, A., ii,

chemical statics and dynamics of the mercury-ethylene compounds, 1907, A., ii, 853.

an apparent exception to the theory of heterogeneous dissociation equilibria, 1908, A., ii, 157.

[vapour pressure of dry and of ordinary sal ammoniac], 1908, A., ii, 466,

structural classification of oxides, oxygen acids, and their salts, 1909, A., ii, 994.

obituary notice of, 1911, T., 599.

Abegg, Richard, and Alvin Joseph Cox. solubility of some sparingly soluble silver salts, 1904, A., ii, 256.

chromate, dichromate, and chromic acid, 1904, A., ii, 662.

Abegg, Richard, Charles James John Fox, and Walter Herz, [interaction of] boric acid, potassium fluoride, and hydrofluoric acid, 1903, A., ii, 540.

Abegg, Richard, and Anna Hamburger, solid polyiodides of the alkali metals, their stability and conditions of existence at 25°, 1906, A., ii, 747.

Abegg, Richard, and Friedrich Willy Hinrichsen, conception of valency, 1905, A., ii, 155.

Abegg, Richard, and Stanislaus Labendzinski, constitution of solutions of

salts, 1904, A., ii, 241.

Abegg, Richard, and J. Neustadt, attempt to measure the rate of neutralisation at low temperatures, 1908, A., ii, 162,

Abegg, Richard, and J. Neustadt. oxidation potentials in non-aqueous

solvents, 1909, A., ii, 462.

Abegg, Richard, and Hans Pick, effect of silver nitrate on the solubility of silver nitrite, 1905, A., ii, 586.

II. The electro-affinity of anions. nitrite ion and its equilibrium with nitrate and nitric oxide, 1906, A., ii,

Abegg, Richard, and Paul von Schroeder. tanning of gelatin, 1908, A., i, 233.

Abegg, Richard, and James Frederick Spencer, thallium oxalates, A., i, 853.

Abegg, Richard, and Iwan I. Shukoff, validity of Faraday's law for metals yielding ions of different valency, 1906, A., ii, 596.

Abegg, Richard. See also William Maitland, Paul Müller, J. Neustadt, Max Scholtz, and James Frederick Spencer.

Abel, Emil, the decomposition curves of solutions of copper salts, 1903, A., ii, 407.

theory of electromotive force in polyphase and non-aqueous one-phase

systems, 1906, A., ii, 722. a specially simple case of intermediate reactions, 1906, A., ii, 731.

hydrolysis of the esters of polyhydric alcohols, 1906, A., ii, 731.

relation of the electrolytic solution pressures in different solvents, 1907, A., ii, 601.

kinetics and catalysis of the hydrogen peroxide-thiosulphate reaction, 1908, A., ii, 26.

lecture experiment to demonstrate the law of mass action, 1908, A., ii, 934.

catalysis of hydrogen peroxide by iodine and iodine ions, 1908, A., ii,

the behaviour of iodine towards thiosulphate and tetrathionate in alkaline solution, 1912, A., ii, 486.

selective catalytic reactions, 1912, A., ii, 927.

hydrolysis of iodine, 1912, A., ii,

Abel, Emil, and Otto von Fürth, physical chemistry of oxyhæmoglobin; the capacity for combining with alkali of the colouring matter of blood, 1906, A., i, 546.

Abel, (Sir) Frederick Augustus, obituary

notice of, 1905, T., 564.

Abel, John Jacob, adrenaline, 1903, A., i, 376, 670, 784,

Abel, John Jacob, behaviour of suprarenal extracts to Fehling's solution, 1903, A., i, 376.

oxidation of adrenaline with nitric

acid, 1903, A., i, 376. adrenaline and its degradation pro-

ducts, 1904, A., i, 264.

the action of drugs and the function of the anterior lymph hearts in cardiectomised frogs, 1912, A., ii, 1193.

Abel, John Jacob, and William Webber Ford, poisons of Amanita Phalloides, 1907, A., ii, 192; 1908, A., ii, 1061.

Abel, John Jacob, and David I. Macht, two crystalline pharmacological agents obtained from the tropical toad (Bufo agua), 1912, A., ii, 1193.

Abel, John Jacob, and René de Mortemer Taveau, adrenaline hydrate, 1906, A.,

i, 56.

Abelin, J., a new method for the detection of salvarsan (diaminodihydroxyarsenobenzene, 1911, A., ii, 948.

Abelin, J., and Stanislaus von Kostanecki, derivatives of 2-styrylcoumarone,

1910, A., i, 631.

Abell, Robert Duncombe, the condensation of phenyl ethyl ketone (propiophenone) with benzylideneacetophenone, and of acetophenone with benzylidenepropiophenone, 1903, T., 360; P., 17.

a synthesis of 1:3:5-triphenyl-2:4-dimethylcyclopentane and of 1:3:5triphenyl-2-methylcyclopentane,

1903, T., 367; P., 18.

1:3-keto-enolic ethers and derivatives of dibenzoylmethane, 1912, T., 989;

P., 145.

derivatives of phenyl styryl ketone. Part I. The tautomeric forms of dibenzoylmethane, 1912, T., 998; P., 145.

Abelmann, Paul, action of magnesium organic compounds on tiglic aldehyde, 1908, A., i, 2; 1910, A., i, 454.

action of organo-magnesium compounds on \(\beta\)-hydroxy-\(\alpha\)-methylbutaldehyde,

1909, A., i, 547.

Abelous, Jacques Emile, existence in plants of an oxidising-reducing diastase; conditions of its action, 1904,

A., i, 840.

Abelous, Jacques Emile, and Jules Aloy, some conditions of the oxidation of salicylaidehyde by [animal] organs and extracts of organs, 1903, A., ii, 560.

Abelous, Jacques Emile, and Jules Aloy, an enzyme in the hen's egg which reduces nitrates, 1903, A., ii, 561.

a soluble ferment in vegetables which reduces nitrates, 1903, A., ii, 678.

existence in plants of an oxidisingreducing diastase, 1904, A., ii, 283.

an oxidising and reducing ferment in the liver, 1904, A., ii, 188.

Abelous, Jacques Emile, and E. Bardier, myosis and reduction of blood pressure caused by normal human urine, 1909, A., ii, 689.

influence of oxidation on the toxicity of urohypotensine, 1911, A., ii,

816.

Abelous, Jacques Emile, and Henri Ribaut, production of hydrogen sulphide from the extract of organs and from protein matter in general,

1903, A., ii, 605.

influence of temperature on the production of hydrogen sulphide by protein matter, extract of animal organs, and extract of yeast, in presence of sulphur, 1903, A., ii, 605.

non-existence of philothion, a supposed sulphur-reduction enzyme, 1904, A.,

i. 704.

Abensour, J., detection of quinine, 1907, A., ii, 826.

Aberson, Johannes Hendrikus, alcoholic fermentation, 1903, A., ii, 445. solvent action of water on zinc in brass,

1907, A., ii, 169.

adsorption capacity of the soil, 1912, A., ii, 292.

Aboulenc, J. See Jean Baptiste Senderens.

Abraham, A. See Edouard Bourgeois.
Abraham, Feliae. See August Michaelis.
Abrahamsohn, B., respiration of barley
during germination, especially its dependence on the amount of protein.

1912, A., ii, 197.
Abram, John Hill. See Benjamin
Moore.

Accame, L. See Guido Pellizzari.

Aceña, R. de la, action of hydrogen bromide or hydrogen chloride on triacetin; new halogen derivatives of triacetin, 1905, A., i, 7.

Ach, Friedrich. See Emil Fischer.

Ach, Fritz, and Ludwig Knorr, oxidation products of codeine, 1903, A., i, 849.

Ach, Fritz, Ludwig Knorr, H. Lingenbrink, and Heinrich Hörlein, nitrocodeinic acid, an oxidation product of nitrocodeine and nitro-ψ-codeine, 1909, A., i, 950. Ach, Lorenz, and Hermann Steinbock, intermediate product in the formation of apomorphine, 1907, A., i, 1069.

Achalme, Pierre, viscosity and diastatic actions; hypothesis on the nature of diastases, 1911, A., i, 592.

function of interatomic electrons in electrolysis, 1912, A., ii, 322.

the rôle of intra-atomic electrons in catalysis, 1912, A., ii, 340.

the function of interatomic electrons in catalysis and electrolysis, 1912, A., ii, 530.

 Achalme, Pierre, and M. Bresson, method for determining the individuality or plurality of diastases in a liquid, 1911, A., i, 172.

influence of the viscosity of the medium on diastatic activity, 1911, A., i, 591.

rôle of viscosity in variations of the action of invertase according to the concentration of sucrose, 1911, A., i, 591.

Achard, Ch., and M. Aynaud, rôle of sodium chloride in the histological impregnation of tissues by silver nitrate, 1906, A., ii, 561.

Achard, Ch., and L. Gaillard, local retention of chlorides following injection of different substances, 1904, A., ii, 59.

Achelis, W., methylguanidine in normal human urine, 1907, A., ii, 41. methylguanidine in urine, 1907, A., ii, 114.

Achelis, W., and Friedrich Kutscher, organic bases in horses' urine, 1907, A., ii, 638.

Achert, Oskar, inversion of sucrose by honey, 1912, A., ii, 394.

Achert, Oskar. See also Emil Fromm. Acheson, Edward Goodrich, colloidal graphite, 1908, A., ii, 375.

Ackermann, Anton. See Fritz Strans.
Ackermann, Dankwart, nuclei of birds' red corpuscles, 1905, A., ii, 98.
benzenesulphomethylguanidine, 1906, A., i, 768.

detection of guanidine, 1906, A., ii,

putrescine, 1908, A., i, 10.

chemistry of putrefaction, 1908, A., i, 10.

experiments on the decomposition of arginine, 1908, A., i, 774.

a new base from putrefying pancreas, 1908, A., i, 1007.

production of putrefaction bases, 1909, A., i, 619.

putrefaction of lysine-free protein, 1910, A., i, 288.

Ackermann, Dankwart, bacterial cleavage of histidine, 1910, A., i, 419.

a new aporrhegma prepared by bacterial agencies, 1910, A., ii, 1089.

the splitting of the pyrrolidine ring by bacteria, 1911, A., i, 808.

β-alanine as a bacterial aporrhegma, 1911, A., ii, 757.

the occurrence of trigonelline and nicotinuric acid in the urine after the administration of nicotinic acid, 1912, A., ii, 967.

Ackermann, Dankwart, R. Engeland, and Friedrich Kutscher, synthesis of 5-guanidinovaleric acid, 1911, A., i, 956.

Ackermann, Dankwart, and Friedrich Kutscher, crab extract, 1907, A., ii, 283, 491; 1908, A., ii, 53.

constitution of neosine, 1908, A., i, 675. physiological actions of an ergot base and of β -iminazolylethylamine [β -amino-4-ethylglyoxaline], 1910, A., ii, 881.

aporrhegma, 1910, A., ii, 1089. the occurrence of lysine in the urine in cystinuria, 1912, A., ii, 72.

Ackermann, Dankwart, and H. Schütze, the formation of trimethylamine by Bacterium prodigiosum, 1911, A., ii, 61.

Ackermann, Edwin, refractometric analysis of beer, 1905, A., ii, 486.

Ackermann, Edwin, and Albert Steinmann, estimation of alcohol in beers by means of the Zeiss immersion refractometer, 1905, A., ii, 557.

Ackermann, Edwin. See also Hermann Matthes.

Ackermann, Ernst. See Paul Rabe.
Ackermann, Fritz, preparation of thiodiphenylamine and its derivatives, 1910,
A., i, 728.

Ackroyd, Harold, uric acid metabolism in dogs, 1910, A., ii, 977.

the presence of allantoin in certain foods, 1911, A., ii, 308.

uric acid metabolism in rabbits, 1911, A., ii, 747.

Ackroyd, William; the action of radium rays on the haloids of the alkali metals and analogous heat effects, 1904, T., 812; P., 108.

Acland, Theodore Dyke, hours of sleep in public schools, 1905, A., ii, 541.

Acqua, Camillo, accumulation of radioactive substances in vegetable organisms, 1907, A., ii, 904.

position at which the nitrogen of nitrates is utilised in plants, 1910, A., ii, 533.

Acree, Solomon Farley, sodium phenyl; action of sodium on ketones, 1903, A., i, 724.

new derivatives of carbimides; hydrochlorides of carbonylhydrazines,

1903, A., i, 861.

constitution of phenylurazoles. II. Reactions with diazomethane, 1903, A., i, 867.

reactions in the urazole series, 1904,

A., i, 270.

reduction of triphenylcarbinol and its homologues to the corresponding triphenylmethanes, 1904, A., i, 315.

preparation of phenylurazole from aethyl phenylsemicarbazidecarboxylate, 1904, A., i, 351, 453.

magnesium a-naphthyl bromide, 1904,

A., i, 360.

diphenyl-o-, -m-, and -p-tolyl-carbinols,

1904, A., i, 409.

syntheses by means of sodium phenyl and of magnesium alkyl bromides, 1904, A., i, 742.

esterification of benzilic and mandelic

acids, 1904, A., i, 747.

acetyl derivatives of phenylurazole, 1905, A., i, 160.

pinacone-pinacolin rearrangement,

1905, A., i, 216. new apparatus: [potash bulbs; porcelain-lined bomb; electrolytic apparatus], 1906, A., ii, 304.

sulphate and sulphur determinations,

1906, A., ii, 897.

detection of formaldehyde in milk,

1906, A., ii, 906. urazoles. VIII. Salts of tautomeric

compounds, 1907, A., i, 258. some semicarbazide derivatives of isopropionic acid, benzoic acid, and benzenesulphonic acid, 1907, A., i,

formaldehyde colour test for proteins,

1907, A., ii, 659.

theory of indicators and the reactions of phthaleins and their salts, 1908, A., i, 423.

theory of indicators, 1908, A., i, 652.

catalysis, 1908, A., ii, 169.

catalysis. VII. Reaction of carbonyl compounds with hydroxylamine and hydroxylamine hydrochloride, 1908, A., ii, 169.

catalysis. VIII. Theories of catalysis,

1908, A., ii, 472. catalysis. IX. Catalytic reactions induced by enzymes, 1908, A., ii, 1022.

catalysis. X. Formation of esters from amides and alcohols, 1909, A., ii, 652.

Acres, Solomon Farley, catalysis. XII. Mechanism of organic reactions, 1912, A., ii, 1047.

Acree, Solomon Farley, and Roger Frederick Brunel, preparation standard solutions, 1906, A., ii, 703.

Acree, Solomon , Farley, and James Edward Hinkins, hydrolysis triacetyldextrose by enzymes, 1903, A., i, 218.

Solomon Farley, and James Acree. McIntosh Johnson, catalysis; rearrangement of acetylhalogenaminobenzene derivatives into halogen acetanilide derivatives, 1907, A., i, 506.

catalysis. IV., 1907, A., ii, 855.

Acree, Solomon Farley, James McIntosh Johnson, Roger Frederick Brunel, Guy Howard Shadinger, and Sidney Nirdlinger, urazoles. XIV. Reactions between tautomeric acids and salts with diazomethane and alkyl haloids, 1908, A., i, 919.

Acree, Solomon Farley, James McIntosh Johnson, and Sidney Nirdlinger. bromination, 1908, A., i, 413; ii,

Acree, Solomon Farley, and Frederick Laist, constitution of phenylurazole. III. Study of tautomerism, 1907, A., i, 796.

Acree, Solomon Farley, and Sidney Nirdlinger, catalysis. V. Hydrolysis of amides by acids, 1907, A., ii, 857.

Acree, Solomon Farley, and Guy Howard Shadinger, urazoles. XI. Affinity constants and constitution of several

urazoles, 1908, A., i, 224. urazoles. XII. Velocity constants and mechanism of the reactions of alkyl haloids with urazoles and urazole

salts, 1908, A., ii, 163.

Acree, Solomon Farley, and Edgar Apple Slagle, theory of indicators and the reactions of phthaleins and their salts, 1908, A., i, 653; 1909, A., i, 650.

Acree, Solomon Farley, and William Anderson Syme, constituents of the poison ivy plant (Rhus toxicodendron), 1906, A., ii, 795.

Acree, Solomon Farley, and Oswin Willy Willcox, 1-phenyl-3:5-dithiolurazole,

1904, A., i, 270.

Acree, Solomon Farley. See also James R. Bailey, Roger Frederick Brunel, Lucius Junius Desha, Sylvester Kline Loy, Nathaniel Edward Loomis, Eli Kennerly Marshall, and Sidney Nirdlinger.

Adam, Paul [Gabriel], milk treated with hydrogen peroxide, 1906, A., ii, 295.

Adam. Richard. See Richard Mohlau. Adametz, Leopold, and Tadeusz Chszaszcz,

formation of volatile alkaloids in sterilised milk by Bacillus nobilis; occurrence of such compounds in Emmenthaler cheese, 1905, A., ii, 273,

Adami, John George, and Ludwig Aschoff, myelin bodies, 1906, A., i, 1000.

Adamla, Johannes. See Adolf Windaus. Adamoff, Wera, physiology of glycogen,

1905, A., ii, 181.

Adams, Alfred, the effect of atmospheres enriched with oxygen on living (α) micro-organisms. organisms: (b) mammals inoculated with tuberculosis, (c) normal mammals; oxygen pneumonia, 1912, A., ii, 776.

Adams, Ernest Bryan. See Percy Fara-

day Frankland.

Adams, Edwin Plimpton, absence of helium from carnotite, 1905, A., ii, 329. Adams, Elliot Quincy, modification of

the periodic table, 1911, A., ii, 593. Adams, G. E. See Homer Jay Wheeler.

Adams, Leason H., and John Johnston, the standard scale of temperatures between 200° and 1100°, 1912, A., ii,

Adams, Leason H. See also John John-

Adams, Maxwell, and Eliza Overman, reduction of copper sulphate with hydroxylamine, 1909, A., ii, 578.

Adams, Paul, light petroleum, vaselin oil, and vaselin, 1905, A., i, 253.

Adams, Roger. See Henry Augustus

Torrey.

Adamson, L., and Herbert Eldon Roaf, effect of acid and alkali on the osmotic pressure of the serum proteins, 1908, A., i, 1026.

Adan, R., estimation of nitrates by Busch's method, 1907, A., ii, 651. estimation of pentoses and pentosans and its practical applications, 1907, A., ii. 657.

assay of turpentine and estimation of mineral oil in rosin spirit, 1908, A.,

ii, 1075.

Addis, Thomas, coagulation-time of blood in man, 1909, A., ii, 68.

pathogenesis of hereditary hæmophilia,

1911, A., ii, 632.

Adeney, Walter Ernest, chemical changes attending the aërobic bacterial fermentation of simple organic substances. I. Carbamide, asparagine, albumose, and Rochelle salt, 1905, 340.

Adeney, Walter Ernest, photographs of spark spectra. III. Ultra-violet spark spectra of platinum and chromium, 1905, A., ii, 493.

simple form of apparatus for observing the rate of absorption of oxygen by polluted waters and by other fermenting liquids, 1908, A., ii, 781.

Adensamer, Alex., and Philipp Hoernes. hydrolysis of egg-albumin, 1906, A., i, 121.

Adhicary, Birendra Bhusan. chanan Neogi.

Adlam, George Henry Joseph. See Her-

bert Brereton Baker.

Adler, Alfred, periodic phenomena at electrodes which can be made passive, 1912, A., ii, 891.

Adler, Herman Morris, a clinical method for determining the alkalinity of the blood, 1907, A., ii, 562.

Adler, Herman Morris. See also Lawrence Joseph Henderson.

Adler, J. See Alexandre Desgrez.

Adler, Josef. See Reginald Oliver Herzog. Adler, Ludwig, detection of earthnut oil in olive oil, 1912, A., ii, 815.

Adler, Oskar, action of glyoxylic acid on the animal body, 1907, A., ii, 378. action of benzidine on the animal body,

1908, A., ii, 312.

compounds of benzidine with sugars. and a method for removing dextrose from mixtures of dextrose and lævulose, 1909, A., i, 517.

alcaptonuria, 1909, A., ii, 914. lævulosuria, 1911, A., ii, 311.

pigment anomalies in metabolism,

1912, A., ii, 467.

Adler, Oskar, and Rudolf Adler, behaviour of certain organic compounds towards blood, especially as regards the detection of blood, 1904, A., ii. 459.

precipitability of carbohydrates in urine by lead acetate, 1905, A., ii, 843. primary aromatic arsinic acids, 1908,

A., i, 492. Adler, Oskar. See also Rudolf Adler.

Adler, Rudolf, and Oskar Adler, a reaction of urine with resorcinol, 1904, A., ii, 372, 754.

precipitation of lævulose from urine by lead acetate, 1905, A., ii, 337. reactions of carbohydrates, 1905, A.,

ii, 360.

Adler, Rudolf. See also Oskar Adler. Adler, Wilhelm, preparation of an anaphtholarsinic acid [4-hydroxynaphthalenearsinic acid], 1909, A., i, 448.

Adler, Wilhelm, preparation of salicylarsinic acid (1-carboxy-6-hydroxy-phenyl-3-arsinic acid), 1910, A., i, 346.

Adlung, Alfred. See Ernest Schmidt. Administration der Minen von Buchs-

weiler, preparation of sodium ferrocyanide from calcium ferrocyanide, 1905, A., i, 123.

preparation of esters of organic acids with the exception of those of formic

acid, 1911, A., i, 601.

Adolph, G., Bell process of electrolysing aqueous solutions of alkali chlorides, 1904, A., ii, 615.

Adorján, Josef, assimilation in wheat,

1903, A., ii, 94.

nitrogen assimilation of wheat grain,

1903, A., ii, 566.

Adrian, Louis Alphonse, function of alcohol in preserving chloroform, 1903, A., i, 596.

Adwentowski, Karol, behaviour of nitric oxide at low temperatures, 1910, A., ii, 199.

Adwentowski, Karol, and Edward Drozdowski, silicon hydride at low temperatures, 1912, A., ii, 44.

Aegenitis, Basil. See Telemachos Kom-

nenos.

Aerde, Maurice van, γγ dimethylallylcarbinol, 1909, A., i, 79.

Aeuer, Ernst. See Paul Köthner. Afanaséeff, B. P. See Leo A. Tschu-

gaeff.

Affelder, Oscar I. See Harry Edward Walters.

Agadechanianz, K., effect of adrenaline on the hepatic and muscular glycogen, 1907, A., ii, 111.

Agafonoff, A. A., electrical conductivity of solutions of vanadyl trichloride in water, 1904, A., ii, 156.

Agamennone, Giovanni. See Federico Giolitti.

Ageewa, M., reversible isomeric process taking place between γ-phenylpropylene and s-phenylmethylethylene [a-phenylpropylene] on heating with anhydrous alkali hydroxides, 1905, A., i, 776.

Ageno, Fernando, partition of sodium oxide between boric acid and carbonic

acid, 1912, A., ii, 339.

Ageno, Fernando, and E. Barzetti, colloidal boron, 1910, A., ii, 500.

Ageno, Fernando, and G. Donini, velocity of electrolytic oxidation of certain organic acids, 1910, A., i, 357.

Ageno, Fernando, and N. Guicciardini, estimation of arsenic and of iron salts in mineral waters, 1911, A., ii, 769. Ageno, Fernando, and Elena Valla, hydrolysis. I. Hydrolysis of carbonates, 1912, A., ii, 243.

Ageno, Fernando. See also Mario Giacomo Levi and Raffaele Nasini.

Ageno, I. See Raffaele Nasini.

Aggazzotti, Alberto, diminution of carbon dioxide in the pulmonary alveoli of man on returning from rarefied air to the normal barometric pressure, 1904, A., ii, 746.

influence of the barometric pressure on the partial pressures of the carbon dioxide and oxygen in the pulmonary alveoli, 1904, A., ii, 746.

action of oxygen on the sickness produced by rarefaction of the air; experiments on an orang-outang, 1905, A., ii, 835.

simultaneous action of oxygen and carbon dioxide on the sickness produced by rarefaction of the air; experiments on an orang-outang, 1905,

A., ii, 835.

experiments on a man breathing carbon dioxide and oxygen together under a barometric pressure of 122 mm., corresponding with an altitude of 14,582 metres, 1905, A., ii, 835.

reaction of the blood in rarefied air as determined by titration and by the electrometric method, 1907, A., ii,

01.

Aggazzotti, Alberto. See also Carlo Foà. Agnew, James Watson, and Robin B. Croad, constituents of oil of savin, 1912, A., i, 636.

Agnew, James Watson. See also George

Gerald Henderson.

Agostinelli, Claudio. See Riccardo Ciusa. Agrestini, Angelo, estimation of proteins in milk treated with formaldehyde; direct estimation of formaldehyde in milk, 1909, A., ii, 194.

Agulhon, Henri, influence of boric acid on diastatic actions, 1909, A., i, 621.

influence of reaction of the medium on the formation of melanins by diastatic oxidation, 1910, A., i, 449.

use of boron as a catalytic manure, 1910, A., ii, 236.

tolerance of maize to boron, 1911, A., ii, 142.

action of ultra-violet light on diastases,

1911, A., ii, 243.

colorimetric detection of alcohol in presence of acetone, colour reactions of certain groups of organic compounds in presence of mineral acids and potassium dichromate, 1911, A., ii, 1140. Agulhon, Henri, mechanism of the destruction of diastases by light, 1912, A., i, 61.

Agulhon, Henri, and Robert Sazerac, action of uranium on certain micro-

organisms, 1912, A., ii, 973.

Agulhon, Henri, and Pierre Thomas,

Aguinon, Henry, and Pierre Thomas, colour reactions of amino-compounds in presence of mineral acids and potassium dichromate, 1912, A., ii, 308.

Agulhon, Henri. See also Gabriel Bertrand.

Ahlers, Wilhelm, acetylhydrocotarnineacetic acid, 1905, A., i, 785.

Ahlert, O. See Alfred Wohl.

Ahlqvist, Alfr. See Thor Ekecrantz.
Ahlström, Bertel, and Ossian Aschan, the pinene fractions of French and American turpentine oils, 1906, A., i, 442.

Ahlum, Charles Chester, a modification of the volumetric estimation of free acid in the presence of iron salts, 1906, T., 470; P., 63.

estimation of the sodium phosphates,

1906, A., ii, 393.

Ahrens, Felix Benjamin, 4-methylpyridine, 1905, A., i, 232.

hydroxysparteine, 1905, A., i, 917. new constituents of coal tar, 1906, A., i, 473.

octanes from rock-oil, 1907, A., i, 269.

the colloidal nature of caoutchouc, 1912, A., i, 481.

Ahrens, Felix Benjamin, and Waldemar Blümel, some by-products from the manufacture of aniline, 1903, A., i, 813.

Ahrens, Felix Benjamin, and Richard Gorkow, lutidines from coal tar, 1903, A., i, 515; 1904, A., i, 615.

Ahrens, Felix Benjamin, and August Luther, 2'- and 4'-nitro-6'-methyl-a-

stilbazole, 1907, A., i 965.

Ahrens, Felix Benjamin, and Leo von Możdźeński, occurrence of nononaphthene in coal tar, 1908, A., i, 618.

Ahrens, Felix Benjamin, and Johannes Riemer, Hanoverian petroleum, 1907, A., i, 813.

Ahrens, Felix Benjamin, and H. Sollmann, piperylhydrazine, 1903, A., i, 513.

Ahrens, Felix Benjamin, and Adolf Stapler, Grignard's reaction with dihaloids, 1905, A., i, 423, 868.

Ahrle, Hermann, synthesis and formula of Caro's acid (monopersulphuric acid), 1909, A., ii, 395. Ahrle, Hermann, Caro's acid, 1909, A., ii, 804.

Ahrle, Hermann. See also Adalbert Kolb.

Aiazzi-Mancini, M. See Angelo Angeli. Aichel, Oswald. See Ludwig Weiss.

Aickelin, Hans. See Adolf von Baeyer, and Otto Dimroth.

Aktien-Gesellschaft für Anilin-Fabrikation, 4-nitro-m-phenylenediamine, 1903, A., i, 54.

preparation of mixed aminoazo-compounds, 1903, A., i, 373.

[mercuric derivatives of sodium \$\beta\$naphtholsulphonates], 1904, \$\Lambda\$., i, 132.

[p-phenetidine- and p-anisidine-osulphonic acid], 1904, A., i, 310. [azo-dyes from 4-chloro-2-aminophen-

ol], 1904, A., i, 353.

[4-chloro-2-aminophenolsulphonic

acid], 1904, A., i, 399. phenyl ether-o-carboxylic [aryloxybenzoic] acids, 1904, A., i, 499;

1905, A., i, 780. [iodochlorides of oleic acid and its

analogues], 1904, A., i, 644. [azo-compounds from 2-hydroxy-3-naphthoic acid], 1904, A., i, 700.

glycollic acid derivatives of pyrogallol and its alkyl ethers, 1905, Å., i, 135.

dyes of the cyanine series, 1905, A., i, 149.

preparation of bromolecithin, 1905, A., i, 163.

preparation of indophenols, 1905, A., i, 468.

naphthaphenazines, 1905, A., i, 552. nitration of aromatic arylsulphonamides, 1905, A., i, 639.

preparation of 1-phenyl- and -p-tolylnaphthylamine-8-sulphonic acid, 1905, A., i, 717.

preparation of α-phenyl- and -p-tolylnaphthylamine-6- and -7-sulphonic acids, 1905, A., i, 770.

yellow sulphur dye, 1905, A., i,

indophenols containing the sulphamino-group, 1905, A., i, 934.

dipropylacetyl-p-phenetidine, 1906, A., i, 418.

5-nitro-2-aminophenol, 1906, A., i, 496.

preparation of dialkylmalonyl-p-phenetidines, 1906, A., i, 497.

p-aminodiphenyloxide-3-sulphonic acid, 1906, A., i, 658.

p-hydroxyphenylglycinamide, 1906, A., i, 658.

Aktien-Gesellschaft für Anilin-Fabrikation, soluble double salt of sodium salicylate and barium theobromine,

1906, A., i, 692.

nitration of m-diarylsulphondiamides, 1906, A., i, 701.

acetylated indophenols, 1906, A., i,

702. preparation of 5:5-diethylbarbituric

acid, 1906, A., i, 704,

aminohydroxy-derivatives of phenylnaphthiminazoles, 1906, A.,

, 713.

soluble double salts of 1:3-dimethylxanthine and 1:3:7-trimethylxanthine with barium salicylate, 1906, A., i, 715.

[reduction of nitroazo-compounds],

1906, A., i, 717. nitration of aromatic arylsulphonamides, 1906, A., i, 736.

preparation of a 3:4-dichloroanilinesulphonic acid, 1906, A., i, 825.

preparation of a di-o-anisidinedisulphonic acid, 1906, A., i, 837.

[p-aminophenylnaphthyl-1:2-triazole-3:8-disulphonic acid], 1906, A., i, 906.

preparation of a di-o-phenetidinedisulphonic acid, 1906, A., i, 950.

[nitration of 3:4-dichlorobenzenesulphonic acid] 1907, A., i, 203.

preparation of tert.-butyltoluene and tert.-butylxylene, 1907, 907.

naphtholmonosulphonates of ethyl p-aminobenzoate, 1907, A., i, 925.

preparation of tetra-alkyldiaminodiphenylmethanesulphonic acids, 1907, A., i, 969.

preparation of 2-derivatives of 6-hydroxy-a\beta-naphthiminazole-8-sulphonic acid, 1907, A., i, 975.

[3'-aminophenol-a\beta-naphthatriazole-5:9-disulphonic acid, 1907, A., i,

[arylsulphonic esters of salicylaldehyde and its homologues], 1907, A., i, 1049.

preparation of the leuco-derivatives of the indophenols, 1907, A., i, 1076.

preparation of 5-hydroxy-3'-aminophenyl-1:2-naphthiminazoledisulphonic acid, 1907, A., i, 1081.

preparation of sulphonic acids of the safranine series, 1908, A., i, 225. preparation of hexamethylenetetr-

amine borate, 1908, A., i, 322. preparation of the urethane of mamino-p-ethoxybenzoic acid, 1908, A., i, 339.

Aktien-Gesellschaft für Anilin-Fabrikation, preparation of arylsulphonyl derivatives of 1:2- and 2:1-aminonaphtholsulphonic acids, 1908, A., i. 416.

preparation of aminohydroxy-derivaphenylnaphthiminazole, tives of

1908, A., i, 469.

preparation of sulphonic esters of cellulose, 1908, A., i, 955.

preparation of phenoxazines, 1908, A., i, 1010.

azo-derivatives of 2-chloro-p-anisidine-2-chloro-p-phenetidine-sulphonic acids, 1908, A., i, 1023.

preparation of aniline and its homologues, 1909, A., i. 220.

preparation of sulphanilic acid, 1909,

A., i, 220.

preparation of p-aminophenol and its N-alkyl derivatives, 1909, A., i,

preparation of p-aminophenol-2-sulphonic acid, 1909, A., i, 224.

preparation of p-phenylenediamine, 1909, A., i, 256.

preparation of p-phenylenediaminesulphonic acid, 1909, A., i, 256,

preparation of 4-amino-4'-hydroxydi-

phenylamine, 1909, A., i, 257. preparation of pyrogallol from 2:6dichlorophenol-4-sulphonic acid, 1909, A., i, 469.

preparation of sulphonic derivatives of thioanilines, 1909, A., i, 737.

[sulphonation of 2':3-dichloro-4-aminoazobenzene], 1909, A., i, 852.

preparation of dibromophenylglycine. o-carboxylic acid, 1910, A., i, 257.

[preparation of derivatives of p-toluenesulphon-p-nitroanilide], A., i, 727.

[preparation of methyl-2:4-diaminoanisole], 1911, A., i, 493.

preparation of arylsulphodiazoiminoderivatives, 1911, A., i, 509.

[preparation of a carbamide derivative], 1911, A., i, 584.

preparation of hydroxy-\$-naphthylpyrazolonemonosulphonic 1911, A., i, 687.

4-chloro-6-nitro-2preparation of aminophenol, 1911, A., i, 853.

preparation of ω-p-alkylhydroxyphenylethylamines and their Nalkyl derivatives, 1911, A., i, 857.

preparation of phenothioxin and its derivatives, 1911, A., i, 903.

[preparation of anthraquinoneacridone derivatives], 1912, A., i, 141.

17

Aktion-Gesellschaft für Anilin-Fabrikation, [preparation of p-aminophenyl methyl mercaptole], 1912, A., i, 183.

preparation of 4-chloro-α-naphthol,

1912, A., i, 183.

preparation of mercury p-aminophenyl-arsinates, 1912, A., i, 228.

preparation of a condensation product from dihydro-1:4-benzothiazone,

1912, A., i, 504.

preparation of indophenol condensation products from perimidine and its derivatives, 1912, A., i, 512.

preparation of esters of salicylic acid,

1912, A., i, 558.

preparation of neutral phosphoric acid esters of phenols and naphthols with their homologues and derivatives, 1912, A., i, 760.

preparation of o-aminoanthraquinonecarboxylic acid, 1912, A., i, 981.

preparation of indophenols of the benziminazole group and their leucoderivatives, 1912, A., i, 1033.

Aktien-Gesellschaft für Chemische Industrie and Hans Kühne, preparation of barium nitrate, 1912, A., ii, 1171.

Alabéeff, Pawel. See Iwan Ostromiss-

lensky. Alagna, B. See E. Oliveri-Mandalà. Alagna, Ezio. See Efisio Mameli.

Alba, F. See A. Hubert.

Albahary, Jacques M., new method of estimating oxalic acid in urine and alimentary matter, 1903, A., ii, 579.

a new method of separation and estimation of the organic acids in fruits and vegetables, 1907, A., ii, 589.

complete analysis of the fruit of [the tomato] Lycopersicum esculentum,

1907, A., ii, 715.

method for the complete analysis of vegetable substances, 1908, A., ii, 327.

ripening of tomatoes (Lycopersicum esculentum), 1908, A., ii, 774.

metabolism of oxalic acid and oxalates, 1912, A., ii, 666.

Albahary, Jacques M., and Karl Löffler, physiological effect of alkaloids from hemlock (Conium maculatum), 1909, A., ii, 81.

Albanese, Manfredi, influence of electrolytes on the viscosity of colloidal

liquids, 1908, A., ii, 1018.

Alber, Eugen, 7-aminoquinaldine [7-amino-2-methylquinoline], 1905, A., i, 235.

Alber, Eugen. See also Fritz Fichter.

Alberda van Ekenstein, William, and Jan Johannes Blanksma, hydrazones derived from p-nitrophenylhydrazine and p-dinitrodibenzylhydrazine, 1904, A., i, 98.

hydrazones derived from o-, m-, and p-nitrophenylhydrazines, 1905, A.,

i, 474.

benzaldehyde derivatives of sugars and glucosides, 1906, A., i, 511.

benzylidene and tolylidene derivatives of hydroxy-acids, 1906, A., i, 512. the lævorotation of mannose, 1907,

A., i, 829. the sugar from frog-spawn, 1907, A.,

ii, 638.

sugars, 1908, A., i, 9.

transformation of l-gulose and of l-idose into l-sorbose, 1908, A., i, 136.

β-hydroxy-δ-methylfurfuraldehyde as the cause of some colour reactions of hexoses, 1909, A., i, 288, 762.

crystallised *l*-ribose, 1909, A., i, 457. formation of lævulic acid from hexoses, 1910, A., i, 461.

Liebermann's protein reaction, 1911,

A., ii, 554.

Alberda van Ekenstein, William. See also Jan Johannes Blanksma and Cornelis Adriaan Lobry de Bruyn.

Albert, August, some derivatives of δaminocaproic [hexoic] acid, 1909, A., i, 140.

dicyclic quaternary bases, 1909, A., i, 178.

Albert, Bruno. See Conrad Willgerodt.

Albert, Friedrich. See Emil Knoevenagel.

Albert, Kurt. See Otto Ruff.

Albert, Robert, estimation of soil acidity, 1909, A., ii, 446.

[Albert's method for determining soil activity], 1910, A., ii, 364.

Albert, Robert. See also Philipp Malkomesius.

Alberti, Leo, and Bronislav Smieciuszewski, preparation of the chlorohydrin, the oxide, and an unsaturated alcohol from normal diprimary decylene glycol [decan-ακ-diol], 1906, A., i, 619.

Albertini, Alberto. See Herman Decker, and Adolf Kaufmann.

Albertoni, Pietro, and Felice Rossi, the action of animal proteins on vegetarians, 1911, A., ii, 411.

Albini, Silvio. See Giuseppe Plancher.
Albitzky, Alexius A., isomerism between oleic and elaidic acids and erucic and brassidic acids. II., 1903, A., i, 227.

Albitzky, Alexius A., oxidation of unsaturated acids by Caro's reagent, 1903,

A., i. 228.

Albitzky, P., the "back action" and "after action" of carbon dioxide and the biological importance of the carbonic acid normally present in the body, 1912, A., ii, 458.

Albrecht, Ernst. See Leopold Rüg-

heimer.

Albrecht, Walther, additive products of cyclopentadiene and quinones, 1906, A., i, 674.

Albrecht, Walther. See also Johannes

Thiele.

Albu, Albert, and Carl Neuberg, chemistry of cancer. IV. Indole in the stomach in carcinoma, 1907, A., ii, 115.

Albuquerque, M. d'A., valency and the evolution of the elements, 1912, A., ii, 1156.

Alcock, Frank Harris, [assay of] sodium salicylate, 1907, A., ii, 58.

Alcock (Miss) Mary. See Gilbert Thomas

Morgan.

Alcock, Nathaniel Henry, and Jordan Roche Lynch, physical and chemical properties of nerves. I., 1908, A., ii, 51.

the relation between the physical, chemical, and electrical properties of nerves. III. Total ash, sulphates, and phosphates, 1910, A., ii, 323.

relation between the physical, chemical, and electrical properties of nerves. IV. Potassium, chlorine and potassium chloride, 1911, A., ii, 413.

Alcock, Nathaniel Henry. See also Otto Loewi.

Alden, Frederick W., [estimation of] chrome and acid in chrome-tanning liquors, 1907, A., ii, 54.

Alders, H., and Arthur Stähler, the phosphates of lead, 1909, A., ii, 670.

rapid electro-analysis, 1909, A., ii, 764. Alderson, Edmund. See Herbert Eldon Roaf.

Aldrich, Thomas Bailey, adrenaline [epinephrine], the active principle of the suprarenal glands, 1905, A., i, 955.

chemistry of the infundibular portion of the pituitary body, 1908, A., ii,

tribromotert.-butyl alcohol, C4H7OBr3,

1911, A., i, 346.

the feeding of young dogs on the anterior lobe of the pituitary body, 1912, A., ii, 782.

Aldrich, Thomas Bailey, the feeding of white rats on the pituitary body, 1912, A., ii, 1192.

the iodine content of the thyroid of sheep, ox, and pig, 1912, A., ii,

1192

Aldrich, Thomas Bailey. See also Elijah Mark Houghton.

Aldridge, Montague. See Frederick Daniel Chattaway.

Alefeld, Ernst, semi-aldehyde of succinic

acid (a correction), 1909, A., i, 364, gravimetric estimation of halogens by means of silver nitrate, 1909, A., ii,

262

Alefeld, Ernst. See also Heinrich Biltz. and Carl Dietrich Harries.

Aleixandre, Peset, a new micro-chemical reaction of semen, 1912, A., ii, 707.

See Louis Grandeau.

Aleksandroff, W. G. See Wladimir I. Palladin.

Alessandri, Luigi, behaviour of some derivatives of phenylhydroxylamine, 1910, A., i, 752.

diacetylfurazan, 1912, A., i, 655.

Alessandri, Luigi. See also Angelo Angeli.

Alexander, Archibald Douglas. See Leonard Bairstow.

Alexander, D. Basil W., constant level reservoir, 1909, A., ii, 877.

Alexander. Erich. See Alexander Naumann.

Alexander, Franz G., the gaseous metabolism of the brain, 1912, A., ii, 957.

Alexander, Franz G., and Geza Révész, the influence of optical stimula on the gaseous metabolism of the brain, 1912, A., ii, 957.

Alexander, Jerome, some colloid-chemical aspects of digestion with ultramicroscopic observations, 1910, A.,

Alexander, Paul, caoutchouc substances containing oxygen, 1904, A., i, 905. caoutchouc nitrosite and its use for the analysis of crude caoutchoucs and caoutchouc products. I., 1905, A., i, 223; 1907, A., i, 433.

inversion of ψ-ionone and its deriva-

tives, 1905, A., i, 355.

caoutchouc nitrosites and their application in analysis, 1911, A., i, 389. constituents of gnayule, Parthenium argentatum, 1911, A., i, 897.

Alexander, Theodor, condensation of aminoacetone with benzaldehyde, 1905, A., i, 92.

Alexander, Thomas J. R. See Hermann

Pauly.

Alexander. William. See Benjamin Moore.

Alexander, W. B. See Walter Parke Bradley.

Alexandroff, A. See Th. Rudakoff, and Vetcheslav E. Tistschenko.

Alexandroff, Dmitry Konstantinowitsch, detection of pyrrolidine-2-carboxylic acid, 1905, A., ii, 869.

salts and ethers of hexanitrodiphenyl-

amine, 1908, A., i, 83.

Alexandroff, Wladimir, qualitative analysis of sulphates, sulphites, and thiosulphates, 1909, A., ii, 264.

burette without stopcock or rubber connexion, 1910, A., ii, 747.

Alex6eff, D. W., dimethylmethylenetri-CH₂ C:CMe₂, 1905, A., methylene, | CH2

i, 639.

periodic phenomena in crystallisation, 1907, A., ii, 239.

electro-catalysis, 1910, A., ii, 98.

Alfano, P. See Marussia Bakunin. Alilaire, E., composition of an acetic

ferment, 1906, A., ii, 623. phosphorus in the fat of micro-organ-

isms, 1908, A., ii, 123.

Alix, Just, and Isidore Bay, a frequent source of error in the analysis of coal, 1904, A., ii, 685.

Alix, Just. See also Isidore Bay.

Allain, L., preservative action of sodium and calcium chlorides on hydrogen peroxide solutions, 1906, A., ii, 663.

Allain Lecanu, Jules [Jacques François Louis], action of phenylhydrazine on alkyl bromides and iodides, 1903, A., i, 778; 1905, A., i, 375.

Allan, Francis Barclay, basic bismuth oxalates, 1903, A., i, 731.

barium salts of phthalic acid, 1909, A., i, 798.

Allan, Francis Barclay, and J. S. DeLury, a new double oxalate of bismuth and potassium, 1903, A., i, 731.

Allan, Francis Barclay and J. A. Phillips, a new double oxalate of bismuth and ammonium, 1903, A., i, 732.

Allan, John. See Edmund Knecht, and Lionel Guy Radcliffe.

Allard, Eduard, the course of acidosis in diabetes, 1907, A., ii, 639. acidosis in pancreas diabetes, 1908, A., ii, 1058.

Allard, Eduard. See also Oscar Gross. Allard, G. See J. Bougault.

Allegri, Cesare. See Arnaldo Piutti.

Alleman, Gellert, toluene-p-diazonium sulphate and the action of sulphuric acid on p-tolyl methyl ether, 1904, A., i. 202.

Alleman, Gellert. See also Percival Rudolph Roberts, and Laurence T. Sherwood.

Allemandet, H. See Paul Thiébaud Muller.

Allemann, O., estimation of formaldehyde in formalin soaps (lysoform, formosapol, and morbizid), 1910, A., ii,

the significance of the hydrogen ion in milk clotting, 1912, A., ii, 1079.

Allemann, O. See also Robert Burri. Allen, Alfred Henry, and Geo Egerton Scott-Smith, analysis George preparations containing opium, 1903, A., ii, 117.

certain reactions of the alkaloids of ipecacuanha, 1903, A., ii, 117.

Allen, Alfred Henry, and Arnold Rowsby Tankard, analytical examination of urine, 1904, A., ii, 596. estimation of boric acid in cider, fruits,

etc., 1904, A., ii, 777. Allen, Eugene Thomas, precipitation and separation by weak organic bases, 1903, A., ii, 518.

ore deposition in relation to iron sulphides, 1911, A., ii, 1093.

Allen, Eugene Thomas, and J. L. Crenshaw, crystalline forms and genetic conditions of the sulphides of zinc, cadmium, and mercury, 1912, A., ii,

Allen, Eugene Thomas, J. L. Crenshaw, John Johnston, and Esper S. Larsen, the mineral sulphides of iron, 1912, A., ii, 354.

Allen, Eugene Thomas, and John Johnston, the exact estimation of sulphur in soluble sulphates, 1910, A., ii, 650.

Allen, Eugene Thomas, and Walter P. White [with optical study Frederic Eugene Wright], wollastonite and pseudo-wollastonite; polymorphic forms of calcium metasilicate, 1906, A., ii, 683.

Allen, Eugene Thomas, and Walter P. with optical study by White, Frederic Eugene Wright and Esper S. Larsen, diopside and its relations to calcium and magnesium metasili-

cates, 1909, A., ii, 247. Allen, Eugene Thomas, Frederic Eugene

Wright, and John Kay Clement, minerals of the composition MgSiO3; a case of tetramorphism, 1906, A., ii, 865.

Eugene Thomas. See also Allen. Arthur Louis Day.

Allen, Herman Camp, reduction of nitrobenzene by means of ferrous hydroxide, 1912, A., i, 249.

Allen, H. S., See (Lord) Blythswood. Allen, Irving Cowan, and Walter Abraham Jacobs, an electrically heated distillation apparatus for difficult distillations, 1912, A., ii, 932.

Allen, Richard William, choline in blood and cerebrospinal fluid, 1904,

A., ii, 623.

Allen, Richard William, and Herbert Stanley French, test for choline in

blood, 1904, A., ii, 100.
Allen, Richard William. See also Edward Farguhar Buzzard, and Marcus Seumour Pembrev.

Allen, Samuel J., radioactivity of the atmosphere, 1904, A., ii, 222.

Allen, Samuel J. See also Ernest Rutherford.

Allen, Thomas Boles. See William

Robert Lang.

Allers, Rudolf A., racemic tryptophan, 1907, A., i, 995.

Allers, Rudolf A., and Samuel Bondi. behaviour of calcium in the blood in experimental poisoning by acids, 1907, A., ii, 973.

Allers, Rudolf A. See also Sigmund

Fränkel.

Allihn, Felix, Bunsen burner with sieve attachment, 1905, A., ii, 81.

Allin, C. G., third methyl ester of phthalic acid, 1909, A., i, 798.

Alliot, Henri, results obtained by the employment of Saccharomyces acclimatised to the volatile toxic substances present in beet molasses, 1903, A., ii, 386.

Alliot, Henri, and Gilbert Gimel, action of oxidising agents on the purity of industrial fermentations, 1904, A., ii,

Allison, Archibald, estimation of chromium in alloys, 1907, A., ii, 654.

Allison, F. G. See F. W. Gill.

Allmand, Arthur John, the electromotive behaviour of cuprous oxide and cupric hydroxide in alkaline electrolytes, 1909, T., 2151; P., 258.

phase equilibrium of the red cupriferrous sulphates, 1909, A., ii,

238.

affinity relations of cupric oxide and of cupric hydroxide, 1910, T., 603;

the electromotive properties of the mercury oxides, 1910, A., ii, 572.

Allmand, Arthur John, the element Cu CuoO alkali | Ho at Oo, 1911, T., 840; P., 69.

Allmand, Arthur John. See also Henry George Denham and Frederick George

Allner, W., Bunsen flame, 1906, A., ii,

Almagia, Marco, uric acid metabolism, 1906, A., ii, 109.

Almagia, Marco, and Gustav Embden. the occurrence of a volatile, iodoform-forming substance during perfusion of the liver, 1904, A., ii,

excretion of sugar after administration of alanine in dogs without a pan-

creas, 1905, A., ii, 842.

Aloisi, Piero, adamite from Monte Valerio, Tuscany, 1909, A., ii, 587. Aloy, Jules [François], a new class of

peruranates, 1903, A., ii, 431. precipitation of some alkaloids by uranium nitrate; reaction for mor-

phine, 1903. A., ii, 581.

conditions of formation and stability of thiosulphuric acid, 1903, A., if,

Aloy, Jules, and Gaston Auber, preparation of uranous salts, 1901, A., ii, 557.

Aloy, Jules, and V. Brustier, the catalysis of borneol and the catalytic hydrogenation of camphor, 1911, A., i, 730.

Aloy, Jules, and Aristide Frébault. pierie acid and 4:6-dinitro-2-aminophenol (pieramic acid), 1905, A., i, 429.

Aloy, Jules, and Paul Frébault, bismuth, 1906, A., ii, 550.

Aloy, Jules, and Ferdinand Laprade a reagent for phenols, 1905, A., ii, 616.

Aloy, Jules, and [Pierre] Charles Rabaut, reduction of nitro-derivatives with sodium hyposulphite, 1905, A., i, 517.

tyrosine, 1908, A., i. 341.

a-amino-p-hydroxyphenylacetic acid, 1910, A., i, 558.

carbamides derived from a-amino-phydroxyphenylacetic acid and its methyl ether, 1911, A., i, 371.

p-hydroxyphenylglyoxylic, p-hydroxyphenylacetic, and p-hydroxyphenylglycollic [p-hydroxymandelic] acids, 1911, A., i, 780.

cyanohydrins and the corresponding benzoylamides and alcohols, 1912,

A., i, 462.

Aloy, Jules, and Augustin Rispal, analysis of a liquid from a pancreatic cyst, 1903, A., ii, 444.

Aloy, Jules, See also Jacques Emile Abelous and Aristide Frébault.

Alpern, Roman, and Charles Weizmann. attempts to prepare glycerides of amino-acids, 1910, P., 345; 1911, T.,

Alpers, Karl, constituents of the leaves of Carpinus Betulus, L.; jellagic acid and tannic acids, 1907, A., i, 149.

Alsberg, Carl Lucas, nucleic acid, 1904, A., i, 791.

the guaiacum reaction, 1908, A., ii, 999.

globulins of egg-yolk of selachians, 1909, A., ii, 499.

the use of chitin in dialysis, 1910, A., ii, 693.

formation of d-gluconic acid by Bacterium sevastanoi, 1911, A., ii, 317.

Alsberg, Carl Lucas, and Ernest Dunbar Clark, a globulin from the egg-yolk of Squalus acanthias, 1908, A., ii,

blood-clot of the king-crab, 1909, A., ii, 68.

hæmocyanin of Limulus polyphemus,

1910, A., i, 647. Alsberg, Carl Lucas, and Otto Folin, metabolism in cystinuria, 1905, A., ii,

Alsberg, Carl Lucas, and C. A. Hedblom, soluble chitin, 1909, A., i, 541.

soluble chitin from Limulus polyphemus, and its osmotic behaviour, 1909, A., i, 946.

Alsberg, Carl Lucas. See also Reginald Fitz and Phoebus A. Levene. Alsleben, Paul. See Franz Sachs.

Alstyne, Eleanor van, and Silas Palmer Beebe, absorption of iodine by the dog's thyroid, 1909, A., ii, 504.

Alt, Heinrich, calorimetric measurements with liquid oxygen and liquid nitro-

gen, 1904, A., ii, 393.

latent heats of vaporisation of liquid oxygen and liquid nitrogen, and the variation of these quantities with temperature, 1906, Å., ii, 269. Alt, Heinrich. See also Karl T. Fischer.

Altan, Anton, Psidium guajava (djamboe) leaves, 1905, A., ii, 192.

Altherg, W., simple molecules as carriers of electricity in gases, and a new method of measuring molecular diameters, 1912, A., ii, 517.

Altenburg, Hans. See Hans Rupe. Altenburg, Johannes. See Otto Wallach.

See Richard Stoermer. Altgelt, H. Altieri, Gaetano. See Marussia Bakunin. Altmann, Arthur, action of carbon dioxide on aqueous solutions of lead acetate, 1907, A., ii, 173.

Altmayer, V. See Max Mayer.

Altnéder, Ferencz, estimation of silver in alloys in the wet way, 1906, A., ii, 395.

Alvares, J., passivity in acid solutions. II., 1909, A., ii, 305.

Alvares, J. See also Otto Sackur.

Alvarez. See Piñerûa Alvarez. Alvarez, Hector H. See G. Wenger.

Alvergniat-Chabaud, burette arranged to fill and level to an automatic zero and to return unused liquid to the reservoir, 1904, A., ii, 366. Alves, A. See Alfred Koch.

Alvisi, Ugo, observations on the action of fluorine in nature, 1912, A., ii, 357.

Alvisi, Ugo, and M. Orabona, the biochemical behaviour of perchlorates, chlorates, nitrates, and nitrites, and the reducing power of the root nodules of Leguminosæ, especially of Vicia faba, 1912, A., ii, 863.

Alvisi, Ugo, and Domenico Venditori, leucite and its application as a manure,

1908, A., ii, 61.

Alway, Frederick Jacob, azoxybenz-aldehydes, 1903, A., i, 201. nitration of benzyl chloride, 1903,

A., i, 242.

nitrosobenzaldehyde, 1903, A., i, 425,

m-nitronitrosobenzene, 1903, A., i, 690.

nitrosobenzoic acids, 1904, A., i, 316.

soils of the northern portion of the Great Plains region: the Second

Steppe, 1907, A., ii, 126. Alway, Frederick Jacob, and Walter D.

Bonner, relations between physical properties and molecular weights of p-and m-nitrosobenzaldehydes, 1903, A., i, 764.

nitrosocinnamic acids and esters, 1904, A., i, 891.

transformation of azoxybenzaldehyde, 1905, A., i, 676.

Alway, Frederick Jacob, and Ross Aiken Gortner, molecular weights of the vellow nitroso-compounds, A., i, 881.

two aromatic nitroso-compounds [mdinitrosobenzene and m-nitronitroso-

benzene], 1905, A., i, 516.

condensation of the three nitroanilines with p-nitrosobenzaldehyde, 1906, A., i, 994.

Alway, Frederick Jacob, and Guy R. McDole, soils from the northern portion of the Great Plains region : tribution of carbonates on the Second Steppe, 1907, A., ii, 294.

Alway, Frederick Jacob, and Reuben M. Pinckney, certain nitrogen compounds,

1904, A., i, 953.

Alway, Frederick Jacob, and Robert S. Trumbull, studies on the soils of the northern portion of the Great Plains region: nitrogen and humus, 1908, A., ii, 1067.

Alway, Frederick Jacob, and Frederick W. Viele, aromatic guanidines, 1903,

A., i, 201.

Alway, Frederick Jacob, and Arthur B. Walker. nitrosobenzoates. A., i, 696.

action of alkali sulphides on p-nitrobenzylaniline, 1903, A., i, 753.

Alway, Frederick Jacob, and M. D. Welsh, reduction of some aromatic nitro-compounds, 1903, A., i, 263.

Amadori, Mario, reciprocal behaviour of alkali sulphates, chromates, molybdates, and tungstates at low and at high temperatures. I., 1912, A., ii, 757.

capacity of sodium haloids for forming solid solutions at high temperatures,

1912, A., ii, 758.

mutual solubility of sulphates and carbonates in the solid state at high temperatures, 1912, A., ii, . 917.

tendency of haloids and phosphates of of the same metal to combine. Alkali chlorides and phosphates,

1912, A., ii, 940.

Amadori, Mario, and G. Pampanini, the capacity of potassium haloids for forming solid solutions in relation to temperature, 1912, A., ii, 48, 154.

Amadori, Mario. See also Alessandro Borgo, Giuseppe Bruni, and Giovanni

Pellini.

Amaduzzi, Lavoro, and Maurizio Padoa, conductivity and photo-electric hysteresis of isomorphous mixtures of sulphur and selenium and of selenium and tellurium, 1912, A., ii, 227.

the Hallwachs effect and phototropy,

1912, A., ii, 227.

Amagat, Emile Hilaire, an hypothesis relative to the internal pressure in liquids, 1909, A., ii, 549.

internal pressure of liquids and the determination of the absolute zero, 1911, A., ii, 1061.

Amagat. Émile Hilaire, variations in the coefficient of pressure with temperature, and their connexion with the internal pressure of liquids, 1912, A., ii, 428.

Amann, August. See Julius Bredt.

Amann, J., ultra-microscopical investigations, 1909, A., ii, 983, 1056; 1911, A., ii, 85, 388.

ultra-microscopy of iodine solutions. 1910, A., ii, 496, 844; 1912, A., ii,

ultra-microscopical studies. III. photo-chemical reaction, 1910, A., ii, 617.

refractrometric estimation of phosphates in urine, 1911, A., ii, 536.

Amann, Max. See Alexander Eibner. Amantea, Giuseppe, ereptase of the intestinal juice, 1911, A., ii, 1000.

presence of erepsin in the organs and its distribution in the mucous membrane of the digestive tract, 1912, A., ii, 777.

Amar, Jules, rôle of calcium oxalate in the nutrition of plants, 1903, A.,

ii, 505; 1904, A., ii, 199.

gaseous osmosis through a colloidal membrane, 1906, A., ii, 337.

refraction in compound gases, 1907, A., ii, 145.

putting into action of the human machine, 1911, A., ii, 48.

Ambardanoff, Salomon, See Carl Adam Bischoff, and Konstantin Wasilevitsch Charitschkoff.

Amberg, Richard, electrolysis of alkaline zinc solutions, 1903, A., ii, 614.

electrolytic analysis with rotating electrodes, 1904, A., ii, 593.

electrolytic precipitation of palladium, 1904, A., ii, 593.

theory of the deposition of metals from rapidly moving electrolytes, 1905, A., ii, 7.

chemical properties and combining weight of palladium, 1905, A., ii,

preparation of electrolytic iron, 1908, A., ii, 593.

electrolytic preparation of pure iron, 1910, A., ii, 414.

rapid estimation of carbon in steel and other iron alloys, 1910, A., ii, 896. Amberg, Samuel, toxicity of adrenaline,

1903, A., ii, 314.

estimation of hydrogen peroxide in milk and the preservation of milk by this substance, 1906, A., ii, 122.

Amberg, Samuel, and Walter Jones, the cleavage of nucleins in relation to enzymes, with special reference to the formation of hypoxanthine in the absence of adenase, 1911, A., i, 823.

the application of the optical method to a study of the enzymatic decomposition of nucleic acids, 1911, A.,

Amberg, Samuel, and Arthur Solomon Loevenhart, the inhibiting action of fluorides on lipase, 1908, A., i, 235.

Amberg, Samuel, and W. P. Morrill,

excretion of creatinine in the newborn infant, 1907, A., ii, 799.

metabolism of a breast-fed infant, 1907,

A., ii, 497.

Amberg, Samuel, and Milton Charles Winternitz, the catalase of sea-urchin eggs before and after fertilisation, with especial reference to the relation of catalase to oxidation in general, 1911, A., ii, 1110.

Amberger, Conrad, colloidal mercury,

1911, A., ii, 205.

metal organosols, 1912, A., ii, 1053. gold organosol, 1912, A., ii, 1059.

Amberger, Conrad. See also Carl Paal. Amberger, Karl. See Gustav Heller. Ambler, Joseph Alfred. See Treat Baldwin Johnson.

Amend, Carl Gustave. See Marston

Taylor Bogert.

Amenomiya, T., conversion of atropine into d- and l-hyoscyamines, 1903, A., i. 109.

terpinene nitrosite, 1905, A., i, 603. constitution of terpinene, 1905, A., i, 802.

See also Johannes Amenomiya, T. Gadamer.

Amerio, Alessandro, emission of carbon in certain flames, 1906, A., ii, 440; 1907, A., ii, 593.

Ameseder, Franz, cetyl alcohol from the fat of dermoid cysts, 1907, A., i,

745. composition of deposits in calcified aortæ, 1911, A., ii, 219.

Aminoff, Gregori, crystalline form of platinichlorides of sulphine derivatives. 1906, A., i, 787.

Ammann, Louis, comparative influence of water and of crude spirit on the composition of [beetroot] pulp in sugar works and distilleries, 1912, A., ii,

See also Léon Lindet. Ammann, Louis. Amos, Arthur. See Alfred Daniel Hall.

Amos. (Miss) Cornelia Bonté Sheldon. effects of ligature of one ureter, 1905. A., ii, 337.

Amos, (Miss) Cornelia Bonté Sheldon. See also Milton Crendiropoulo.

Amosoff, W. See Nicolai M. Kijner. Amoss, Harold L. See Joseph Hoeing Kastle.

Amouroux, Gaëtan, and Marcel Murat, synthesis starting from butyrone, 1912. A., i, 414.

Amouroux, Gaëtan. See also Marcel Murat.

Ampère Electrical Co., preparation of camphor, 1903, A., i, 502.

Ampola, Gaspare, culture experiments on the action of calcium fluoride on Vesuvian soil, 1904, A., ii, 767. denitrification of soil. III., 1905, A.,

ii, 194.

ten years' experiments on denitrification in arable soil, 1908, A., ii, 525. Ampola, Gaspare, and Sante de Grazia,

denitrification of soil, 1907, A., ii.

action of calcium fluoride on Vesuvian soil, 1907, A., ii, 388.

Ampola, Gaspare, and Francesco Scurti. tobacco oil; chemical and physical properties and composition, 1905, A., ii, 214.

the sugars of the tobacco plant, 1909. A., ii, 339.

Ampola, Gaspare, and Celso Ulpiani, denitrification in soil. II., 1904, A., ii, 139.

Amsler, N. K. See Alexander E. Porai-Koschitz.

Amstel, (Miss) J. van., and Gerrit van Iterson. jun., the temperature optimum of physiological processes, 1911, A., ii, 319.

Anastachewitz, A. See Adolf Kaufmann.

Ancel, Paul. See Paul Bouin.

Anderlini, Francesco, automatic mercury pump and apparatus for the study of gases, 1906, A., ii, 605.

some ammonio-copper mercuric iodides and an ammonio-copper iodide, 1912,

A., ii, 764.

Anderlini, Francesco. See also Raffaele Nasini.

Anders, Hans Gerkard. See Walter Herz. Andersen, A. C., volumetric estimation of sodium hydroxide in the presence of sodium carbonate, 1908, A., ii, 985.

Bang's method of sugar estimation and its application in the analysis of urine, 1909, A., ii, 102.

Andersen, A. C., Bang's method of estimating sugar, and the preservability of the reagents employed in titration, 1910, A., ii, 757.

nitrogen estimations by Kjeldahl's method, 1911, A., ii, 655.

the detection and estimation of sugar in the urine, 1912, A., ii, 101.

Andersen, A. C. See also Einar Biilmann, and Sören Peter Lauritz Sörensen.

Andersen, Erik Buch, metallic radiation, 1909, A., ii, 203.

Andersen, Erik Buch. See also Knud

Estrup.

Andersen, Nils. See Louis Pelet-Jolivet. Andersen, Olaf, epidote from Notodden, Telemark, Norway, 1912, A., ii, 1183. Anderson, Benton R., fruit of Solanum

dulcamara, 1911, A., ii, 762.

Anderson, Charles, association of natrolite and datolite at Pokolbin, New South Wales, 1904, A., ii, 349.

a mineral allied to montmorillonite from New South Wales, 1904, A., ii, 668.

monazite from New South Wales, 1904,

A., ii, 669. zeolites from New South Wales, 1907,

A., ii, 887.

petterdite and datolite, 1906, A., ii, 768. Anderson, Duncan Geddes. See Thomas Stewart Patterson.

Anderson, Ernest, action of Fehling's solution on galactose, 1909, A., i,

empirical relation between the configuration and rotation of sugars,

1911, A., i, 770.

relation between the configuration and rotation of the lactones in the sugar and saccharinic acid groups, 1912, A., i, 161.

Anderson, (Miss) Emma Alexander. See John Kerfoot Wood.

Anderson, Hugh Kerr, action of eserine and atropine on the denervated sphincter iridis, 1904, A., ii, 578.

action of drugs on the paralysed iris, 1905, A., ii, 546.

action of alkaloids on the iris, 1906, A., ii, 104.

Anderson, John Augustus. See Harry Clary Jones.

Anderson, John Spence. See Robert Alexander Houstoun.

Anderson, Rudolph. See Hermann Leuchs.

Anderson, R. J., phytin and phosphoric acid esters of inositol, 1912, A., i, 607, 676.

Anderson, R. J., organic phosphoric acid compound of wheat bran, 1912, A., ii.

Anderson, William Carrick, the formation of magnesia from magnesium carbonate by heat, and the effect of temperature on the properties of the product, 1905, T., 257; P., 11.

Anderson, William Carrick, and George Lean, properties of the aluminium-

tin alloys, 1904, A., ii, 37.

Anderson, W. H., detection of canesugar in milk and cream, 1907. A., ii,

Andersonn, Erich. See Otto Diels.

Andersson, Nils, the behaviour of the sugar of the blood after bleeding, 1909. A., ii, 767.

Andés, Louis Edgar, chlorobenzenes as solvents for resins, 1906, A., i, 154.

Andesner, Hans, behaviour of gabbro magma in fusions, 1911, A., ii, 47.

Andd, Gerolamo. See Bernardo Oddo. Andouard, Ambroise, sodium nitrate in preserved meat, 1906, A., ii, 492.

André, Emile, acetylenic ketones, 1910, A., i, 563.

combination of amines with acetylenic ketones; preparation of ethylenic β-substituted amino-ketones, 1911, A., i, 268.

cyclic acetylenes; phenylbutinene.

1911, A., i, 277.

new method for obtaining \$-diketones, 1911, A., i, 545.

action of hydrazine on ethylenic β-substituted aminoketones, 1912, A., i, 628.

Andre, Franz. See Julius Tafel.

André, Gustave, nature of the nitrogenous compounds in soil at different depths, 1903, A., ii, 235, 508.

nutrition of plants deprived of their

cotyledons, 1903, A., ii, 567. comparisons between the phenomena of the nutrition of plants without and with cotyledons, 1903, A., ii,

nutrition of etiolated plants, 1903, A., ii, 606.

development of annual fatty plants; study of the mineral bases, 1904, A., ii, 200.

development of annual fatty plants: study of the nitrogen and ternary substances, 1904, A., ii, 433.

variations in the composition of seeds during maturation, 1904, A., ii,

variations of mineral matters in ripening seeds, 1904, A., ii, 676.

André. Gustave development of organic matter in seeds during maturation, 1905, A., ii, 50.

transformations of nitrogenous substances in seeds during maturation,

1905, A., ii, 604.

simultaneous variations of organic acids in some oleaginous plants, 1905, A., ii. 605.

composition of the liquids which circulate in plants; variations of the nitrogen in the leaves, 1906, A., ii, 192.

variations in phosphoric acid and nitrogen in the leaf sap of certain plants, 1906, A., ii, 246.

variations in the nitrogen and phosphoric acid of the sap of an oleaginous plant, 1906, A., ii, 385.

composition of juices extracted from

roots, 1907, A., ii, 122.

migration of soluble principles in plants, 1907, A., ii, 288.

composition of vegetable juices from stems and leaves, 1907, A., ii, 291.

constant composition of vegetable juices obtained by successive extractions, 1908, A., ii, 217.

the first stages in the development of perennial plants compared with those of annuals, 1909, A., ii, 174, 337.

elaboration of nitrogenous matter in the leaves of living plants, 1909,

A., ii, 693.

elaboration of phosphorus-containing material and saline substances in the leaves of living plants, 1909, A., ii, 754.

development of a bulbous plant; variations in weight of the dried plant,

1910, A., ii, 334.

development of a bulbous plant; variations in the weight of nitrogen and mineral matters, 1910, A., ii, 442.

conservation of salts during the course of vegetation of an annual plant,

1911, A., ii, 141.

conservation of saline materials by an annual plant; distribution of dry material, total ash, and nitrogen, 1911, A., ii, 423.

conservation of saline materials by an annual plant; distribution of fixed elements, 1911, A., ii, 423.

diffusion of saline substances through certain vegetable organs, 1911, A.,

ii, 760.

soluble substances in the plasma of potato tubers, 1912, A., ii, 198.

displacement by water of soluble substances in the plasma of potato tubers, 1912, A., ii, 198.

André, Gustave, displacement by water of nutritive substances in seeds, 1912, A., ii, 591.

the evolution of nitrogen, phosphorus, and sulphur during the growth o

barley, 1912, A., ii, 675.

distribution of the mineral bases in barley during growth, 1912, A., ii, 803.

André, Gustave. See also Marcellin Berthelot.

André, Louis, and Albert Leulier, rotatory power of normal quinine hydrochloride, 1910, A., i, 581.

estimation of bromine in monobromo-

camphor, 1910, A., ii, 748. reae, Edward. See En Andreae, Emil Fischer.

Andreae, J. L., the "floating" method of determining the density of homogeneous solid substances, 1911, A., ii, 469.

Andreasch, Rudolf, a-methylhydantoin, 1903, A., i, 157.

phthalyl derivatives of a-aminopropionic acid, 1904, A., i, 895.

substituted rhodanic acids and their aldehyde condensation products, 1907, A., i, 233; 1908, A., i, 683; 1910, A., i, 694.

Andreasch, Rudolf, and Arthur Zipser, substituted rhodanic acids and their aldehyde condensation products, 1903, A., i, 855; 1904, A., i, 444; 1905, A., i, 930.

Andréeff, Gregorius. See Alexander M. Saytzeff.

Andréeff, Iwan Iw., rate of growth and solution of crystals, 1907, A., ii, 336; 1908, A., ii, 475.

chemical action of ultra-violet rays: synthesis and decomposition of water,

1912, A., ii, 112.

Andréeff, N. N., application of optical properties of liquids to the study of polymerisation and analogous phenomena, 1908, A., ii, 547.

Andréeff, N. N., and A. Saposhnikoff, determination of the degrees of dissociation of electrolytes in mixtures, 1912, A., ii, 892

Andrew, George William. See William Arthur Bone.

Andrew, Irving Atwater. See Harry Ward Foote.

Andrew, John Harold, and Charles Alfred Edwards, liquidus curves of the ternary system: aluminium-copper-tin, 1909, A., ii, 891.

Andrew, John Harold. See also William Henry Bentley.

Andrewes, Frederick William, bacterial flora of London air, 1903, A., ii, 385.

resistance of Staphylococcus pyogenes aureus to mercury perchloride, 1903,

A., ii, 386.

Andrews, Albert Edward, the active constituents of the Indian solanaceous plants Datura stramonium, D. fastuosa, and D. metel, 1911, T., 1871; P., 248.

estimation of codeine in opium, 1911,

A., ii, 1144.

Andrews, Albert Edward. See also

Wyndham Rowland Dunstan.

Andrews, Launcelot Winchester, estimamation of very small vapour tensions in certain circumstances, 1903, A., ii, 11.

new volumetric method of general applicability, 1903, A., ii, 682,

686.

volumetric determination of mercury and of hydrogen cyanide, 1903, A., ii, 695.

new method for the preparation of pure iodine, 1904, A., ii, 22.

Sprengel's method for the colorimetric estimation of nitrates, 1904, A., ii, 515.

direct separation of chlorides and bromides, 1907, A., ii, 503.

use of chromates of barium and of silver in the estimation of sulphates and chlorides, 1905, A., ii, 115.

refractive indices of alcohol-water mixtures, 1908, A., ii, 333.

volumetric estimation of mercuric salts, 1909, A., ii, 440.

the presence of iodate in commercial potassium iodide, 1909, A., ii, 1050.

Andrews, Launcelot Winchester, and Henry Avery Carlton, density curve of mixtures of bromine and chlorine, 1907, A., ii, 575.

Andrews, Launcelot Winchester, and Henry V. Farr, volumetric estimation of small quantities of arsenic, 1909, A.,

ii, 437.
Andrews, Launcelot Winchester, and Henry Max Goettsch, starch iodide, 1903, A., i, 10.

Andrews, William H. See Edwin Bret Hart.

Andrich, K. See Carl Schall.

Andriewsky, W. N., action of a mixture of ethyl bromoacetate and p-tolualdehyde on zinc; synthesis of β-hydroxy-β-p-tolylpropionic acid, 1908, A., i, 799.

Andriewsky, W. N., synthesis of βhydroxy-β-phenylpropionic acid, 1909, A., i, 158.

Andrlík, Karl, behaviour of the ammonium salts of some amino-acids in aqueous or sugar solutions on heating, 1903, A., i, 551.

preparation of glutamic acid from the waste liquors from molasses, 1903,

A., i, 797.

amine-ammonia water obtained by the distillation of the concentrated waste-liquors from the desaccharification of molasses, 1903, A., ii, 116.

optical rotatory power of glutamic

acid, 1904, A., i, 10.

isolation of betaine from the waste liquors from the desaccharification of molasses by means of strontia, 1904, A., i, 652.

influence of manuring on the quality of the beet, 1904, A., ii, 77.

estimation of the harmful nitrogen in the beet and in the products of sugar factories, 1905, A., ii, 616.

injurious nitrogen in sugar-beet, 1907,

A., i, 293.

the preparation of adenine from beet sugar residues, 1910, A., ii, 742. guaninepentoside from molasses resi-

dues, 1911, A., i, 397.

Andrlík, Karl, V. Bartos, and Josef
 Urban, difference of races and individual beets with regard to their composition, 1910, A., ii, 152.
 Andrlík, Karl, and Vladimir Staněk,

Andrlik, Karl, and Vladimir Stanek, influence of betaine and of amines on the growth of the sugar-beet,

1904, A., ii, 436.

estimation of sucrose in osmose-water and molasses, 1907, A., ii, 511.

the influence of optically active nonsugar material on the estimation of sugar in the sugar-beet, 1910, A., ii, 463.

Andrlík, Karl, Vladimir Staněk, and B. Mysík, comparative experiments on the manuring of beet, 1905, A., ii, 550.

Andrlîk, Karl, Vladimir Staněk, and Josef Urban, consumption of nutrients by parent beets and seedlings, 1906, A., ii, 300; 1907, A., ii, 387, 984.

Andrlik, Karl, and Josef Urban, influence of the [harmful] nitrogen on the purity of the syrup, 1905, A., ii, 617.

retention of the injurious nitrogen compounds of sugar-beet by the sap; stability of these substances in the purification process and their increase during prolonged storage of the roots, 1906, A., ii, 388. Andrlik, Karl, and Josef Urban, importance of sodium for sugar-beet, 1908,

A., ii, 219.

amount of nutrients utilised by sugarbeet in the first year and its relation to the amount of sugar in the roots, 1908, A., ii, 1066; 1909, A., ii, 176. manuring sugar-beet with sodium

chloride, 1909, A., ii, 515.

influence of nutrition on the variability in the composition of sugarbeet in the first year of growth, 1911, A., ii, 427.

Andrlik, Karl, Alois Velich, and Vladimir Stanek, physiological action of betaine, 1903, A., ii, 228. Andrlîk, Karl, and K. Velich, import-

ance of glutamic and aspartic acids as food-stuffs, 1908, A., ii, 307.

Andström, V., the rusting of iron, 1911,

A., ii, 43.

Anelli, Giovanni, estimation of sulphur by the Carius method, 1911, A., ii,

Anelli, Giovanni. See also Giuseppe Oddo.

Anema, P., and Charles Marius van Deventer, a problem of gas analysis, 1908, A., ii, 221.

Angel, Andrea, cuprous formate, 1906, T., 345; P., 58; discussion, P., 59. isomeric change of halogen-substituted diacylanilides into acylaminoketones, 1912, T., 515; P., 46.

Angel, Franz, a soda-sanidine from Mitrowitza, 1910, A., ii, 783.

Angeli, Angelo, diazo-fatty acids, 1904, A., i, 564.

formation of diazo-compounds, 1904, A., i, 699.

action of diphenylhydroxyacetic acid on dimethylcarbamide, 1908, A., i,

the oxidation of some azo-derivatives to the corresponding azoxy-compounds, 1910, A., i, 645.

some analogies between derivatives of oxygen and nitrogen, 1910, A., ii, 844, 948; 1911, A., i, 620.

Angeli-Rimini reaction of the aldehydes, 1912, A., i, 117, 626.

interesting decomposition of oximes, 1912, A., i, 269.

chemistry of silver therapy, 1912, A., ii, 964.

Angeli, Angelo, and Luigi Alessandri, the decomposition of certain salts of silver, 1910, A., i, 605.

nitropyrrole, 1911, A., i, 397.

structure of the azoxy-compounds, 1911, A., i, 817, 1045.

Angeli, Angelo, Luigi Alessandri, and M. Aiazzi-Mancini, N-phenyl ethers of the oximes, 1911, A., i, 544.

Angeli, Angelo, Luigi Alessandri, and Raffaello Pegna, action of nitrosoderivatives on unsaturated compounds, 1910, A., i, 552.

Angeli, Angelo, and Francesco Angelico. reactions of nitroxyl, 1904, A., i,

nitrosoindoles, 1904, A., i, 526. nitrohydroxylaminic acid, 1904, A., ii,

hydroxamic acids, 1904, A., ii, 330. new reactions of nitroxyl (dihydroxyammonia), 1905, A., ii, 385. 1-hydroxy-2-phenylindole, 1907, A.,

i, 153.

Angeli, Angelo, Francesco Angelico, and Enrico Calvello, pyrrole derivatives, 1904, A., i, 188.

Angeli, Angelo, Francesco Angelico, and Vincenzo Castellana, derivatives of

camphor, 1903, A., i, 842.

Angeli, Angelo, Francesco Angelico, and Francesco Scurti, hydroxamic acids, 1904, A., i, 310.

Angeli, Angelo, and Antonino d'Angelo, diazoindoles, 1904, A., i, 537.

Angeli, Angelo, and Vincenzo Castellana, a reaction of secondary amines, 1905, A., i, 491.

certain nitrogen compounds [substituted hydroxylamines], 1906, A., i,

aldehydic compounds, 1909, A., i, 308. the aldehyde reaction, 1909, A., i, 392.

method of formation of benzoylphenylhydrazine, 1909, A., i, 421.

Angeli, Angelo, Vincenzo Castellana, and R. Ferrero, decomposition of certain salts of silver, 1909, A., i, 739.

Angeli, Angelo, and Giuseppe Maragliano, nitration of amines, 1905, A., i. 873.

Angeli, Angelo, and Guerriero Marchetti, researches on the hydroxypyrroles, 1907, A., i, 436.

indoles, 1907, A., i, 551.

azoxy-compounds, 1906, A., i, 716.

new reactions of indoles and pyrroles, 1908, A., i, 207.

a transformation of dimethylpyrrole, 1908, A., i, 564.

decomposition of certain salts of silver, 1908, A., ii, 841.

certain aldehydic compounds, 1909, A., i, 12.

Angeli, Angelo, and Luigi Marino, santonic acid, 1907, A., i, 321.

Angeli, Angelo, and Luigi Marino, santoninic acid, 1908, A., i, 543.

Angeli, Angelo, and Eugenio Morelli, indoles, 1908, A., i, 828.

Augeli, Angelo, and Bruno Valori, azoxycompounds, 1912, A., i, 321.

Angelico, Francesco, transformations of the nitrosopyrroles, 1905, A., i, 659. amines and diazopyrroles, 1905, A., i, 938.

picrotoxin, 1907, A., i, 332; 1909, A., i, 318; 1910, A., i, 404, 577; 1911,

A., i, 1003.

principles of Atractylis gummifera (Sicilian masticogna), 1907, A., ii, 122; 1910, A., i, 403.

transformations of diazopyrroles, 1909,

A., i, 122.

researches on azinetriphenylpyrrole, 1911, A., i, 1032.

Angelico, Francesco, and Enrico Calvello, transformations of the nitrosopyrroles, 1904, A., i, 447.

Angelico, Francesco, and C. Labisi, transformations of oximinotriphenylpyrrole, 1910, A., t, 427. diazopyrroles, 1910, A., i, 444.

Angelico, Francesco, and Andrea Pitini, toxicological detection of the poisonous principle of Atractylis gummifera, II., 1907, A., ii, 801.

Angelico, Francesco, and Giuseppe Velardi, nitroindoles, 1904, A., i,

526.

Angelico, Francesco. See also Angelo Angeli.

Antonino d'. See Angelo Angelo, Angeli and Vincenzo Castellana. Angeloni, Lvigi. See Lvigi Balbiano.

Angelucci, Ottorino, constitution of the group, N2O2, of pernitroso-compounds derived from oximes, 1905, A., i, 801.

new laboratory apparatus, 1905, A., ii,

constitution of Scholl's nitroimines, 1906, A., i, 768.

quantitative separation of radiothorium from the mud of Echaillon and Salins Moutier, 1906, A., ii, 594.

electrolysis of thorium nitrate, 1907, A., ii, 773.

double nitrate and oxalate of thorium, 1909, A., ii, 742.

Angelucci, Ottorino. See also Gian Alberto Blanc.

Angenot, Henri, estimation of tin, antimony, and [arsenic] in ores and alloys, 1904, A., ii, 784.

separation of tungsten from tin, 1906,

A., ii, 496.

Anger, Erwin. See Arthur Kötz.

Angerer, Ernst, positive band spectrum of nitrogen and its variation with temperature, 1910, A., ii, 561.

Angrisani, T. See Marussia Bakunin. Angström, Knut, emission of heat by radium, 1906, A., ii, 63.

Angyán, J. von, and R. von den Velden, blood coagulation in man, 1912, A., ii, 954.

Anilinfarben- & Extrakt-Fabriken vorm. Joh. Rud. Geigy & Co., [formyl derivatives of aromatic bases], 1903, A., i, 522.

methyl-diaminodiarylmethane-w.sulphonic acids, 1904, A., i, 452.

preparation of acridine dyes, 1904, A., i, 530.

[basic dyes from formyl-m-diamines],

1906, A., i, 308. nitration of 2-hydroxy-1-diazonaphthalene-4-sulphonic acid, 1906, A, i,

545. preparation of diazo-oxynaphthalene sulphonic acids and their anhydr-

ides, 1906, A., i, 907. preparation of the anhydrides of 1diazo-2-hydroxy- and 2-diazo-1hydroxy-naphthalenes, 1906, A., i,

908.

preparation of 2'-hydroxynaphthalene-1-azo-\(\beta\)-naphthol-4'-sulphonic acid, 1907, A., i, 454.

[preparation of triphenylmethane colouring matters from diorthosubstituted benzaldehydes], 1908, A., i, 986; 1910, A., i, 175.

[preparation of disazo-derivatives of 2-amino-p-cresol], 1908,

1022.

preparation of 2:6-dichloro- and 2:3:6trichlorotoluene-4-sulphonyl chlorides, 1909, A., i, 706.

preparation of o-4-nitroso-1-hydroxynaphthoylbenzoic acid, 1910, A., i,

preparation of o-4-chloro-1-hydroxy-B-naphthoylbenzoic acid, 1910, A., i, 746.

preparation of 6-chloro-1-hydroxynaphthacenequinone, and of 6chloro-1-hydroxynaphthacenequinone-4-sulphonic acid, 1911, A. i, 136.

preparation of unsymmetrical substituted diphenylmethane derivatives, 1911, A., i, 978.

Anilinfarben- & Extrakt-Fabriken vorm. Joh. Rud. Geigy & Co. See also Joh. Rud. Geigy & Co.
Ankersmit, J. S. See Fritz Ullmann.

29

Anneler, E., estimation of morphine in opiates, especially in pantopon "roche" 1912, A., ii, 818.

Anneler, E. See also Frederick Pearson

Treadwell.

Annenkoff, A. See Nicolai D. Zelinsky. Annett, Harold Edward, nature of the colour of black cotton soils [in India], 1910, A., ii, 535.

Anno, Kinzuchi, the formation of d-lactic acid in incubated hen's eggs, 1912,

A., i, 748.

Annoni, Angelo, preparation of barium cacodylate, 1905, A., i, 758.

Ansaldo, Giovanni. See Luigi Rolla. Anschütz, Arnold. See Richard Josef Meyer and Max Trautz.

Anschütz, Richard, calculation of the number of classes of saturated polyhydric alcohols and their oxidation

products, 1903, A., i, 3.

new class of aromatic compounds allied to tetronic acid, 1903, A., i, 270. methylocitric acid [methoxytricarballylic acid], 1903, A., i, 550.

[acetyl-lactonitrile; acetylsalicylphenetidide]; correction, 1905, A., i, 267.

action of phosphorus pentachloride and trichloride on substituted ophenolcarboxylic acids, 1906, A, i, 500.

action of the chlorides of phosphorus on phenolsulphonic acids. I., 1908,

A., i, 83.

a new method of forming isocyanates [carbimides]. I., 1908, A., i, 326. attempt to prepare hexaphenylethane,

1908, A., i, 331.

a new method of forming isocyanates [carbimides] and Hofmann's thio-carbimide reaction. II., 1910, A., i, 158.

Loschmidt's graphic formulæ; history of the benzene theory, 1912, A., i, 247.

iminotetronic acid, 1912, A., i, 836.

sulphonylides, 1912, A., i, 852.

Anschütz, Richard, and Richard Anspach, action of phosphorus pentachloride and trichloride on 3-chlorosalicylic acid, 1906, A., i, 502.

action of phosphorus pentachloride and trichloride on 5-chlorosalicylic

acid, 1906, A., i, 503.

Anschütz, Richard, Richard Anspach, Reinhold Claus, Remigius Fresenius, Joachim Graff, Peter Junkersdorf, August Nefgen, Julius Sieben, and Joseph Wagner, the benzotetronic acid [4-hydroxycoumarin] group. I., 1909, A., i, 660.

Anschütz, Richard, and Heinrich Beckerhoff, formation of p-tert-amylphenol and tort-amylbenzene, 1903, A., i, 556.

Anschütz, Richard, and W. Bertram, acetylglycollic acid, 1903, A., i,

229

synthesis of tetrone-α-carboxylic ester and tetronic acid, 1903, A., i, 271.

acetyl derivative of fermentation lactic

acid, 1904, A., i, 966.

anhydroaconitic acid, 1904, A., i, 972.

anilide and phenetidide of acetylglycollic acid and of acetylsalicylic

acid, 1904, A., i, 990.

Anschütz, Richard, and Rudolf Böcker, the tetronic acid group. II. Action of acetylmandelyl chloride on ethyl sodiomalonate and ethyl sodiocyanoacetate, 1909, A., i, 729.

Anschütz, Richard, Rudolf Böcker, and Reinhold Claus, action of silver cyanide on acetoxycarboxylic chlorides, 1909,

A., i, 717.

Anschütz, Richard, and Alphons Deschauer, transformations of methyl dicarboxyaconitate, 1906, A., i, 727.

Anschütz, Richard, Julien Drugman, Ferdinand Haas, Oswald Scharfenberg, and Otto J. Sieplein, ester, amide-, anilide-, and p-toluidide-acids of mesaconic acid, 1907, A., i, 468.

Anschütz, Richard, and Paul Förster,

Anschütz, Richard, and Paul Förster, action of benzene and aluminium chloride on the chlorides of acetylated hydroxy-acids, 1909, A., i, 715.

Anschütz, Richard, and Ferdinand Haas, methyl itaconate, 1905, A., i,

259.

Anschütz, Richard, Emanuel Löwenberg, Karl Runkel, Fritz Schmitz, Jeff Henry Shores, and Julius Sieben, the benzotetronic acid [4-hydroxy-coumarin] group. I., 1909, A., i, 730.

Anschütz, Richard, Emanuel Löwenberg, Fritz Schmitz, and Jeff Henry Shores, action of benzene and aluminium chlorides. 1906. Apr. 1. 516.

chlorides, 1906, A., i, 516.
Anschütz, Richard, and Heinrich Mehring, action of phosphorus pentachloride and trichloride on 3:5-dichlorosalicylic acid, 1906, A., i,

501

Anschütz, Richard, and Oskar Motschmann, hydrolytic decomposition of acetylated hydroxy-acids. II, 1912, A., ii, 1046.

Anschütz, Richard, and Georg Rauff, decomposition of p-tert-butyl- and p-tert-amyl-phenols, 1903, A., i, 555.

2:6-dinitro-4-tert-amylphenol and its transformation products, 1903, A.,

i. 556.

Anschütz, Richard, and Alfred Robitsek, action of phosphorus pentachloride and trichloride on 3:5-dibromosalicylic acid, 1906, A., i, 503.

action of phosphorus pentachloride and trichloride on 2-hydroxyuvitic

acid, 1906, A., i, 507.

Anschütz, Richard, Alfred Robitsek, and Fritz Schmitz, action of phosphorus pentachloride and trichloride on 3:5di-iodosalicylic acid, 1906. A., i, 504.

Anschütz, Richard, and Otto Schmidt, action of phosphorus oxychloride on acetylanthranilic acid, 1903, A., i, 56.

anthranil and anthranilic acid, 1903,

A., i, 56.

Anschütz, Richard, Otto Schmidt, and A. Greiffenberg, action of anthranilic acid on acetylanthranil, 1903, A., i,

acylanthranils, 1903, A., i, 57.

Anschütz, Richard, and Max Eugen Scholl, the benzotetronic acid group. II. Ketonic hydrolysis of benzotetronic acid [4-hydroxycoumarin] and its homologues, 1911, A., i, 315.

Anschütz, Richard, and Ernst Schroeder, action of phosphorus pentachloride and trichloride on m-cresotic acid (3-hydroxy-p-toluic acid; 4-methylsalicylic acid), 1906, A., i, 506.

action of phosphorus pentachloride and trichloride on p-cresotic acid (5-methylsalicylic acid; 4-hydroxy-

m-toluic acid), 1906, A., i, 507.

Anschütz, Richard, Ernst Schroeder, Everhard Weber, and Richard Anspach, action of phosphorus pentachloride and trichloride on B-cresotic acid [2-hydroxy-m-toluic acid; 3methylsalicylic acid], 1906, A., i, 505.

Anschütz, Richard, and Paul Walter, amide acids of phenylsuccinic acid,

1908, A., i, 542.

oxidation of phoronic acid by nitric

acid, 1909, A., i, 697.

Anschütz, Richard, Paul Walter, and Carl Hahn, ester- and amide-acids of phenylsuccinic acid, 1907, A., i, 766.

Anschütz, Richard, Everhard Weber, and Karl Runkel, action of phosphorus pentachloride on 1-hydroxy-2-naphthoic acid, 1906, A., i, 508.

Anschütz, Richard, Everhard Weber, Julius Sieben, and Richard Anspach, action of phosphorus pentachloride and trichloride on nitro- and halogennitro-salicylic acids, 1906, A., i, 505.

Anselme, Alexandre d', solubility of gypsum in solutions of sodium

chloride, 1903, A., ii, 478.

volumetric estimation of calcium and magnesium in water from salt

marshes, 1903, A., ii, 695.

solubility of calcium hydroxide in solutions of alkali hydroxides and the rendering caustic of alkali carbonates, 1903, A., ii, 726.

Anselmino, Otto, phenylhydrazones of hydroxyaldehydes, 1903, A., i, 121.

decomposition of phenylhydrazones, 1903, A., i, 367; 1904, A., i, 194.

formation of salts of aromatic bases with dicarboxylic acids, 1904, A., i, 306; 1906, A., i, 493.

isomeric Schiff's bases, 1906, A., i, 13; 1907, A., i, 913; 1910, A., i,

174.

action of phenols on trichloroacetic acid, 1907, A., i, 413.

reduction products of Schiff's bases, 1908, A., i, 259.

picrates, 1908, A., i, 879.

Anselmino, Otto. See also Karl Auwers. Anspach, Richard. See Richard Anschütz.

Anthes, E., melting-point apparatus, 1912, A., ii, 19.

Anthes, E., See also Hermann Staudinger.

Anthony, Roland B. See Louis Kahlen-

Antonaz, Aldo. See Georg Rohde.

Antoni, Wilhelm, estimation of alcohol in fermented liquids, 1908, A., ii, 902.

Antoni, Wilhelm. See also Eduard Buchner and Carl Dietrich Harries. Antonoff, George Nicolaevich, compounds of haloid salts of metals with hydr-

oxylamine, 1905, A., ii, 709. surface tension in the critical regions of solutions, 1907, A., ii, 334.

tension at the boundary of two layers, 1907, A., ii, 606.

radium-D and the products of transformation, 1910, A., ii, 568.

the disintegration products of uranium,

1911, A., ii, 844.

Antonoff, George Nicolaevich, and B. V. Malysheff, solution of copper or its oxide in potassium hydroxide, 1907, A., ii, 262.

Antony, Ubaldo, formation of dithionic

acid, 1903, A., ii, 723.

Antony, Ubaldo, and Giuseppe Magri, liquid hydrogen sulphide as a solvent, 1905, A., ii, 446.

Antropoff, Andreas von, mercury salts of hydrogen peroxide and the preparation of a compound HgO2, 1908, A., ii, 383.

pulsating catalysis of hydrogen peroxide by mercury. J.-III., 1908,

A., ii, 472.

argon in radioactive zirconium minerals, 1908, A., ii, 943; 1909, A., ii,

solubility of xenon, krypton, argon, neon, and helium in water, 1910, A., ii, 409.

simplified and improved form of Toepler's mercury air-pump, 1910, A., ii, 947.

dynamics of osmotic cells. I. Preliminary communication, 1911, A.,

ii, 472.

Antulich, Oskar, substituted rhodanines and their condensation products with aldehydes. IX., 1910, A., i,

Aoki, Yoshihiko, See Rikō Majima. Aparin, I., acid of the moss berry, 1904, A., ii, 200.

fatty oil of strawberries, 1904, A., ii, 583.

Apelt, Oskar. See Daniel Vorländer. Aphanassieff, B. P. See Eugen von Biron.

Apitz, R. See Karl Auwers.

Apitzsch, Hermann, preparation of dibenzyl ketone, 1904, A., i, 510.

action of carbon disulphide and potassium hydroxide on ketones. 1905, A., i, 810.

reduction of ketones by alcoholic stannous chloride and hydrochloric acid, 1907, A., i, 537.

condensation of esters of 4-keto-2:6dithiolpenthiophen-3:5-dicarboxylic acid with ethyl chloroacetates, 1909, A., i, 48.

Apitzsch, Hermann, and G. A. Bauer, thio-γ-pyronedithiols [4-ketopenthiophendithiols], 1909, A., i, 47.

Apitzsch, Hermann, and R. Blezinger, action of carbon disulphide and potassium hydroxide on ketones. III., 1909, A., i, 46.

Apitzsch, Hermann, and Ludwig Christian Kelber, sulphides from the ester of 2:6-dithiolketopenthiophen-3:5-dicarboxylate. VI., 1909, A., i. 826.

thio-y-pyrone derivatives, 1910, A., i, 409.

Apitzsch, Hermann, and Franz Metzger, action of carbon disulphide and potassium hydroxide on dibenzyl ketone, 1904, A., i, 510.

reduction of ketones, 1904, A., i, 510. Apolloni, F. See Filippo Traetta-Mosca.

Apostoi, Th. See N. Costachescu.

Appelberg, Axel, electrolysis of fused lead chloride with reference to its connexion with current density and current yield, 1903, A., ii, 630.

Appenzeller, Ernst. See Franz Sachs. Applebey, Malcolm Percival, the viscosity of salt solutions, 1910, T., 2000;

P., 216.

Applebey, Malcolin Percival. See also Earl of Berkeley and Harold Brewer Hartley.

Aps, Edmond J., a carrier for filled basins or beakers, 1910, A., ii,

a new apparatus for effecting slow and certain incineration, 1911, A., ii, 149.

Arafuru, Katsunosuke, influence of boric acid on the inversion of sucrose by the catalytic action of hydrochloric acid. 1910, A., i, 653.

Araki, Trasaburo, enzymatic decomposition of nucleic acids, 1903, A., i,

668.

Arand, Karl. See Hugo Simonis. Arbenz, Emil. See Emil Erlenmeyer, jun.

phosphorous acid, 1905, A., i, 316. Arbusoff, structure of phosphorous acid and its

derivatives, 1907, A., i, 8.

structure of phosphorous acid and its derivatives. III. The compounds of the tervalent phosphorus derivatives with the mono-halogen compounds of copper, 1907, A., i, 174.

structure of phosphorous acid and its derivatives. IV. The conversion of tervalent into quinquevalent derivatives of phosphorus, 1907, A., i, 275.

preparation of ketone acetals, 1907, A., i, 749.

preparation of acetals by Claisen's method, 1908, A., i, 555.

existence of isomeric double sulphites of potassium and sodium, 1909, A., ii, 573.

new method for the preparation of aliphatic nitriles, 1910, A., i, 721.

isomerisation of some phosphorus compounds, I., 1910, A., i, 802; 1911, A., i, 100.

Arbusoff, Alexander E., and P. S. Pishtschimuki, preparation of sulphonic acids of the aliphatic series, 1909,

A., i, 452.

Arbusoff, Alexander E., and W. M. Tichwinsky, preparation of substituted indoles by the catalytic decomposition of arylhydrazones, 1910, A., i, 771.

catalytic decomposition of phenylhydrazine by means of haloids, 1910, A., i, 776.

Arcangeli, Alceste, microchemical detection of phosphorus in microscopical preparations of vegetable and animal tissues, 1907, A., ii, 813.

Archbutt, Leonard, estimation of the iodine value of oils by the iodine-bromide method, 1904, A., ii, 374.

the action of slightly alkaline waters on iron, 1905, A., ii, 590.

estimation of oxygen in copper, 1906,

A., ii, 122.

Archbutt. Sydney Leonard. See William Gemmell, and Walter Rosenhain.

Archetti, Andrea, estimation of clay in

limestone, 1909, A., ii, 763.

Archibald, Ebenezer Henry, a revision of the atomic weight of rubidium, 1904, T., 776; P., 85.

electrical conductivity of solutions of the alcohols in liquid hydrogen

bromide, 1907, A., ii, 526.

electrical conductivity of solutions of organic acids in liquid hydrogen chloride and bromide, 1907, A., ii, 840.

atomic weight of platinum, 1910,

A., ii, 43.

electrical conductivity of solutions of the alcohols in liquid hydrogen chloride, 1912, A., ii, 527.

Archibald, Ebenezer Henry, and Douglas McIntosh, the basic properties of oxygen; additive compounds of the halogen acids and organic substances and the higher valencies of oxygen; asymmetric oxygen, 1904, T., 919; P., 139.

liquefied hydrides of phosphorus, sulphur, and the halogens as conducting solvents. II. 1904, A., ii,

melting points of solid chloroform, toluene, and ether, 1904, A., i,

Archibald, Ebenezer Henry, and W. A. Patrick, electrical conductivity of solutions of platinum tetraiodide and of iodine in alcohol, 1912, A., ii, 423.

Archibald, Ebenezer Henry, and H. von Wartenberg, formation of ozone by electrolysis with alternating current, 1911, A., ii, 1083.

Archibald, Ebenezer Henry, Wendell G. Wilcox, and B. G. Buckley, study of the solubility of potassium platini-

chloride, 1908, A., ii, 492.

Archibald, Ebenezer Henry. See also Howard Turner Barnes, Theodore William Richards, Bertram Dillon Steele, and James Wallace Walker.

Arden, Alexander. See Aladar Skita. Ardern, Edward. See Gilbert John

Fowler.

Arena, F. See Giuseppe Kernot. Arena, M. See Ezio Comanducci.

Arend, J. P. See Camille Aschman. Arend, Kurt von. See August Michaelis. Arendt, Theodor. See Josef Houben.

Aretz, Matthias, the long-waved portion of the spark and arc spectra of copper,

1911, A., ii, 351.

Argenson, G., estimation of alcohol in dilute solutions, 1903, A., ii, 46.

Argyriades, E., apparatus for estimating sulphur dioxide, 1907, A., ii, 393.

Argyris, Alfred, neurokeratin, A., i, 70.

chemistry of the brains of birds and fishes, 1908. A., ii, 965.

Argyris, Alfred, and Otto Frank, absorption of monoglycerides of the higher fatty acids, 1912, A., ii, 1069. Aries, E., laws and equations of chemical

equilibrium, 1903, A., ii, 589. the laws of displacement of chemical

equilibrium, 1904, A., ii, 16. extension of Clapeyron's formula to all

the indifferent states, 1904, A., ii,

the conditions of the indifferent state, 1904, A., ii, 244.

the properties of the curves representing the indifferent states, 1904, A., ii, 314.

the fundamental law of osmotic phenomena, 1904, A., ii, 648.

theory of dilute solutions based on the law of van't Hoff, 1904, A., ii, 648. the tonometric and cryoscopic fomulæ,

1904, A., ii, 707.

Arima, R. See Junichi Mochizuki.

Arinkin, Michail In nokentjevič, the influence of inorganic and organic acids on liver autoly sis, 1907, A., ii,

endotoxins of vibrios, 1907, A., ii,

Ark. Harry. See Harry Medforth Dawson.

- Arkwright, J. A., the serum reactions (complement fixation) of the meningococcus and the gonococcus, 1912, A., ii, 187.
- Arloing, Fernand, and Marc Troude, action of ozone on the diphtheria bacillus and its toxin, 1903, A., ii, 318
- Armani, G., and J. Barboni, qualitative test for small quantities of gold and silver, 1910, A., ii, 659.
- Armes, Henry Percy. See Julius Berend
- Armit, Henry William, toxicology of nickel carbonyl, 1907, A., ii, 981; 1909, A., ii, 168.
 - physiological effect of cobalt carbonyl vapour, 1909, A., ii, 918.
- Armit, Henry William, and Arthur Harden, estimation of small quantities of nickel in organic substances, 1906, A., ii, 397.
- Armstrong, Edward Frankland, studies on enzyme action. I. The correlation of the stereoisomeric a-and B-glucosides with the corresponding glucoses 1903. T. 1305. P. 200
 - glucoses, 1903, T., 1305; P., 209. studies on enzyme action. II. Rate of the change conditioned by sucroclastic enzymes and its bearing on the law of mass action, 1904, A., i, 956.
 - studies on enzyme action. III.
 Influence of the products of change
 on the rate of change conditioned
 by sucroclastic enzymes, 1904, A.,
 i, 957.
 - lysis of isomeric glucosides and galactosides by acids and enzymes, 1904, A., i, 1070.
 - studies on enzyme action. VII. The synthetic action of acids contrasted with that of enzymes; synthesis of maltose and isomaltose, 1906, A., i, 127.
 - studies on enzyme action. VIII. The mechanism of fermentation, 1906, A., i, 128.
 - rapid detection of emulsin, 1910, A., ii, 668.
- Armstrong, Edward Frankland, and Paul Scidelin Arup, stereoisomeric glucoses and the hydrolysis of glucosidic acetates, 1904, T., 1043; P., 169.
- Armstrong, Edward Frankland, and Robert John Caldwell, studies on enzyme action. IV. Sucroclastic action of acids as contrasted with that of enzymes, 1904, A., i, 957, 1070.

- Armstrong, Edward Frankland, and Stephen Lewis Courtauld, formation of isodynamic glucosides with reference to the theory of isomeric change and the selective action of enzymes; preparation of β-methylglucoside, 1905, A., i, 746.
- Armstrong, Edward Frankland. See also Henry Edward Armstrong, Jacobus Henricus van't Hoff, and Frederick Keeble.
- Armstrong, Henry Edward, the mechanism of combustion, 1903, T., 1088; P., 201.
 - enzyme actions as bearing on the validity of the ionic dissociation hypothesis and on the phenomena of vital change, 1904, A., i, 958.
 - retardation of combustion by oxygen, 1904, A., ii, 723.
 - the mechanics of fire, 1905, A., ii, 448. studies on enzyme action; lipase, 1906, A., i, 126.
 - origin of osmotic effects, 1907, A., ii,13. studies of the processes operative in solutions. VI. Hydrolysis, hydrolation, and hydronation as determinants of the properties of aqueous solutions, 1908, A., ii, 814.
 - origin of osmotic effects. II. Differential septa, 1909, A., ii, 387.
 - morphological studies of benzene derivatives. Part I. Introductory,
 - 1910, T., 1578; P., 139. studies of the processes operative in solutions. Part XIX. The complexity of the phenomena afforded by solutions; a retrospect, 1910, P., 299.
- Armstrong, Henry Edward, and Edward Frankland Armstrong, enzyme action. X. The nature of enzymes, 1907, A., i, 809.
 - studies on enzyme action. Part XV. The comparative influence of monhydric C₂H_{2n+1} alcohols and other non-electrolytes on enzymic activity, 1910, P., 334.
 - origin of osmotic effects. III. The function of hormones in stimulating enzymic change in relation to narcosis and the phenomena of degenerative and regenerative change in living structures, 1910, A., ii, 883.
 - function of hormones in regulating metabolism, 1911, A., ii, 642.
 - origin of osmotic effects. IV. The differential septa in plants with reference to the translocation of nutritive materials, 1911, A., ii, 918.

Armstrong, Henry Edward, Edward Frankland Armstrong, and Edward Horton, enzyme action. XII. The enzymes of emulsin, 1908, A., i, 745.

studies on enzyme action. Part XVI. Prunase and amygdalase: their separate occurrence in plants, 1910,

P., 334.

studies on enzyme action. Part XVII. The distribution of β -glucases in

plants, 1910, P., 334.

enzyme action. XVI. Enzymes of the emulsin type. I. Prunase, the correlate of prunasin, 1912, A., i, 816.

enzyme action. XVII. Enzymes of the emulsin type. II. The distribution of β -enzymes in plants, 1912,

A., i, 816.

Armstrong, Henry Edward, and Robert John Caldwell, studies of the processes operative in solutions, The discrimination of hydrates in solution, 1907, A., ii, 850.

Armstrong, Henry Edward, and David Crothers, studies of the processes operative in solutions. VIII. The influence of salts on hydrolysis and the determination of hydration values, 1908, A., ii, 816.

studies of the processes operative in solutions. Part XVIII. The depression of electrical conductivity bv non-electrolytes, 1910,

299,

Armstrong, Henry Edward, and John Vargas Eyre, studies on enzyme action. Part XVIII. Linase, 1910, P., 335.

studies of the processes operative in solutions. XI. The displacement of salts from solution by various precipitants, 1910, A., ii, 832.

enzyme action. XVIII. Enzymes of the emulsin type. III. Linase and other enzymes in Linaceæ, 1912, A.,

i, 816.

Armstrong, Henry Edward, John Vargas Eyre, Arthur Vivian Hussey, and William Perceval Paddison, studies of the processes operative in solutions. II. The displacement of chlorides from solution by alcohol and by hydrogen chloride, 1907, A., ii, 848.

Armstrong, Henry Edward, Edward Horton, studies on enzyme action. XIII. Enzymes of emulsin type, 1910, A., i, 602.

enzyme action; urease: a selective enzyme 1912, A., i, 594.

Armstrong, Henry Edward, and Walter Hamis Glover, studies on enzyme XI. Hydrolysis of raffinose by acids and enzymes, 1908, A., i, 712.

Armstrong, Henry Edward, and Thomas Martin Lowry, phenomena of luminosity and their possible correlation with radioactivity, 1904, A., ii, 5.
Armstrong, Henry Edward, and Ernest

Ormerod, studies on enzyme action:

lipase, II., 1907, A., i, 103.

Armstrong, Henry Edward, and William Robertson, the significance of optical properties as connoting structure; camphorquinone-hydrazones-oximesdiazo-derivatives: a contribution to the theory of the origin of colour and to the chemistry of nitrogen, 1905, T., 1272; P., 180; discussion, P., 180.

Armstrong, Henry Edward, and Ernest Harry Rodd, morphological studies of benzene derivatives. III. p-Dibromo-benzenesulphonates (isomorphous) of the "rare earth" elements-a means determining the directions of valency in tervalent elements, 1912, A., i, 756.

Armstrong, Henry Edward, and John Adam Watson, studies of the processes operative in solutions. IV. Hydrolysis of methyl acetate in presence of

salts, 1904, A., ii, 849.

Henry Edward, Armstrong, Edward Wheeler, studies of the processes operative in solutions. VII. Relative efficiencies of acids as deduced from their conductivities and hydrolytic activities, 1908, A., ii, 815.

studies of the processes operative in solutions. Part XVII. The relative efficiencies of acids as deduced from their conductivities and hydrolytic activities. II., 1910, P., 299.

Armstrong, Henry Edward, and Frederick Palliser Worley, studies of the processes operative in solutions. Part XIII. The depression of the hydrolytic activity of acids by paraffinoid alcohols and acids, 1910, P., 298.

Arnaud, Albert, and Victor Hasenfratz, oxidation of higher acetylenic aliphatic

acids, 1911, A., i, 515.

Arnaud, Albert, and Swigel Posternak, additive di-iodo-derivatives of higher fatty acids of the $C_nH_{2n-4}O_2$ series, 1909, A., i, 630.

partial hydrogenation of acids in the stearolic series and isomerism of their hydriodo-derivatives, 1910, A.

i, 356.

Arnaud, Albert, and Swigel Posternak, isomerisation of oleic acid by displacement of the double linking, 1910, A., i, 459.

two new isomerides of stearolic acid, 1910, A., i, 459.

Arnaud, Albert. See also Henri Pellet. Arnaud, Francis William Frederick. See Cecil Howard Cribb.

Arnd, Th. See H. Süchting.

Arnd, Thenkmar. See Heinrich Biltz.
Arndt, Fritz, aromatic \(\psi\)-thiocarbamides
and their conversion into aryl ortho-

thiocarbonates, 1911, A., i, 918.

Arndt, Fritz. See also Karl Auwers.

Arndt, Kurt, preparation of metallic calcium, 1903, A., ii, 76; 1905, A., ii, 87.

velocity of decomposition of ammonium nitrite. II., 1904, A., ii, 16.

conductivity of fused salts, 1906, A., ii, 418.

measurements of viscosity at high temperatures, 1907, A., ii, 745.

the electrolytic dissociation of fused salts, 1907, A., ii, 598, 842.

solubility of alkaline earths in their molten chlorides, 1907, A., ii, 167. viscosity and conductivity, 1908, A.,

ii, 87. gravimetric estimation of boric acid,

1909, A., ii, 700. two cheap appliances for quantitative work [supports for crucibles], 1910,

A., ii, 747.
the influence of surface condition on
the rusting of iron, 1911, A., ii, 896.
influence of painting on the rusting of

influence of painting on the rusting of iron, 1912, A., ii, 454.

Arndt, Kurt, and Albert Gessler, con-

ductivity of fused salts, 1908, A., ii, 923.

density and equivalent conductivity of some fused salts, 1908, A., ii, 923.

Arndt, Kurt, and Willi Loewenstein, solutions of lime and silica in fused calcium chloride, 1909, A., ii, 1005.

Arndt, Kurt, and Georg Schraube, adsorption by heated charcoal, 1912, A., ii, 1144.

Arndt, Kurt, and Kurt Willner, anodic disturbances in electrolysis of molten liquids, 1907, A., ii, 599. the decomposition tension of fused

calcium chloride, 1908, A., ii, 457.

Arnheim, Julius, autolysis, 1904, A., ii,

Arnheim, Julius, and Adolf Rosenbaum, glycolysis, 1904, A., ii, 189.

Arnold, Alfred. See Emil Erlenmeyer, jun.

Arnold, Carl, behaviour of carbonates and hydroxides towards saturated solutions of potassium and ammonium carbonates, 1905, A., ii, 356.

[reagents for ozone], 1906, A., ii, 390.

two new methods for the estimation of dextrose, 1906, A., ii, 400.

Arnold, Carl, and Curl Mentzel, estimation of urea by Folin's method, 1903, A., ii, 48.

detection of hydrogen peroxide in milk, 1903, A., ii, 449.

detection of thiosulphates in foods in the presence of sulphites, 1903, A., ii, 573.

new reactions for distinguishing heated from raw milk and for the detection of hydrogen peroxide in milk, 1903, A., ii, 580.

Arnold, H., analysis of platinum alloys, 1912, A., ii, 870.

Arnold, Hans. See E. Schürmann.

Arnold, H. D. See Walter Guyton Cady. Arnold, Hans Richard. See Josef Houben.

Arnold, John Oliver, a fourth recalescence in steel, 1911, A., ii, 728.

Arnold, John Oliver, and Arthur Avery Read, iron, manganese, and carbon, 1910, A., ii, 1071.

the chemical and mechanical relations of iron, chromium, and carbon, 1911, A., ii, 1092.

Arnold, Robert B. See William Albert Noyes.

Arnold, Vincenz, a new nitroprusside reaction in urine, 1907, A., ii, 115. the presence of a dye resembling urorosein in certain pathological urines, 1909, A., ii, 821.

a new protein colour reaction; organpeptides, 1910, A., ii, 560.

cysteine in animal organs, 1911, A., ii, 306.

urorosein pigments of the urine, 1911, A., ii, 309.

a case of hæmatoporphyrinuria in typhoid fever, 1912, A., ii, 1195.

Arnold, W., estimation of the molecular weights of small quantities of fatty acids, 1912, A., ii, 395.

sources of error in the estimation of the Polenske number of fats, 1912, A., ii, 702.

Arnoldi, Heinrich. See Karl Andreas Hofmann, and Johannes Paessler.

Arnost, Alois, estimation of camphor [in celluloid], 1907, A., ii, 59.

Arnot, Robert. See Emil Knoevenagel. Arnou, G. See A. Portevin. Arntz, Emil, estimation of clay in soils, 1909, A., ii, 440.

Arntz, Karl. See Otto Fischer. Arny, Henry V., and T. M. Pratt, estimation of casein, 1906, A., ii, 407. Aron, Hans, influence of alkalis on the

growth of bone, 1905, A., ii, 100. influence of solutions of pigments on the heat coagulation of proteins, 1907, A., i, 989.

iron in the colouring matter of blood and its absorption of light, 1907,

A., ii, 280.

simple method for the estimation of calcium in organic materials, 1907, A., ii, 652.

calcium metabolism in relation to

rickets, 1908, A., ii, 771.

Aron, Hans, and Karl Frese, calcium foods in growing animals, 1908, A., ii, 405.

Aron, Hans, and Felix Hocson, rice as a foodstuff; the nitrogen and phosphoric acid metabolism with rice and other vegetable foodstuffs as the chief source of nutrition, 1911, A., ii, 625.

Aron, Hans, and Franz Müller, light absorption of hæmoglobin, 1907, A.,

i, 265.

Aron, Hans, and Robert Sebauer, importance of calcium salts for the growing organism, 1908, A., ii, 208.

Aron, Hans. See also Karl Oppenheimer, and Arthur Rosenheim. Aronssohn, Frédéric, mineral composition

of the bee, 1911, A., ii, 509. Aronstamm, B. See Josef Tambor.

Aronstein, Louis, detection of small quantities of white phosphorus in presence of large quantities of phosphorus sesquisulphide, 1906, A., ii, 705, 899; 1907, A., ii, 395.

Aronstein, Louis, and A. S. van Nierop, action of sulphur on toluene and xylene, 1903, A., i, 158, 329.

Arpi, Ragnar. See Carl Benedicks. Arpin, Marcel, estimation of moist gluten in flour, 1903, A., ii, 119.

Arragon, Charles, estimation of organic phosphorus compounds in flour and pastry, 1906, A., ii, 592.

a new colour reaction of petroleum,

1909, A., ii, 188.

Arrhenius, Svante [August], physical chemistry of agglutinins, A., ii,

Schütz's rule for reaction velocities,

1908, A., ii, 678. hæmolysis, 1908, A., ii, 708.

agglutination and coagulation, 1908, A., ii, 822.

Arrhenius, Svante [August], the laws of digestion and absorption, 1910, A., ii, 52.

energy relationships in vaporisation and electrolytic dissociation, 1912, A., ii, 131.

chief law of adsorption phenomena, 1912, A., ii, 139

the secretion of gastric and pancreatic juice, 1912, A., ii, 182.

electrolytic dissociation, 1912, A., ii,

419.

Arrhenius, Svante, and Thorvald Madsen, applications of physical chemistry to the study of toxins and anti-toxins, 1903, A., ii, 561.

toxins and antitoxins; diphtheria poison, 1905, A., ii, 50.

Arrhenius, Svante.

See also Hartog Jakob Hamburger. Arrivaut, G., alloys of manganese and

molybdenum, 1906, A., ii, 676. constituents of manganese-molybdenum alloys, 1906, A., ii, 758.

pure alloys of tungsten and manganese; preparation of tungsten, 1906, A., ii, 861.

alloys of silicon and silver, 1908, A., ii, 1035.

manganese arsenides, 1911, A., ii, 399. Arrivaut, G. See also Emile Vigouroux. Arsandaux, Henri, composition of baux-

ite, 1909, A., ii, 490, 587. study of laterites, 1910, A., ii, 723.

Arsem, William C., electric vacuum furnace, 1906, A., ii, 652.

transformation of other forms of carbon into graphite, 1912, A., ii, 250.

Arsonval, Arsène d', and Fréd. Bordas, low temperatures and chemical analysis [addendum], 1906, A., ii,

distillation and desiccation in vacuum by means of low temperatures, 1907, A., ii, 71.

Arteméeff, D. N., growth of crystal spheres, 1911, A., ii, 24.

Arteméeff, D. N. See also Evgraph

Stepanowitsch von Fedoroff.

Arth, Georges [Marie Florent], determination of the calorific power of blast-furnace gases by means of the calorimetric bomb, 1904, A., ii, 516. estimation of "coke" and "volatile

matter" in coal, 1905, A., ii, 202. Arth, Georges, and Crétien, solution of calcium sulphate in salt water, 1906,

A., ii, 853.

Arth, Georges, and Paul Ferry, purification of brine by barium carbonate, 1904, A., ii, 30.

Arth, Georges, and Emile Nicolas, electrolytic estimation of small quantities of silver in presence of lead, 1903, A., ii,

Arthur, Walter. See Edward DeMille

Campbell.

Arthus, Maurice, and Jean Gavelle, action of sodium fluoride on yeast, 1904, A., ii, 279.

Artini, Ettore, crystalline form of nitrogen sulphide, N₄S₄, 1906, A., ii,

crystalline forms of some benzene derivatives, 1909, A., i, 465.

brugnatellite, a new mineral species found in Val Malenco, 1909, A., ii, 247.

crystalline form of cholesteryl salicyl-

ate, 1910, A., i, 620. .

Artmann, Paul, introduction of iodine into tolylcarbamides, 1905, A., i,

the estimation of small quantities of

ammonia, 1911, A., ii, 226.
Artmann, Paul, and R. Brandis, iodometric estimation of phosphoric acid, 1910, A., ii, 241.

Artmann, Paul, and Anton Skrabal, iodometric estimation of ammonia, 1907, A., ii, 196.

Artmann, Paul. See also Arthur Müller and Anton Skrabal.

Artus. See Jacques Cavalier.

See Edward Paul Seidelin. Frankland Armstrong and Thomas Purdie.

Arzalier, Léon, acid sulphates of potass-

ium, 1908, A., ii, 763. rzalier, Léon. See also Arzalier, Léon.

William Œchsner de Coninck.

Arzberger, H., new hydrogen sulphide, carbon dioxide, or hydrogen generating apparatus, 1905, A., ii, 21. Arzibacheff. B. See Nicolai D. Zelinsky.

Asahina, Yasuhiko, sakuranin, a new glucoside from the bark of Prunus pseudo-cerasus var. Sieboldi, 1908, A., i, 559.

the fruit of Styrax obassia, 1908, A.,

styracitol, 1909, A., i, 288; 1912, A., i, 832.

alkaloids of Dicentra pusilla, 1909, A., i. 601.

Asahina, Yasuhiko. See also Richard Willstätter.

Aschan, J., examination of some samples of aloe from the Cape, 1903, A., i, 772.

Aschan [Adolf] Ossian, stereochemistry of alicyclic compounds, 1903, A., ii, 2.

Aschan [Adolf] Ossian, quinquevalent nitrogen. I. A new case of stereoisomerism, 1904, A., i, 350.

terpenes from Finnish pine and firresins, 1906, A., i, 442, 686.

two new terpenes, 1907, A., i, 630. first runnings from Finnish turpentine oil, 1907, A., i, 947.

santene, 1908, A., i, 94.

humus substances soluble in water from Scandinavian fresh waters, 1908, A., i, 250.

new borneol, 1908, A., i, 428.

constitution of isopinene, 1909, A., i,

constitution of wood charcoal, 1909, A., ii, 570.

camphenic (camphenecamphoric) acid, 1910, A., i, 709.

constitution of camphene. phene hydrochloride and camphene hydrate, 1911, A., i, 794.

constitution of camphene. III. Individuality of camphene from various sources, 1911, A., i, 796.

constitution of camphene. IV. Stereoisomeric camphenic acids, 1911, . A., i, 797.

the oxidation of camphene, 1912, A., 1, 367.

the decomposition of some higher acids of the oxalic acid group by heat, 1912, A., i, 536.

pinene hydriodide; (3-iodocamphane) and camphane, 1912, A., i, 879.

Aschan, Ossian, and E. Falck, mechanism of the Hell-Volhard reaction, 1912, A., i, 599.

Aschan, Ossian, and Lauri Lokka, the availability of the potassium "rapakivi" and pegmatitic granites, 1912, A., ii, 252.

Aschan, Ossian, A. Peterson, and W. Sjöström, constitution of isofenchocamphoric acid and of some compounds of the fenchone series, 1912, A., i, 198.

Aschan, Ossian. See also Bertel Ahlström.

Ascher, Edmund. See Friedrich Wilhelm Semmler.

Ascher, Erich. See Carl Neuberg.

Ascher, Karl, the presence and detection of allantoin in human urine, 1910, A., ii, 793.

Aschkenasi, Salo. See Gustav Heller. Aschkinass, Emil, range of activity and absorption of a-rays; secondary radiation produced by a-rays, 1908, A., ii,

Gabriel. See Alfred Aschkinasy, Werner.

Aschman, Camille, and J. P. Arend, direct estimation of water in butter and other fats, 1906, A., ii, 814. calcium cyanamide, 1908, A., ii, 220.

Aschner, Leo. See August Michaelis.

Aschner, R., and Otto Porges, the respiratory exchange in animals from which the pituitary body has been removed, 1912, A., ii, 458.

Aschoff, Fritz. See Paul Wagner.

Aschoff, Ludwig. See John George Adami.

Ascoli, Alberto, the passage of protein through the placental walls, 1903, A., ii, 87.

constituent of anthrax the active

serum, 1906, A., ii, 687.

Ascoli, Marcel, electric osmose in liquid

ammonia, 1904, A., ii, 108.

Ascoli, Maurizio, and Angelo Bonfanti, diastases and anti-diastases in blood serum, 1904, A., ii, 827.

Ascoli, Maurizio, and G. Izar, physicopathological action of colloidal metals on man, 1907, A., ii, 897.

influence of inorganic colloids on autolysis, 1907, A., ii, 897; 1908, A., ii, 713; 1909, A., ii, 74.

influence of inorganic colloids on Part III. Action of autolysis. poisons, 1908, A., ii, 121.

liver extracts and uric acid, 1909, A.,

the influence of inorganic colloids on autolysis. VI. The differences of action of various hydrosols, 1909, A., ii, 501.

uric acid formation. III. Uric acid formation in liver extracts after the addition of dialuric acid and urea, 1909, A., ii, 909.

Ascoli, Muurizio and L. Vigano, absorption of protein, 1903, A., ii, 739.

Aselmann, E., ions produced by falling

liquids, 1906, A., ii, 329. Ashbrook, Donald S., electrolytic separations possible with a rotating anode, 1905, A., ii, 64.

Ashby, Sydney Francis, the comparative nitrifying power of soils, 1904, T.,

1158; P., 175.

Ashdown, (Miss) Olive Eveline, and John Theodore Hewitt, the by-products of alcoholic fermentation, 1910, T., 1636; P., 169.

Asher, Leon, physiology of glands.

1904, A., ii, 500.

physiology of glands. XVII. The internal secretion of the suprarenal bodies and their innervation, 1912, A., ii, 660.

Asher, Leon, and Paul Boehm, physiology of glands. X. The liver in different nutritive conditions, 1909, A., ii, 163.

Asher, Leon, and Martin Flack, physiology of glands. XVI. The internal secretion of the thyroid and its formation under the influence of nervestimulation, 1911, A., ii, 55.

Asher, Leon, and Hans Grossenbacher, physiology of glands. XI. The functions of the spleen, 1909, A., ii, 503.

Asher, Leon, and Theodor Karaulow, the physiological permeability of cells. III. The permeability of the salivary glands to sugar; theory of salivary secretion, 1910, A., ii, 516.

physiology of glands. XV. The relationship between the physico-chemical properties of the gland proteins and the secretive capacity of the glands, 1910, A., ii, 628.

Asher, Leon, and Dimitri Pletneff, XIV. The physiology of glands. influence of proteins and protein degradation products on the activity of the liver, 1909, A., ii, 1035.

Asher, Leon, and Karl Reichenau,

physiology of glands. XIII. Excretion of total nitrogen and uric acid during feeding with proteoses, 1909, A., ii,

Asher, Leon, and R. Rosenfeld, physiology of glands. VIII. Physico-chemical relations of different substances in the blood, 1907, A., ii,

Asher, Leon, and Hans Vogel, physiology of glands. XVIII. The function of the spleen as an organ controlling the metabolism of iron, 1912, A., ii, 959.

Asher, Leon, and Richard Zimmermann, XII. The physiology of glands. function of the spleen in iron metabolism, 1909, A., ii, 503.

Asher, Philip, assay of opium and its preparations, 1906, A., ii, 638.

Ashley, R. Harman, oxidation of sulphites by iodine in alkaline solution, 1905, A., ii, 351.

estimation of sulphites by iodine, 1905, A., ii, 609.

analysis of dithionic acid and the dithionates, 1906, A., ii, 800.

Ashman, George C., quantitative estimation of radium emanation in the atmosphere, 1908, A., ii, 918.

specific radioactivity of thorium and its products, 1909. A., ii, 111.

Ashman, George C. See also Herbert Newby McCoy.

Ashworth, J. R., magnetic temperaturecoefficients of the ferro-magnetic elements in corresponding states, 1912, A., ii, 127.

Askenasy, Paul, W. Jarkowsky, and A. Waniczek, aluminium carbide,

1909, A., ii, 46.

Askenasy, Paul, and Sigismund Klonowski, the manganate fusion, 1910,

A., ii, 297.

electrolytic production of potassium permanganate from solutions of potassium manganate, 1910, A., ii, 413.

Askenasy, Paul, and A. Lebedeff, thermic reduction of alumina, 1910,

A., ii, 780.

Askenasy, Paul, Richard Leiser, and N. Grünstein, electrolytic oxidation of ethyl alcohol to acetic acid, 1909, A., i, 869.

Askenasy, Paul, and Charles Ponnaz, silico-thermic experiments, 1909, A., ii,

Askenasy, Paul, and A. Solberg, thermal decomposition of potassium manganate, 1912, A., i, 1167.

Askenasy, Paul. See also Gerhard Just. Aslanoglou, P. L., estimation of morphine in opium, 1904, A., ii, 219.

Asō, Keijirō, action of sodium fluoride on plant life, 1903, A., ii, 173. physiological influence of manganese

compounds on plants, 1903, A., ii, 323.

lability of enzymes, 1904, A., i, 958. what is the compound contained in certain plant juices which is able to liberate iodine from potassium iodide, 1904, A., ii, 141.

influence of different ratios of lime to magnesia on the growth of rice, 1904, A., ii, 765.

organic compounds of phosphorus in the soil, 1904, A., ii, 838.

further observations on oxydases, 1905, A., ii, 346.

injurious action of acetates and formates on plants, 1906, A., ii, 887.

stimulating action of calcium fluoride on phænogams, 1906, A., ii, 888.

stimulating influence of sodium fluoride on garden plants, 1906, A., ii, 889.

application of sodium nitrate as topdressing for some Japanese crops, 1906, A., ii, 890.

manurial value of calcium cyanamide,

1906, A., ii, 890.

manurial value of different potassium compounds for barley and rice, 1909, A., ii, 891.

Aso, Keijiro, is potassium sulphate physiologically acid? 1909, A., ii, 926.

influence of different ratios of lime to magnesia on the growth of rice,

1909, A., ii, 926.

influence of the ratio of lime to magnesia on the yield in sand cultures, 1909, A., ii, 929.

manuring with dicyanodiamide, 1909,

A., ii, 929.

amount of acid in, and resistance to acids of, different roots, 1910, A., ii, 439.

Asō, Keijirō, and Rana Bahadur, influence of the reaction of the manure on the yield, 1906, A., ii, 890.

Aso, Keijiro, and S. Nishimura, preservation of night-soil, 1909, A., ii, 929.

Asō, Keijirō, and Marius Emmanuel Pozzi-Escot, rôle of oxidising diastases in the preparation of tea and their influence on sumach leaves, 1903, A., ii, 322.

Aso, Keijiro, and Tsuneta Yoshida, manurial value of various organic phosphorus compounds, 1909, A., ii,

Asō, Keijirō. See also Otto Lemmermann, and Oscar Loew.

Asriel, M. See Heinrich Goldschmidt. Assmann, Fritz, vegetable agglutinins, 1911, A., ii, 126.

Aston, Bernard Cracroft, the alkaloids of the Pukatea, 1910, T., 1381; P.,

Aston, Bernard Cracroft. See also Thomas Hill Easterfield.

Aston, (Miss) Emily [Alicia]. See (Sir) William Ramsay.

Aston, Francis William, and Hubert E. Watson, relation between current, voltage, pressure, and the length of the dark space in different gases, 1912,

A., ii, 324. Astorri, L. See Federico Giolitti.

Astre, Charles, detection and estimation of free mineral acids and red wines, 1908, A., ii, 892.

Astre, Charles, and P. Aubouy, pyramidone hydrochloride and hydro-

bromide, 1906, A., i, 989.

Astre, Charles, and G. Bécamel, compound of pyramidone with mercuric

chloride, 1905, A., i, 835.

Astre, Charles, and J. Vidal, compounds of antipyrine with the chlorides of

tin, 1911, A., i, 399.

compound of antipyrine with ferric chloride, obtained with chloride, 1911, A., i, 814. ferrous Astre. Charles, and Jules Ville, compound of antipyrine with mercuric oxide, 1905, A., i, 670.
Astruc, A., piperazine glycerophosphates,

1905, A., i, 382.

piperazine monomethylarsonate, 1905, A., i, 671.

piperazine benzoate and salicylate,

1906, A., i, 309.

loss of hydrocyanic acid from cherrylaurel water on keeping and on treatment with animal black, 1911, A., ii, 921.

Astruc, A., and Emile Baud, thermochemistry and acidimetry of methyl-

arsonic acid, 1904, A., ii, 644.

Astruc, A., and J. Bouisson, estimation of "ferripyrine," 1910, A., ii, 557.

Astruc, A., and R. Brenta, piperazine

phosphates and arsenates, 1908, A., i,

Astruc, A., and L. Courtin, quinine and

euquinine, 1911, A., i, 396.

Astruc, A., and J. Delorme, mineral waters of Fumade, 1905, A., ii, 727. Astruc, A., and H. Murco, perchloric

and periodic acids, 1903, A., ii, 17. Astruc, A., and Gaston Pégurier, esti-

mation of pyramidone, 1905, A., ii,

Astruc, A. See also Emile Band and F. Jadin.

Astruc, H., citric acid and natural wines, 1908, A., ii, 640.

Astruc, H., and J. Mahoux, natural and added free tartaric acid in natural wines, 1908, A., ii, 992.

Atack, Frederick William. See Edmund

Knecht.

Aten, Adriaan Hendrik Willem, the system pyridine and methyl iodide, 1905, A., ii, 237.

equilibrium in the system: bismuth and sulphur, 1906, A., ii, 11.

solubility of mercuric chloride in ethyl acetate and acetone, 1906, A., ii, 151. the system sulphur—chlorine, 1906, A., ii, 157.

preparation of sulphuric acid of known strength by specific gravity determinations, 1906, A., ii, 893.

conduction of electricity in mixtures of metals and their salts, 1909, A., ii, 537; 1910, A., ii, 769.

melting-point curves of endothermic compounds, 1909, A., ii, 971.

specific conductivity of fused potassium nitrate, 1911, A., ii, 1051.

Aten, Adriaan Hendrik Willem. also Hendrik Willem Bakhuis Roozeboom.

Atenstädt, Paul. See Adolf Beythien and Richard Stoermer.

Athenstaedt and Redeker, preparation of hexamethylenetetramine borocitrates, 1912, A., i, 168.

Atkin, E. E., relation of the reaction of the culture medium to the production of hæmolysin, 1911, A., ii, 997.

Atkin, E. E. See also William Bulloch. Atkins, K. N. See Roemer Rex Renshaw.

Atkins, William Ringrose Gelston, the freezing point of milk; a method of detecting adulteration, 1908, A., ii, 641.

Traube's molecular volume method applied to binary mixtures of organic substances, 1910, P., 337.

cryoscopic, ebullioscopic and association constants of trimethylcarbinol, 1910, P., 342; 1911, T., 10.

cryoscopy of blood, 1910, A., ii, 970. cryoscopic determination of the osmotic pressures of some plant organs, 1910, A., ii, 1100.

Atkins, William Ringrose Gelston, and Emil Alphonse Werner, the dynamic isomerism of ammonium thiocyanate and thiocarbamide, 1912, T., 1167; P., 141.

the influence of certain salts on the dynamic isomerism of ammonium thiocyanate and thiocarbamide, 1912, T., 1982; P., 233.

Atkins, William Ringrose Gelston. See also Henry H. Dixon and Thomas Arthur Wallace.

Atkinson, A. A. See Frederick Bickell Guthrie.

Atkinson, Ernest Francis Joseph, Harry Ingham, and Jocelyn Field Thorpe, the formation and reactions of iminocompounds. Part III. The formation of 1:3-naphthylenediamine and its derivatives from o-toluonitrile, 1907, T., 578; P., 76.

Atkinson, Ernest Francis Joseph, and Jocelyn Field Thorpe, an intramolecu lar change leading to the formation of naphthalene derivatives, 1905, P., 305; discussion, P., 306.

the formation and reactions of iminocompounds. Part II. Condensation of benzyl cyanide leading to the of 1:3-naphthylenediformation amine and its derivatives, 1906, T., 1906; P., 281; discussion, P., 282.

the formation and reactions of iminocompounds. Part V. The formation of methyl derivatives of 1:3-naphthylenediamine from the three tolylacetonitriles, 1907, T., 1687; P., 216.

Atkinson, F. C. See J. M. McCaudless. Atkinson, Harford M., a modified separating funnel and washer for heavy liquids, 1911, A., ii, 105.

estimation of carbon dioxide, 1912,

A., ii, 488.

Attema, J. J. See Antoine Paul Nicolas Franchimont.

Atterberg, Albert, borates of the alkali metals and of ammonium, 1906, A.,

laterite from Brazil, 1909, A., ii, 590. barium sulphate a plastic substance, 1911, A., ii, 605.

the plasticity of barium sulphate, 1912,

A., ii, 50.

reduction of potassium platinichloride by magnesium, 1912, A., ii, 686.

Attfield, John, obituary notice of, 1912, T., 688.

Attwell, Herbert Moore. See Martin Onslow Forster.

Atwater, Wilbur Olin, coefficients of digestibility and availability of foods,

1904, A., ii, 186. Atwater, Wilbur Olin, Francis Gano Benedict, A. P. Bryant, Albert W. Smith, and John Ferguson Snell, experiments on the metabolism of matter and energy in the human body, 1903, A., ii, 308.

Atwater, Wilbur Olin, and John Ferguson Snell, bomb-calorimeter and method of its use, 1903, A., ii,

Aubel, Edmond [Marie Lambert] van, action of radioactive substances on the electrical conductivity of selenium, 1903, A., ii, 403.

decomposition of iodoform by the action of oxygen and light rays,

1905, A., i, 1.
production of ozone by ultra-violet light, 1910, A., ii, 28, 118.

Pulfrich's ratio between volume contraction and refractive power of liquid mixtures, 1910, A., ii, 169.

Auber, Gaston. See Jules Aloy. Aubert, thermo-endosmosis, 1909, A., ii,

thermo-osmosis, 1912, A., ii, 900.

Aubouy, P., antipyrine phosphate and arsenate, 1908, A., i, 370.

Aubouy, P. See also Charles Astre.

Auchy, George, estimation of carbon [in steel] by combustion, 1903, A., ii,

rapid estimation of molybdenum in steel, 1903, A., ii, 336.

rapid estimation of phosphorus in steel, 1903, A., ii, 693.

Auchy, George, the sodium hydroxide method of estimating molybdenum in steel, 1905, A., ii, 861.

vanadium and its estimation, 1910,

A., ii, 551.

Auclair, Jules, and Louis Paris, fatty matters in, and resistance to, acids of the tubercle bacillus, 1907, A., ii,

chemical constitution and biological properties of the protoplasm of Koch's bacillus, 1908, A., ii, 315.

Auer, Clara Meltzer. See Samuel James Meltzer.

Auer, John, effect of saline purgatives, 1906, A., ii, 876.

the purgative inefficiency of saline cathartics when injected subcutaneously or intravenously, 1908, A., ii, 213.

effect of carbon dioxide on the frog's

pupil, 1909, A., ii, 250.

the prophylactic action of atropine in immediate anaphylaxis of guinea pigs. III., 1910, A., ii, 985.

Auer, John, and Samuel James Meltzer, effect of calcium on the cardiac vagus,

1909, A., ii, 253.

influence of calcium on the pupil, 1909, A., ii, 909.

Auer, John. See also Samuel James Meltzer.

Auer von Welsbach. See Welsbach. Auerbach, Ernst Berthold, the pentene ring, 1903, A., i, 412.

Auerbach, Ernst Berthold. Leopold Spiegel. See also

Auerbach, Friedrich, boric acid and arsenious acid; a study on the formation of complexes, 1904, A., ii,

estimation of hardness in waters, 1904, A., ii, 151.

magnesium potassium carbonate, 1904, A., ii, 335.

condition of hydrogen sulphide in mineral wells, 1904, A., ii, 723.

formaldehyde and formate formation, 1905, A., i, 740.

relation between the logarithmic temperature constant and heat evolution, 1905, A., ii, 571.

potentials of the most important standard electrodes, 1912, A., ii, 123.

the estimation of free carbon dioxide in water by Trillich's method, 1912, A., ii, 996.

Auerbach, Friedrich, and Hermann Barschall, formaldehyde. I. Formaldehyde in aqueous solution, 1905, A., i, 859.

Auerback, Friedrich, and Hermann Barschall, formaldehyde. II. Solid polymerides of formaldehyde, 1908, A., i, 131.

Auerbach, Friedrich, and Hans Pick, the alkalinity of aqueous solutions of

carbonates, 1911, A., ii, 1078.

Auerbach, Friedrich, and Werner Plüddemann, volumetric estimation of formic acid and its salts, 1909, A., ii, 355.

Auerbach, Herbert, spectroscopic investigation of the behaviour of metallic salts in flames of different temperatures, 1909, A., ii, 105, 279.

Aufray, M., amounts of ammonia and nitric acid in rain-water in Tonquin,

1911, A., ii, 224.

Aufrecht, Arthur, rapid estimation of albumin in urine, 1910, A., ii, 560, 663.

Aufrecht, Arthur. See also Hermann Grossmann and Richard Josef Meyer. Auger, Victor, pyrophosphorous acid, 1903, A., ii, 421.

systematic alkylation of arsenic, 1904,

A., i, 22.

methylarsine, 1904, A., i, 724.

action of acid chlorides on tertiary bases containing an aromatic radicle, 1904, A., i, 805.

new method of preparing organic derivatives of phosphorus, 1904, A.,

i, 983.

action of the halogen derivatives of tervalent and quinquevalent metalloids on alkyl haloids, 1904, A., i, 983.

thioformic acid, 1905, A., i, 14. acetyl-lactic [a-acetoxypropionic] acid,

1905, A., i, 320.

new methods of preparing some organic derivatives of arsenic, 1906, A., i, 488.

decomposition of copper sulphate by methyl alcohol, 1906, A., i, 550.

esterification of arsenious anhydride by alcohols and phenol, 1907, A., i,109. cuprous metaphosphate, 1907, A., ii, 174.

theory of the formation of aventurine glass containing copper, 1907, A., ii, 263.

colloidal solution of arsenic, 1907, A., ii, 948.

action of amorphous arsenic on alkylhaloid derivatives, 1908, A., i, 13. preparation of methyl and ethyl cyan-

ides, 1908, A., i, 81.

a new type of combination of sulphur with certain iodides, 1908, A., i, 241. Auger, Victor, mixed trihalogen derivatives of methane, 1908, A., i, 494.

action of alkalis on mono- and dimethylarsonic acids and their iododerivatives, 1908, A., i, 516.

the hydrates of arsenic acid, 1908, A., ii, 489.

mixed halogen compounds of tin, 1910, A., ii, 133.

alkali mangani-manganates, 1910, A., ii, 298.

sodium manganate and its hydrates, 1910. A., ii, 710.

1910, A., ii, 710.
oxidation of iodine by hydrogen

peroxide, 1911, A., ii, 386. action of hydrogen peroxide on iodine

compounds containing oxygen, 1912, A., ii, 40.

stability of the hypoiodites, 1912, A., ii, 751.

periodates of the alkali metals, 1912, A., ii, 757.

estimation of iodine in iodides, and in particular in the ash of sqaweed, 1912, A., ii, 805.

new volumetric estimation of uranium, 1912, A., ii, 1098.

Auger, Victor, and M. Billy, thio-acids, R. CO.SH, 1903, A., i, 310.

mangani-manganates of the alkaline earths, 1904, A., ii, 262.

action of organomagnesium solutions on the halogen derivatives of phosphorus, arsenic, or antimony, 1904, A., i, 983.

Auger, Victor, and Pierre Dupuis, guaiacylphosphoric acids, 1908, A., i, 529.

Auger, Victor, and M. Gabillon, new method for estimating sulphuric acid and sulphates, 1911, A., ii, 330.

Augustin, Hans, estimation of carbons in irons and steels in the electric furnace, 1911, A., ii, 1029.

Auld, Samuel James Manson, new method for the estimation of acetone, 1906, A., ii, 256.

mercury derivatives of pseudo-acids containing the group CO'NH, 1907, T., 1045; P., 151.

the hydrolysis of amygdalin by emulsin, 1907, P., 72; discussion, P., 72; 1908, T., 1251, 1276; P., 97, 181.

the hydrolysis of amygdalin by emulsin. Part III. Synthesis of d-benzaldehydecyanohydrin, 1909, T., 927; P., 62.

an examination of irritant woods. Part I. Chloroxylonine from East Indian satinwood, 1909, T., 964; P., 148. Auld, Samuel James Manson, occurrence of osyritrin (viola-quercitrin) in Osyris abyssinica, 1910, P., 146.

phosphomolybdate estimation of phosphoric acid in soils, 1912, A., ii, 487.

Auld, Samuel James Manson, and Arthur Hantzsch, compounds of ketones and aldehydes with mercuric oxide, 1905, A., i, 742.

supposed isomerism of tetramethylammonium iodide mercuricyanide,

1905, A., i, 747.

Auld, Samuel James Manson, and Samuel Shrowder Pickles, extraction apparatus for plant products, 1909, A., ii, 563.

the constituents of West Indian satinwood, 1912, T., 1052; P., 143.

Auld, Samuel James Manson. See also Wyndham Rowland Dunstan, Arthur Hantzsch, and Thomas Anderson Henry.

Aumer, Joseph. See Helen Isham.

Aupperle, James A., volumetric estimation of carbon in iron and steel with the use of barium hydroxide, 1906, A., ii, 630.

Aureggi, Carlo. See Giovanni Pellini. Aureggi, P. C. See Carlo Sandonnini. Aureli, S. See Guido Bargellini.

Auschkap, Y. I. See Alexander E.

Porai-Koschitz.

Auspitzer, Otto. See Rudolf Wegscheider.

Austerweil, Géza, new method of isomerisation in the terpene series, 1909, A., i, 400.

preparation of butadiene and its homologues, 1912, A., i, 525.

Austerweil, Géza, and G. Cochin, relation between molecular constitution and odour, 1910, A., i, 572. causes of geranic odours, 1910, A., i, 687.

Austerweil, Géza, and Paul Pacottet, estimation of esters in wine, 1908, A., ii, 232.

Austerweil, Géza. See also Ernst Berl.
Austin, Arthur Everett, calcium metabolism in a case of Myositis ossificans, 1907, A., ii, 711.

enterokinase in infancy, 1909, A., îi, 496.

Austin, Arthur Everett, and Mabel D.
Ordway, extra-intestinal origin of
hydrobilirubin, 1908, A., ii, 408.

Austin, Louis [Winslow]. See Ludwig Holborn.

Austin, Percy Corlett, the synthesis of complex acridines, 1908, T., 1760; P., 200.

Austin, Percy Corlett, the interaction of silver nitrate and potassium persulphate and its catalytic effect in the oxidation of organic substances, 1911, T., 262; P., 24.

Austin, Percy Corlett. See also Julius

Schmidt and Alfred Senier.

Austin, Peter T. See Thomas Bliss Stillman.

Austin, William Lyle, and Charles Alexander Keane, analysis of lithopone, 1912, A., ii, 687.

Austrian, Charles Robert. See Walter

Jones.

Autenrieth, Wilhelm [Ludwig], strontium chromate and the microchemical detection of strontium, 1904, A., ii, 844.

estimation of potassium in silicates,

1908, A., ii, 897.

detection of hydrocyanic acid in an exhumed corpse and the stability of hydrocyanic acid in presence of putrefying matter, 1911, A., ii, 78.

the action of phosphorus thiochloride on alkaline solutions of phenols,

1912, A., i, 104.

Autenrieth, Wilhelm, and René Bernheim, simple method for the estimation of potassium in urine, 1903, A., ii, 181.

action of ammonia and ethylamine on the esters of sulphonic acids, 1904,

A., i, 978.

ethylsulphone derivatives of pphenetidine and their pharmacological importance, 1905, A., i, 47.

Autenrieth, Wilhelm, and Fritz Beuttel, poly-membered heterocyclic systems containing sulphur, and ring closure in the para-position, 1910, Å., i, 60.

poly-membered heterocyclic systems containing sulphur, and ring closure in the meta-position, 1910, A., i,

estimation of phenol, salicyl alcohol, salicylic acid, and p-hydroxybenzoic acid as tribromophenol bromide, 1910, A., ii, 552.

Autenrieth, Wilhelm, and August Brüning, cyclic compounds containing sulphur, 1903, A., i, 272.

condensation of mercaptans with nitriles, 1904, A., i, 35.

Autenrieth, Wilhelm, and Albert Funk,

colorimetric estimation of lactose in urine and milk, 1912, A., ii, 101.

Autenrieth, Wilhelm, and Alfred Geyer, reaction between phenols and phosphorus pentachloride, 1908, A., i, 156.

Autenrieth, Wilhelm, and Alfred Geyer, pentamethylene mercaptans and multi-membered cyclic mercaptols and disulphones, 1909, A., i, 6.

action of phosphorus pentachloride and pentabromide on mercaptans,

1909, A., i, 26.

Wilhelm, and Autenrieth, Julius Koburger, action of aromatic amines ethylenedisulphonic chloride; derivatives of vinylsulphonic acid, 1904, A., i, 34.

Autenrieth, Wilhelm, and Johann Georg Koenigsberger, a new colorimeter and its application to the estimation of the colouring matter of blood, iron, indican, and creatinine, 1910, A., ii,

910.

Autenrieth, Wilhelm, and Paul Mühlinghaus, action of phosphorus pentabromide and pentachloride on phenyl alkyl ethers, 1907, A., i, 31.

behaviour of aromatic esters towards phosphorus pentabromide and pentachloride, 1907, A., i, 316.

atenrieth, Wilhelm, and Gerhard Müller, colorimetric estimation of Autenrieth, sugar, creatine, and creatinine urine, 1912, A., ii, 101.

Autenrieth, Wilhelm, and Carl Pretzell, addition of aniline to monobasic unsaturated acids and their anilides, 1903, A., i, 474.

the five isomeric acids, C4H6O2, 1905,

A., i, 629.

Autenrieth, Wilhelm, and Theodor Tesdorpf, colorimetric estimation of dextrose in urine, 1911, A., ii, 159.

Autonoff, Nina, bacteria which form creatinine, 1907, A., ii, 190.

Auwers, Karl [Friedrich], formation of derivatives of diphenylmethane from ψ-phenols and allied compounds, 1903, A., i, 621.

aromatic hydroxy-ketones, 1904, A., i,

preparation and hydrolysis of phenol ethers by Gattermann's method, 1904, A., i, 67.

formation and decomposition of diphenylmethane derivatives, 1904,

A., i, 487.

o-aminobenzyl alcohol and μ-methyl-[3-methyl-2:4phenopentoxazole benzoxazine], 1904, A., i, 581.

decomposition of phenyl esters by organic bases, 1904, A., i, 773.

a new application of the pyridine method of acylation, 1904, A., i, 1051.

Auwers, Karl [Friedrich], transformation of O-acyl compounds into Nderivatives, 1904, A., i, 1051.

benzoyl derivatives of salicylamide,

1905, A., i, 894.

relations between the constitution and the stability of the condensation products of organic bases with substituted hydroxybenzyl bromides, 1906, A., i, 258.

constitution of pseudo-phenols, 1906,

A., i, 838.

chlorinated alcohols [phenols] of the dihydrobenzene series and their transformation products, 1906, A., i. 947.

some aromatic aldehydes and ketones,

1906, A., i, 962.

alkylidenedihydrobenzenes, 1907, A., i, 399.

conversion of quinonephenylhydrazones into hydroxyazo-compounds, · 1907, A., i, 554.

Lederer-Manasse synthesis phenol alcohols, 1907, A., i, 610.

acyl derivatives of salicylamide and allied compounds, 1907, A., i, 928.

so-called mesohydry, 1908, A., i, 228. constitution of hydroxyazo-comof pounds, 1908, A., i, 477.

the optical behaviour of cyclohexadiene derivatives, 1908, A., i, 520. O-azo-compounds, 1909, A., i, 67.

influence of substituents on the capacity for migration of acid residues, 1909, A., i, 436.

the terpinene question, 1909, A., i, 596.

[a-terpinene], 1910, A., i, 53.

conversion of pulegone into menthenes, 1910, A., i, 122.

C- and O-acyl derivatives of coumaranones or 2-hydroxycoumarones, 1910, A., i, 629.

hydroaromatic compounds; carboxylic acid of the "semibenzene" group,

1911, A., i, 298. hydroaromatic compounds; chloro-

derivatives of hydroaromatic ketones and semibenzenes, 1911, A., i, 383. simple method of formation of hydr-

oxyhydrindones, 1912, A., i, 107. the C-acyl derivatives of 2-hydroxy-

coumarones, 1912, A., i, 484. preparation of O-alkyl and C-alkyl

derivatives, 1912, A., i, 486. cyclopentadiene, 1912, A., i, 956.

hydroxycarboxylic esters of coumarone, thionaphthen, and indole, and their products of alkylation, 1912, A., i, 1009.

Auwers, Karl [Friedrich], spectrochemistry of enols and enolic derivatives, 1912, A., ii, 3.

spectrochemical behaviour and constitution of ethyl acetoacetate, 1912,

A., ii, 4.

spectrochemistry of unsaturated compounds, 1912, A., ii, 109.

spectrochemical investigations, 1912, A., ii, 213.

constitution of camphene, 1912, A., ii, 214.

the absorption and refraction methods,

1912, A., ii, 505.

spectrochemistry of unsaturated organic compounds; influence of alkyl groups in conjugated systems, 1912, A., ii, 1013.

spectrochemistry of chloro-compounds,

1912, A., ii, 1015.

Auwers, Karl, Otto Anselmino, Engelbert Bergs, Woldemar Richter, Harry Ulrich, and Friedrich Winternitz, undecular transformation of acylated aminohydroxy-compounds, 1904, A., i, 736.

Auwers, Karl, R. Apitz, Fritz Arndt, A. Boennecke, and Karl Müller, hydroxyazo-compounds and ketohydrazones. IV.-VI., 1911, A., i, 585.

Auwers, Karl, and Fritz Arndt, method of preparation of ketothionaphthens,

1909, A., i, 175.

addition of dimethyl sulphate to thiophenol ethers, 1909, A., i, 644.

transformation of thiophenol ethers into thioflavanone derivatives, 1909,

A., i, 668.

Auwers, Karl, and Richard Bondy, phenylhydrazones of aromatic hydroxyaldehydes. I., 1904, A., i, 1053.

Auwers, Karl, Richard Bondy, and Karl Müller, observations on acylation, 1904, A., i, 1052.

Auwers, Karl, and Otto Bürger, phenylhydrazones of aromatic hydroxyaldehydes. II., 1904, A., i, 1054.

Auwers, Karl, and Hugo Dannehl, capacity of acyl groups for migration in the molecules of organic compounds, 1908, A., i, 458.

capacity for transformation of acyl derivatives of the phenylhydrazones of o-hydroxyketones, 1909, A., i,

441.

Auwers, Karl, Hugo Dannehl, and A. Boennecke, hydroxyazo-compounds and ketohydrazones. I.-III., 1911, A., i 168.

Auwers, Karl, Hugo Dannehl, Fritz Eisenlohr, W. Hirt, and Karl Müller, intramolecular transformations of acylated compounds, 1909, A., i, 222.

Auwers, Karl, Hugo Dannehl, and Karl Müller, migration and reciprocal displacement of acid groups in acylated dibromohydroxybenzylphenylhydr-

azines, 1909, A., i, 187.

Auwers, Karl, and Alfred Dombrowski, hydroxybenzylpiperidines and dibromo-p-hydroxy-ψ-cumylanilines, 1906, A., i, 380.

condensation products of dibromo-phydroxybenzyl bromide with aromatic bases, 1908, A., i, 333.

Auwers, Karl, and Moritz Eckardt, acyl derivatives of benzeneazo-η-cresol and β-benzeneazo-α-naphthol and their transformation products, 1908, A., i, 480.

Auwers, Karl, and Fritz Eisenlohr, hydroxyazo-compounds, 1908, A., i, 229.

intramolecular changes of acylated compounds, 1909, A., i, 915.

determination of constitution by spectrochemical methods, 1910, A., ii, 365.

determination of constitution by the optical method, 1910, A., ii, 367.

molecular dispersion of cyclopentadiene; a correction, 1910, A., ii, 561. spectrochemical investigations. II.

The refraction and dispersion of substances containing one pair of conjugate double linkings, 1911, A., ii, 781.

spectrochemical investigations. III. The refraction and dispersion of hydrocarbons, aldehydes, ketones, acids, and esters containing several related conjugations, 1911, A., ii, 782.

Auwers, Karl, and Philipp Ellinger, spectrochemical differentiation between hydroaromatic compounds with endocyclic and with semicyclic double linkings, 1912. A. i. 187.

linkings, 1912, A., i, 187.

Auwers, Karl, and Emil Gierig, cryoscopic notes, 1903, A., ii, 268.

Auwers, Karl, Otto Hähnle, Robert

Auwers, Karl, Otto Hähnle, Robert Jacob, Johannes Reichel, Wilhelm Strecker, Otto Wehr, and Rudolf Zaubitzer, condensation products of ψ-phenols with dimethylaniline and analogous tertiary bases, 1904, A., i, 995.

Auwers, Karl, and K. Hannemann, migration of acid residues in the phenylhydrazones of acylated ohydroxyaldehydes, 1909, A., i, 439.

Auwers, Karl, and Max Hessenland, conversion of hydroaromatic alcohols into benzene derivatives, 1905, A., i, 434.

alkylidenedihydroderivatives of benzenes from p-cresol, 1907, A., i,

synthesis of pulenone derivatives from o-cresol, 1908, A., i, 550.

conversion of dichloro-a\beta-pulenenone into $\Delta^{1:3}$ -dihydro-p-xylene, A., i, 551.

Auwers, Karl, and Friedrich von der Heyden, dichlorocyclohexenones and cyclohexadienes from o-cresol, 1909, A., i, 592.

Auwers, Karl, W. Hirt, and Friedrich von der Heyden, acylated o-hydroxyazo-substances and their reduction,

1909, A., i, 438.

Auwers, Karl, Fritz Jescheck, Otto Schröter, Th. von Markovits, and Carl Roever, new brominated \u03c4-phenols, 1906, A., i, 354.

Auwers, Karl, Fritz Jescheck, and Carl Kipke, formation of s-dihydroxydiphenylmethanes, 1907, A., i, 917.

Auwers, Karl, and Gustav Keil, cyclic ketones from chloroform and phenols, 1903, A., i, 100, 620; 1904, A., i, 26; 1905, A., i, 445.

Auwers, Karl, and Carl Kipke, condensation products of organic bases with phenols and ψ -phenols of the 4-cumenol series, 1906, A.,

Auwers, Karl, Carl Kipke, Alfred Schrenk, and Otto Schröter, condensation products of organic bases with phenols and \u03c4-phenols of the xylenol and hemimellithenol series, 1906, A., i, 261.

Auwers, Karl, and Arno Köckritz, alkylidenedihydrobenzenes from as-mxylenol, as-o-xylenol and ψ-cumenol, 1907, A., i, 401.

Auwers, Karl, and Otto Mahler, fission of substituted phenyl benzyl ethers by

alkalis, 1907, A., i, 1033.

Auwers, Karl, Gustav Mann, and Emil Gierig, relation between constitution and cryoscopic behaviour of solvents, 1903, A., ii, 268.

Auwers, Karl, and Th. von Markovits, and vic-m-xylenol tetramethyldiphenoquinone, 1905, A., i, 219.

m-2-xylenol, 1908, A., i, 629.
Auwers, Karl, and W. Moosbrugger, refraction and dispersion of organic substances containing several isolated double linkings, 1912, A., ii, 213.

Auwers, Karl, and Karl Müller, conversion of benzylidenecoumaranones into flavonols, 1909, A., i, 45.

transformation of phenylhydrazones of unsaturated aldehydes and ketones into pyrazolines, 1909, A., i, 59.

hydroaromatic compounds: hydrocarbon, C₉H₁₂, of the semibenzene series, 1911, Å., i, 621.

Auwers, Karl, and G. Peters, unsaturated hydroaromatic hydrocarbons with semicyclic double linkings, 1910, A.,

reducibility of conjugated double linkings in hydroaromatic substances,

1910, A., i, 827. unsaturated hydroaromatic acids with one semicyclic double linking, and their derivatives, 1910, A., i, 841.

Auwers, Karl, and Erich Rietz, condensation of ψ -phenols with phenols,

1905, A., i, 887.

saponifiability of ethers of aromatic hydroxy-ketones, 1907, A., i, 938.

fission of dihydroxydiphenylmethanes on bromination, 1907, A., i, 919.

- Auwers, Karl, and Walter Adolf Roth, relationship between constitution and heats of combustion of unsaturated hydrocarbons, 1910, A., ii. 485.
 - thermochemical investigations. Relation between the constitution and the heat of combustion of unsaturated compounds, 1910, A., ii,
- Auwers, Karl, Walter Adolf Roth, and Fritz Eisenlohr, heats of combustion of terpenes and styrenes, 1910, A., ii, 586.

thermochemical investigations. Heats of combustion of terpenes and styrenes and prediction of heats of combustion, 1911, A., ii, 1065.

Auwers, Karl, and Alfred Schrenk, condensation products of organic bases with ψ -phenols of the mesitol series, 1906, A., i, 267.

Auwers, Karl, and Otto Schröter, phydroxytriphenylcarbinol and its derivatives, 1903, A., i, 820.

condensation products of organic bases with phenols and ψ -phenols of the eresol series, 1906, A., i, 259.

condensation products of organic bases with ψ-phenols containing strongly negative substituting groups, 1906, A., i, 347.

Auwers, Karl, and Konrad Sonnenstuhl, acylation of compounds with mixed functions, 1904, A., i, 1054.

Auwers, Karl, and H. Voss, influence of constitution on the conversion of phenylhydrazones of unsaturated compounds into pyrazolines, 1910, A., i, 70.

Auzies, J. A. A., new method of estimating the various elements of an organic substance; (1) substance containing C, H, O, N; (2) substance containing C, H, O, N, S; (3) substance containing C,H,O,N,S,Cl,Br,I, 1911, A., ii, 928.

the action of moist sulphur on cholic taurine, 1912, A., i, acid and

Averbeck, H. See Ludwig Knorr. Avery, David, reduction of gold chloride by charcoal, 1908, A., ii, 391.

Avery, Samuel, changes of colour caused by the action of certain rays on glass, 1905, A., ii, 589.

constitution of Paris green and its homologues, 1906, A., i, 788.

Avery, Samuel, and E. Corr, estimation total soluble bitumen in paving material, 1906, A., ii, 584.

Avery, Samuel, and Guy R. McDole, action of sodium benzyl cyanide with cinnamic ester, 1908, A., i,

oxidation and reduction of γ-cyano-βγdiphenylbutyric acid, 1908, A., i, 796.

Avery, Samuel, and Fred W. Upson, synthesis of certain aromatic succinic acids, 1908, A., i, 343.

nitration of β -p-tolylglutaric acid,

1908, A., i, 796.

Avrutin, Ghersch. See Guido Bargellini.

Aweng, Eugen, detection of methyl alcohol in ethyl alcohol, 1912, A., ii,

Awerkieff, Nicolai D., precipitation of crystalline gold by formaldehyde, 1903, A., ii, 218, 603.

dissolution of metallic gold in hydrochloric acid in presence of various organic substances, 1908, A., ii, 859.

an animal alkaloid from sterilised milk kept under specific conditions, 1911, A., ii, 751.

Axhausen, Walter. See Emil Fischer. Aymerich. See Prats Aymerich.

Aynaud, M., the platelets of human blood, 1911, A., ii, 213.

Aynaud, M. See also Ch. Achard. Ayrignac, J. See Alexandre Desgrez. Ayrton, Barbara, activation of pancreatic juice, 1909, A., ii, 497.

Azéma, L., identity of pastreite with jarosite, 1910, A., ii, 720.

ilmenite from Brazil, 1911, A., ii, 407. Azzarello, Emanuele, action of diazomethane on ethylene and diallyl,

1905, A., i, 867. action of hydroxylamine and a-benzylhydroxylamine on ethyl hydroxy-

trimethylcomenate, 1905, A., i, 916. pyrazoline ketones, 1905, A., i, 941. presence of boric acid in genuine

Sicilian wines, 1907, A., ii, 125. estimation of arsenic in copper, 1910,

A., ii, 241. analysis of copper-manganese alloys;

direct titration of iron and manganese present in the same solution, 1910, A., ii, 754.

Azzarello, Emanuele. See also Alberto

Peratoner.

B.

Baar, N., alloys of molybdenum with nickel, of manganese with thallium, and of calcium with magnesium, thallium, lead, copper, and silver, 1911, A., ii, 611.

Baas, Karl Hermann, action of oxygen on frog's nerves, 1904, A., ii, 576.

Baat, (Miss) Woutrine Constance de. See Frans Antoon Hubert Schreinemakers. Babadschan, I. S. See Iwan von Ostro-

misslensky.

Babák, Edward, morphogenetic reaction of the alimentary canal of the frog's larva on muscle proteins of different classes of animals, 1906, A., ii, 101. Babb, J. E., an improved gas apparatus,

1905, A., ii, 348.

Babcock, E. N. See Raymond E. Hanson. Babel, Alexis, action of morphine and

its derivatives, 1905, A., ii, 339. formation of methæmoglobin, 1906, A., i, 779, 914.

Babel, Alexis. See also Otto A. Oesterle. Babini, Vincenzo. See Luigi Mascarelli and Ciro Ravenna.

Babkin, Boris P., and Nicolai P. Tichomiroff, the relationship between the proteolytic power, the nitrogen, and the total solids of the pancreatic juice, 1909, A., ii, 1031.

Babkin, Boris P. See also Emil Abder-

halden.

Baborovský, Jiri, magnesium suboxide, 1903, A., ii, 726.

the behaviour of magnesium anodes, 1905, A., ii, 671.

1 German equivalent is "Georg."

Baborovský, Jiri, and Bohumil¹ Kuzma, so-called silver peroxide, 1908, A., ii, 378; 1909, A., ii, 666.

Baborovský, Jiri, and V. Vojtěch, photographic inactivity of ammonium amalgam, 1907, A., ii, 420.

Bach, Alexis, hydrogen tetroxide and ozonic acid, 1903, A., ii, 17.

behaviour of chromic acid towards Caro's reagent, 1903, A., ii, 80.

the function of peroxydase in the reaction between hydrogen peroxide and hydrodic acid, 1904, A., ii, 810.

decomposition of carbon dioxide by light, 1904, A., ii, 836.

catalase, 1905, A., i, 623.

influence of peroxydase on alcoholic fermentation, 1906, A., i, 470.

fate of yeast catalase in cell-free alcoholic fermentation, 1906, A., i, 470.

influence of peroxydase on the activity of catalase, 1906, A., i, 470.

peroxydases as specifically-acting enzymes, 1906, A., i, 616, 919. action of light on uranyl acetate, 1906, A., ii, 321.

behaviour of peroxydase towards

iodine, 1907, A., i, 268.

behaviour of peroxydase towards hydroxylamine, hydrazine, and hydrogen cyanide, 1907, A., i, 810.

peroxydase active in tyrosinase, 1908,

A., i, 237.

mode of action of tyrosinase, 1908, A., i, 237.

behaviour of peroxydase towards light,

1903, A., i, 238.

amount of nitrogen in the oxidising ferments, 1908, A., i, 238.

tyrosinase, 1909, A., i, 278.

method for the rapid preparation of oxidising enzymes from plant extracts, 1910, A., i, 291.

theory of the action of oxydases. I. Oxydases free from manganese and

iron, 1910, A., i, 291.

theory of the action of oxydases. II.
Influence of metallic salts on the
subsequent change of the products of
oxydase action, 1910, A., i, 291.

theory of the action of oxydases, 1910,

A., i, 801.

decomposition of water by hypophosphites in presence of palladium as a catalyst, 1910, A., ii, 31.

the reducing ferments. I. The Schardinger enzyme (perhydrindase), 1911, A., i, 412.

1 German equivalent is "Gottlieb."

Bach, Alexis, the reducing ferments. II. Reduction of nitrates by the system perhydrase, aldehyde, water, 1911, A., i, 759.

the reducing ferments; the presence of a co-ferment of perhydridase in animal tissues, 1912, A., ii, 183.

Bach, Alexis, and Fréd. Battelli, degradation of carbohydrates in the animal organism, 1903, A., ii, 495. oxidation and resolution in the animal

organism, 1903, A., ii, 560.

Bach, Alexis, and Robert Chodat, the function of peroxides in the living cell. IV. Peroxydases, 1903, A., i, 377; 1904, A., i, 542.

the function of peroxides in the living cell. VI. Catalases, 1903, A., i,

671.

function of peroxides in the living cell. IX. Rate of the peroxydase reaction, 1904, A., i, 792.

oxidation processes in the living cell,

1908, A., i, 490.

Bach, Alexis, and (Mlle.) V. Maryanovitch, the supposed specific action of phenolase, 1912, A., i, 739.

Bach, Alexis, and Jacob Tscherniack, purification of peroxydase, 1908, A., i, 746.

Bach, Alexis, and B. Sharsky, the behaviour of phenolase towards acids, 1911, A., i, 824.

Bach, Alexis. See also Robert Chodat.

Bach, Hermann, colorimetric estimation of phenols in waste liquors, 1912, A., ii, 98.

Bachem, Albert, arc spectrum of zirconium, 1910, A., ii, 670.

spectral investigation of the phosphorescence and the distribution of the excitation for certain phosphorescent alkaline-earth metal sulphides, 1912, A., ii, 713.

Bachem, C., behaviour of veronal (sodium veronal) in the animal body, after one administration, and in the chronic condition, 1910, A., ii, 985.

Bachilli, D. See Italo Bellucci.

Bachmann, Hermann, manurial experiments with kainite and "forty per cent. potassium salt," 1903, A., ii, 38.

action of phosphoric acid in conjunction with lime, 1904, A., ii, 145.

manurial experiments with "agricultural phosphate," 1906, A., ii, 702. experiments with basic slag-ammonia,

1908, A., ii, 624.

field experiments with ammonium sulphate, 1908, A., ii, 980.

Bachmann, Paul, and Karl Dziewoński, molecular rise of boiling point for nitrobenzene, 1903, A., ii, 354.

Bachmann, Paul. See also Karl Dzie-

woński.

Bachmann, Wilhelm, the ultramicroscopic structure of jellies, 1912, A., ii,

Bachmann, Wilhelm. See also Richard Zsigmondy.

Bachran, Fritz. See Arthur Stähler. Backe, Arnold, new compound contained in foods, 1910, A., i, 225.

isomaltol, 1910, A., i, 544. Backer, Hilmar Johannes, action of pure [absolute] nitric acid on benzenesulphomethylamide, 1905, A., i, 766.

electro-reduction of alkylnitroso-amides, 1912, T., 592; P., 65. electrochemical reductions. I. Reduction of primary nitroamines into

hydrazines, 1912, A., i, 339. electrochemical reductions. II. Reduction of secondary nitroamines to hydrazines, 1912, A., i, 730.

Backer, Hilmar Johannes. Antoine Paul Nicolas Franchimont.

Backlund, Helge, the olivine group, 1911, A., ii, 616.

Backman, Eugène Louis, action of ethyl alcohol on the isolated mammalian heart, 1907, A., ii, 377.

action of lactic acid on the isolated and surviving heart of mammals, 1908,

A., ii, 612.

Bacmeister, Adolph, the secretion of cholesterol in human bile, 1910, A., ii. 792.

Bacon, Charles W., estimation of halogens in organic compounds, 1909, A., ii, 179.

Bacon, N. T., phenomena observed in Crookes' tubes, 1906, A., ii, 722.

Bacon, Raymond Foss, reactions of sodium benzhydrol, 1905, A., i, 203.

the physiologically active constituents of certain Philippine medicinal plants, 1907, A., ii, 500.

catalysis by means of uranium salts in the sunlight, 1907, A., ii, 854.

Philippine terpenes and essential oils, 1908, A., i, 814; 1909, A., i, 658; 1911, A., i, 73.

Philippine terpenes and essential oils. II. Ylang-ylang oil, 1908, A., i, 815.

a rapid clinical method for determining the ammonia coefficient of urines, 1909, A., ii, 757.

solution of oxalic acid and uranium salts as a chemical photometer, 1911, A., ii. 5.

Bacon, Raymond Foss, and Paul B. Dunbar. I. Apparatus for the continuous extraction of liquids with immiscible solvents lighter than water. II. Apparatus for quantitative reactions which depend on the measurement of an evolved gas, 1912, A., ii, 679. Bacon, Raymond Foss, and Paul Caspar

Freer, action of sodium on acetone,

1907, A., i, 479.

Bacon, Raymond Foss, and Harry Taylor Marshall, toxic action of saponin, 1907, A., ii, 497.

Bacon, Raymond Foss. See also Paul B.

Dunbar.

Bacon, Roger, presentation of photograph of portrait of, by Mr. Oscar Guttmann, 1903, P., 271.

presentation to the Society, by Mr. Oscar Guttmann, of bronze medal struck in honour of, in 1818, 1905, P., 83.

Bacon, William. See Charles Frederick Cross.

Bacovescu, A., oxidation by means of picric acid; indulines from aniline, 1908, A., i, 825.

action of potassium hydroxide on

aniline, 1909, A., i, 852.

condensation of a- and B-naphthols with ethyl acetoacetate, 1910, A., i.

Bacovescu, A., and Amé Pictet, isostrychnine, 1905, A., i, 815.

Bacovescu, A., and Eugène Vlahutza, indirect volumetric method for the estimation of chromium, nickel, cobalt, zinc, and lead, 1909, A., ii, 767.

Baczyński, Wl., and Stefan von Niementowski, bromination of benziminazoles, 1903, A., i, 124.

dihydroxyacridone and its derivatives,

1905, A., i, 927. Baddiley, James. See Arthur George Green.

Bade, Fritz. See Emil Erlenmeyer, jun. Badenhausen, Theodor. See Stobbe.

Bader, Walter. See Fritz Ullmann.

Badische Anilin- & Soda-Fabrik, halogensubstituted derivatives of indoxyl, 1903, A., i, 32.

preparation of ω-cyanomethylaniline and its derivatives, 1903, A., i, 336.

preparation of bromo-derivatives of

indigotin, 1903, A., i, 345. 4-chloro-2-nitroauisole, 1903, A.,i,478. conversion of \(\beta\)-naphthylamine and its derivatives into \(\beta\)-naphthol and its derivatives, 1903, A., i, 480.

Badische Anilin- & Soda-Fabrik, dialkyl ethers of chloroaminoresorcinol, 1903, A., i, 482.

halogen derivatives of \(\beta \)-methylanthra-

quinone, 1903, A., i, 498.

preparation of nitrogen-free polychloroderivatives from aminoanthraquinones, 1903, A., i, 500.

[derivatives of 4:4'-dimethoxydiphenyl-

methane], 1903, A., i, 558.

preparation of phenylglycinethioamideo-carboxylic esters, 1903, A., i, 627. 8-naphthol-6-azo-2-nitrophenol-4-sul-

phonic acid, 1903, A., i, 663. 2-nitro-6-diazophenol-4-sulphonic acid,

1903, A., i, 665. arylation of α-aminonitriles, 1903, A., i. 753.

vellow dyes of the acridine series, 1903, A., i, 776; 1904, A., i, 700.

preparation of sodium oxide, 1903, A., ii. 646.

preparation of potassium oxide, 1903, A., ii, 724.

[dinitrophenyl ether of quinoneoxime],

1904, A., i, 68. 4:5-dinitro-α-naphthylamine, 1904.

A., i, 154.

preparation of the chlorides and anhydrides of organic acids, 1904, A., i, 282.

disazo-dye from chloroaminosalicylic

acid, 1904, A., i, 353.

8-chloro-a-naphthylamine and its sulphonic acids, 1904, A., i, 396.

nitro-nitroamines and nitroamines of the anthraquinone series, 1904, A., i, 433.

azo-compounds from naphthylaminesulphonic acids, 1904, A., i, 459.

conversion of anthranilodiacetic acid into phenylglycine-o-carboxylic or anthranilic acids, 1904, A., i, 498.

azo-dyes from 1-chloro-2:6-diaminobenzene-4-sulphonic acid], 1904, A., i, 536.

preparation of dyes of the anthracene series, 1904, A., i, 599.

halogen derivatives of phenylglycineo-carboxylic acid, 1904, A., i, 670.

yellow dyes of the anthracene series, 1904, A., i, 679.

azo-dye from anthranilic acid and pcresol, 1904, A., i, 700.

acetyl-p-aminophenylglycine, 1904. A., i, 806.

preparation of acetylphenylglycine-o-.carboxylic acid, 1904, A., i, 806.

preparation of indole, 1904, A., i, 816. preparation of indoxylic acid and indoxyl, 1904, A., i, 893.

Badische Anilin- & Soda-Fabrik, [indophenol derivatives], 1904, A., i, 945.

o-hydroxyazo-dye from 2:4-dichloroα-naphthylaminesulphonic acid, 1904, A., i, 953.

formyl-p-aminophenylglycine, 1904. A., i, 1019.

brominated homologues of indigotin, 1904, A., i, 1020.

introduction of hydroxyl groups into anthraquinone and its derivatives, 1904, A., i, 1032.

[p-diazonium compounds of phenylalkylnitrosoamines], 1904, A., i, 1063.

preparation of alkali hyposulphites, 1904, A., ii, 250.

preparation of alkali oxides, 1904, A., ii, 255.

[4-phenoxy-2-aminobenzenesulphonic acid], 1905, A., i, 127.

ω-sulphomethylanthranilic acid, 1905,

A., i, 130. [a new purpurinsulphonic acid], 1905, A., i, 146.

halogen derivatives of fluoran, 1905, A., i, 149.

[chloroindanthrene], 1905, A., i, 158. [o-hydroxyazo-derivatives of a-naphthylamine], 1905, A., i, 250.

[azo-dyes from alphylsulphonaminonaphthol derivatives], 1905, A., i, 250.

[azo-dyes from nitro-m-diamines], 1905, A., i, 251.

ω-sulphomethyl derivatives of aromatic amines, 1905, A., i, 340, 769.

condensation product from anthranilic acid and formaldehyde, 1905, A., i, 437.

preparation of nitriles, 1905, A., i, 438.

preparation of ω-cyanomethylanthranilic acid, 1905, A., i, 645.

aminodihydroxyanthranew quinonesulphonic acid], 1905, A., i, 654.

preparation of stable, dry hyposulphites, 1905, A., ii, 814.

preparation of chloro-derivatives of indigotin, 1906, A., i, 89, 277.

chlorination of mono- and di-aminoderivatives of anthraquinone, 1906, A., i, 99.

azo-dye from 3:4-dichloroaniline, 1906 A., i, 121.

υ-hydroxyazo-dyes, 1906, A., i, 121. preparation of chloro- and bromophthalimides, 1906, A., i, 182.

[azo-dyes from 3:4:6-trichloroaniline], 1906, A., i, 322.

Badische Anilin- & Soda-Fabrik, [azodyes from nitro-m-phenylenediaminesulphonic acid], 1906, A., i, 322.

sulphonic esters of hydroxybenzaldehydes and hydroxybenzoic acids,

1906, A., i, 413.

preparation of the salts of formaldehydesulphoxylic acid, 1906, A., i,

" preparation of indoxyl, 1906, A., i, 695.

preparation of hydroxyethylaniline and its derivatives, 1906, A., i, 736. preparation of derivatives of the re-

duction products of anthraquinone, 1906, A., i, 862.

preparation of indoxyl and its derivatives, 1906, A., i, 883; 1910, A., i,

preparation of benzanthronequinolines, 1906, A., i, 889.

preparation of 4-alkyloxy-a-naphthols, 1906, A., i, 951.

preparation of hydroxyethyl salicylate,

1906, A., i, 957. [oxidation of aromatic hydrocarbons and their derivatives with manganese disulphate], 1907, A., i, 202.

preparation of thio-derivatives of quinol and its chloro-compounds,

1907, A., i, 210.

preparation of aldehydes of the anthraquinone series, 1907, A., i, 224. preparation of anthracene derivatives,

1907, A., i, 226; 1908, A., i, 999;

1912, A., i, 119, 1006.

The orientation of sulphonated chlorotolueneazo-β-naphthols and their lake-forming properties], 1907, A., i, 263.

preparation of benzanthrone and its derivatives, 1907, A., i, 324.

[preparation of dianthraquinonylamine derivatives], 1907, A., i, 327. oxidation of o-nitrotoluene in the side-

chain with manganese dioxide and sulphuric acid, 1907, A., i, 407.

[acetyl derivatives of the highly chlorinated alkylanilines], 1907, A., i, 408.

preparation of chlorinated amidines, 1907, A., i, 444.

preparation of stable compounds from aldehydes and hyposulphites, 1907, A., i, 478.

preparation of acyl alkyl compounds of highly halogenated aromatic amines, 1907, A., i, 507.

preparation of dianthraquinonyl and its derivatives, 1907, A., i, 539, 942.

Badische Anilin- & Soda-Fabrik, benzanthrone derivatives of the naphthanthraquinone series, 1907, A., i, 943.

[properties of substituted amidines], 1907, A., i, 973.

preparation of derivatives of formaldehydesulphoxylic acid containing

nitrogen, 1907, A., i, 1024. [preparation of 2':2'-dianthraquinonyl-1:5-diaminoanthraquinone], 1907,

A., i, 1085.

dinitrodiphenylaminesulphonic acids and their transformation into triphenylmethane colouring matters, 1908, A., i, 154.

[direct production of alizarin from anthraquinone], 1908, A., i, 191. preparation of hydroxybenzanthrones,

1908, A., i, 193.

[chlorination of dianthraquinonyl derivatives], 1908, A., i, 193.

preparation of salts of 1-diazo-β-naphtholsulphonic acids, 1908, A., i, 231.

preparation of diphenylamine deriva-

tives, 1908, A., i, 259.

preparation of indoxyl and its homologues and derivatives, 1908, A., i,

[oxidation of 2-methyl-1:2'-dianthraquinonylamine], 1908, A., i, 456. preparation of formaldehydesulph-

oxylate, 1908, A., i, 605.

preparation of halogen derivatives of benzanthrone, 1908, A., i, 661; 1909, A., i, 244.

preparation of barium cyanide from barium cyanamides, 1908, A., i, 770. preparation of complex dianthra-

quinonyldiaminoanthraquinones, 1908, A., i, 807.

preparation of the cyanides and cyanamides of the alkali and alkaline earth metals, 1908, A., i, 964.

preparation of derivatives of benzanthrone, 1908, A., i, 993.

preparation of chloroacylaminoanthraquinones, 1908, A., i, 994.

preparation of pure nitrites from nitrous fumes, 1908, A., ii, 175.

preparation of 2-p-nitrosoanilinonaphthalene-6:8-disulphonic acid, 1909, A., i, 221.

preparation of derivatives of 1:3diaminoanthraquinone, 1909, A., i,

preparation of benzanthrone and its derivatives, 1909, A., i, 244.

[anthrapyridone derivatives], 1909, A., i. 262.

Badische Anilin- & Soda-Fabrik, preparation of p-aminodiazobenzene and its derivatives, 1909, A., i, 273.

preparation of 3-chloro-6-nitroaniline, 1909, A., i, 297.

[preparation of derivatives of triaminobenzene], 1909, A., i, 337.

preparation of derivatives of thiolbenzoic acid, 1909, A., i, 718; 1912, A., i, 111.

preparation of substituted aromatic carboxylic acids from the corresponding aldehydes, 1909, A., i, 792.

preparation of acetylaminoanthraquinones, 1909, A., i, 810.

[preparation of 2-methylanthrapyridone], 1909, A., i, 835.

[preparation of methylenebis-3-chloro-6-nitroaniline], 1909, A., i, 910.

[condensation products of amino- and chloro-anthraquinones, 1909, A., i, 940.

[preparation of benzanthranyl-1-aminoanthraquinone derivatives], 1909, A., i, 941.

preparation of substituted halogen derivatives of 3-oxy-(1)-thionaphthen, 1909, A., i, 950.

preparation of 2:3-diketodihydro-(1)-thionaphthen, 1909, A., i, 950.

[preparation of benzoyl-p-phenylene-diaminesulphonic acid], 1909, A., i, 964.

preparation of safraninesulphonic acids, 1909, A., i, 972.

preparation of halogenated anthraquinones, 1910, A., i, 49.

preparation of 2:3-diketodihydro-(1)-thionaphthen derivatives, 1910, A., i, 59, 60.

preparation of chloro- and bromoanthraquinonesulphonic acids, 1910, A., i, 270.

preparation of dianthraquinonyl and of dibenzanthronyl derivatives, 1910, A., i, 271.

preparation of nitrogen derivatives of phenylglycine-o-carboxylic acid, 1910, A., i, 318.

preparation of anthranilodi-ω-acetic acid and its derivatives, 1910, A., i, 319.

preparation of halogenated 2-methylanthraquinone derivatives substituted either in the aromatic nucleus or in the side-chain, 1910, A., i, 325.

preparation of 5-halogen-6-chloro-2-acylaminotoluenes, 1910, A., i, 371.

Badische Anilin- & Soda-Fabrik, [preparation of 3-chloro-o-toluidine-5sulphonic acid], 1910, A., i, 371.

preparation of halogen derivatives of phenylglycine-o-carboxylic acid, 1910, A., i, 382.

preparation of condensation products in the anthracene series, 1910, A., i, 397, 701, 702; 1911, A., i, 885.

preparation of mononitroanthraquinonvlouinglines 1910 A. i 430

onylquinolines, 1910, A., i, 430. preparation of thionaphthen deriva-

tives, 1910, A., i, 500, 764. preparation of carbamino-acid esters from 6-amino-α-naphthol-3-sulphonic acid, 1910, A., i, 667.

preparation of halogenindoxylic acids and their esters, 1911, A., i, 156.

preparation of 1:5-dichloronaphthalene-3-sulphonic acid and of 1:4-dichloronaphthalene-6-sulphonic acid, 1911, A., i, 434.

preparation of o-nitroauthraquinonecarboxylic acids, 1911, A., i, 455.

preparation of acenaphthenone, 1911, A., i, 464.

preparation of halogenated anthraquinones, 1911, A., i, 466.

preparation of anthranilic acid esters containing a substituted group in the para-position to the aminogroup, 1911, A., i, 539.

preparation of substituted anthranilic acid esters, 1911, A., i, 539.

preparation of sulphonated aromatic ammonium compounds, 1911, A., i, 627.

preparation of βγ-dimethyl-Δαγ-butadiene, 1911, A., i, 829.

preparation of chloroalkylarylsulphonyl chlorides, 1911, A., i, 850.

preparation of a mixture of 1:4- and 1:5-dichloronaphthalenes, 1911, A., i. 850.

preparation of aminoanthraquinones and of aminoaphthanthraquinones or their derivatives, 1911, A., i, 884.

preparation of anthraquinone condensation products, 1911, A., i, 885.

preparation of halogenated derivatives of indigotin, 1911, A., i, 925, 1030.

preparation of sulphurous acid derivatives of unsaturated hydrocarbons, 1911, A., i, 938.

[preparation of derivatives of anthraquinonecarboxylic acids and of anthraquinoneacridones], 1911, A., i, 980.

preparation of phenanthridone derivatives, 1911, A., i, 1026.

Badische Anilin- & Soda-Fabrik, preparation of ammonium salts from nitrogen compounds of aluminium, 1911, A., ii, 1088.

[preparation of dimethylindanthren],

1912, A., i, 142.

preparation of chloroalkylarylsulphonic acids and of chloroalkylarylcarboxylic acids, 1912, A., i, 176.

preparation of aromatic sulphonyl ammonium compounds, 1912, A., i,

176.

preparation of halogenated dehydroindigotin salts, their nuclear homologues and substitution products, 1912, A., i, 218.

preparation of carboxylic acids of aromatic ammonium compounds or their derivatives, 1912, A., i, 355.

preparation of aldehydes in the anthraquinone series, 1912, A., i, 361. preparation of condensation products

in the anthraquinone series, 1912, A., i, 362, 811, 996.

preparation of chloro-substituted derivatives of authranilic acid, 1912, A., i, 450.

[preparation of anthraquinone derivatives], 1912, A., i, 468, 996.

[preparation of nitromethylbenzanthrone], 1912, A., i, 475.

[preparation of naphthanthracridone], 1912, A., i, 504.

preparation of nitrated derivatives of indigotin, 1912, A., i, 512.

preparation of condensation products in the authracene series, 1912, A., i,

preparation of pinacone from acetone and sodium, 1912, A., i, 831.

preparation of anthraquinone derivatives containing sulphur, 1912, A., i, 876, 980, 1013.

[preparations of phenanthrene derivatives containing sulphur, 1912, A., i, 877.

preparations of crystalline zinc formaldehydesulphoxylate, 1912, A., i,

preparation of 1-aminoanthraquinone-2-carboxylic acid and its derivatives, 1912, A., i, 979.

preparation of ammonia by the catalytic combination of nitrogen and hydrogen, 1912, A., ii, 936.

preparation of molybdenum compounds containing nitrogen, 1912, A., ii, 946.

the catalytic preparation of ammonia from its elements by the employment of pure iron as the contact substance, 1912, A., ii, 1052.

Badonnel, V. See Alfred Guyot.

Bäckström, Helmer. See Euler.

Bädeker, Karl, electrical conductivity and thermo-electric power of certain compounds of the heavy metals, 1907, A., ii, 327.

a peculiar type of electrical conduct-

ivity, 1908, A., ii, 654.

Bädeker, Karl, and E. Pauli, electrical conductivity of solid cuprous iodide, 1908, A., ii, 654.

Backeland, Leo, dissociation of lead nitrate, 1904, A., ii, 405.

Baer, Julius, and Léon Blum, katabolism of fatty acids in diabetes. II., 1907, A., ii, 285.

the action of various chemical substances on sugar excretion and acidosis, 1907, A., ii, 640; 1908, A., ii, 122; 1911, A., ii, 512.

the degradation of fatty acids in Diabetes mellitus, 1908, A., ii, 1057; 1910, A., ii, 227; 1911, A.,

ii, 512.

Baer, Julius, and Adam Loeb, liver

autolysis, 1905, A., ii, 734.

Baer, Julius, and Wilhelm Meyerstein, the influence of pharmacological agents on oxidation in the organism, 1910, A., ii, 1094.

Baer, Julius. See also Ernst Friedmann and Jakob Parnas.

Bärlocher, Max. See Joh. Howitz.

Baerwald, Hans, measurement of the absorption of cathode-rays in gases by means of secondary rays, 1910, A., ii, 250.

excitation of the phosphorescent alkaline earth-metal sulphides by canal rays, 1912, A., ii, 1122.

Baessler, Paul, sodium nitrate compared with ammonium sulphate,

1908, A., ii, 127.

manurial value of calcium nitrate and calcium cyanamide as compared with sodium nitrate and ammonium sulphate, 1911, A., ii, 650.

Baessler, Paul. See also Friedrich

Kretschmer.

Baeyer [Johann Friedrich Wilhelm], Adolf von, dibenzylideneacetone and triphenylmethane, 1905, A., i, 281; 1909, A., i, 641.

Grignard's reaction, 1905, A., i,

action of methyl sulphate on dimethyl-

pyrone, 1910, A., i, 763.

Baeyer, Adolf von, and Hans Aickelin, dibenzylideneacetone and triphenylmethane. IX., 1907, A., i, 691.

Baeyer, Adolf von, Hans Aickelin, Carl Diehl, Richard Hallensleben, and Hermann Hess, derivatives of tri-phenylcarbinol. II., 1910, A., i, 249.

Baeyer, Adolf von, Alfons von Bentheim, and Carl Diehl, derivatives of triphenylcarbinol, 1907, A., i, 757.

Baeyer, Adolf von, and Richard Hallendibenzylideneacetone triphenylmethane. VIII., 1905, A., i, 358.

Baever, Adolf von, and Jean Piccard, dimethylpyrone, 1911, A., i, 901.

Baeyer, Adolf von, and Victor Villiger, dibenzylideneacetone and triphenylmethane, 1904, A., i, 308, 786.

colour bases of the triphenylmethane

dyes, 1905, A., i, 454.

Baeyer, Adolf von, Victor Villiger, and Henry Bassett, jun., dibenzylideneacetone and triphenylmethane, 1904, A., i, 898.

Baeyer, Adolf von, Victor Villiger, and Richard Hallensleben, dibenzylideneacetone and triphenylmethane, 1903, A., i, 811.

Baeyer, Otto von, slow cathode rays,

1909, A., ii, 288.

change in the velocity of B-rays in their passage through matter, 1912, A., ii, 617.

Baeyer, Otto von, and Otto Hahn, magnetic line-spectrum of \(\beta\)-rays, 1910, A., ii, 566.

Baeyer, Otto von, Otto Hahn, and Lise Meitner, observation of β-rays from radium-D., 1911, A., ii, 567.

the B-rays of the active deposit of thorium, 1911, A., ii, 567.

magnetic spectrum of B-rays of radium, 1912, A., ii, 7.

the magnetic spectrum of \$\beta\$-rays of thorium, 1912, A., ii, 409.

Baeyer, Otto von. See also Heinrich Rubens

Baezner, Carlo, transformation of o-nitroand op-dinitro-benzyl chlorides into

acridine derivatives, 1904, A., i, 928. Baezner, Carlo, and August Gardiol, o-nitrobenzophenone and its reduction products, 1906, A., i, 673. synthesis in the acridine series, 1906,

A., i, 887.

Baezner, Carlo, J. Gueorguieff, and August Gardiol, conversion of onitro- and op-dinitro-benzyl chlorides into acridine derivatives, 1906, A., i, 699.

diacridines, 1906, A., i, 901.

Bagard, P., preparation of acyclic aldehydes. I. and II., 1907, A., i, 384, 476.

Bagard, P. See also Edmond Emile Blaise and André Wahl.

Bagaschoff, In., analysis of garnet-sand from Lake Baikal, 1903, A., ii, 383.

Bagg, Edward P. See Arthur I. Kendall.

Bagh, Alexander von. See Alfred Einhorn

Bagley, George. See Thomas Hill Easterfield.

Baglioni, Silvestro, importance of sodium in the functions of the spinal medulla, 1904, A., ii, 756.

comparison of muscles, electrical organ, and blood-serum of Torpedo ocellata,

1906, A., ii, 781. composition of body-fluids in marine animals, 1906, A., ii, 869.

effects of feeding with maize; certain properties of zein. I., 1908, A., ii, 619.

effects of nutrition with maize; action of the gastric juice on zein and gliadin. II., 1910, A., ii, 625.

effects of nutrition with maize. Action of the pancreatic juice of the dog on zein and gliadin, 1911, A., ii, 999.

Bagros. See Léon Grimbert.
Bagster, Lancelot Salisbury, improved mouth-blowpipe, 1910, A., ii, 892.

properties of binary mixtures of some liquefied gases, 1911, T., 1218; P., 141.

Bagster, Lancelot Salisbury. See also Bertrum Dillon Steele.

Baguley, Allan, phosphate nutrition of plants, 1912, A., ii, 293.

Bahadur, Rana, action of sodium nitroprusside on plants, 1904, A., ii, 762.

influence of various ratios of phosphoric acid to nitrogen on the growth of barley, 1905, A., ii, 348.

composition of the fibrous part of the Japanese orange, 1906, A., ii, 886.

Bahadur, Rana. See also Keijirō Asō. Bahntje, Paul. See Erich Müller.

Bahr, Eva von., influence of pressure on the absorption of ultra-red radiation by gases, 1909, A., ii, 630; 1910, A., ii, 914.

decomposition of ozone by ultra-violet

light, 1910, A., ii, 949. the alteration of absorption lines by foreign gases, 1912, A., ii, 2.

influence of temperature on the ultrared absorption of gases, 1912, A.,

Bahr, Fritz, thallous hydroxide 1911, A., ii, 803.

Bahr, Fritz, and Otto Sackur, the thermal formation of potassium manganate from manganese dioxide and potassium hydroxide, 1911, A., ii, 1091.

Baidakowsky, L., synthesis of β-hydroxy-β-anisylpivalic acid [β-hydroxy-β-anisyl-aa-dimethylpropionic acid], 1903, A., i, 827.

action of zinc on a mixture of cinnamaldehyde and ethyl α-bromopropionate, 1906, A., i, 178.

action of zinc on a mixture of salicylaldehyde and ethyl α-bromopropionate; synthesis of α-methyl-coumarin, 1906, A., i, 178.

Baidakowsky, L., and Sergius N. Reformatsky, action of phenylhydrazine on formic esters, 1903, A., i, 441.

Baidakowsky, L., and I. Slepaka, action of phenylhydrazine on benzoic, acetic, and isovaleric esters, 1903, A., i, 441.

Baier, Ed., refraction of butter fat, 1903, A., ii, 249.

Baikoff, Alexander L., alloys of copper and antimony and the phenomenon of recalescence observed in them,

1904, A., ii, 346. contact phenomena in the flame under the influence of solids, 1905, A., ii, 379.

crystallisation and structure of steel, 1907, A., ii, 874.

Bailey, Clement William, and Hamilton McCombie. the effect of heat on a mixture of benzaldehydecyanohydrin with m-chloroaniline and with mtoluidine, 1912, T., 2272; P., 266.

Bailey, Edward Monroe, studies on the banana. I., 1906, A., ii, 385. biochemical and bacteriological studies of the banana, 1912, A., ii, 379

of the banana, 1912, A., ii, 379.

Bailey, Edward Monroe. See also
Andrew Lincoln Winton.

Bailey, H. C. See John R. Murlin.
Bailey, Herbert S., automatic syphon pipette, 1908, A., ii, 827.

automatic filter funnel, 1909, A., ii,

an electrically heated vacuum fractionation apparatus, 1911, A., ii, 256.

Bailey, James R., Solomon Farley Acree, and P. T. Miller, action of carbimides and thiocarbimides on hydrazo-acids, 1904, A., i, 826.

Bailey, James R., Solomon Furley Acree, C. P. Norby, and M. B. Wesson, ring condensations of the esters of uraminoand semicarbazino-acids with sodium ethoxide, 1903, A., i, 129. Bailey, James R., and Barney Brooks, hydantointetrazones, 1908, A., i, 842.

Bailey, James R., and Louis Knox, I. Diazoamino-compounds from semi-carbazino-fatty acids. II. Chemical behaviour of the derivatives of carbamidoazoisobutyric acid, 1907, A., i, 801.

Bailey, James R., and C. P. Bandolph, desulphurisation of thiohydantoins, 1908, A., i, 741.

thiohydantoins and bases derived from these, 1908, A., i, 742.

Bailhache, G., oxalomolybdites, 1903, A., i, 66.

estimation of nitric acid with ferrous sulphate, 1904, A., ii, 679.

Bailhache, G. See also G. Rivière.

Baillon, M. See Robert Fosse.
Bailly, O., application of the formaldehyde titration method to the estimation of amino-acids in plants, 1912,
A., ii, 1009.

Bain, (Miss) Alice Mary. See William Hobson Mills.

Bain, Alexander William, the action of ethyl iodide and of propyl iodide on the disodium derivative of diacetylacetone, 1906, T., 1224; P., 196.

the action of ethylene dibromide and of propylene dibromide on the disodium derivative of diacetylacetone, 1907, T., 544; P., 77.

Bain, Alexander William. See also Samuel Smiles.

Bain, David. See Hugh Marshall.
 Bain, James Watson, estimation of titanium, 1904, A., ii, 93.

Bain, James Watson. See also Ernest P. Moore.

Bain, William, destruction of blood corpuscles in liver and spleen, 1903, A., ii, 493.

action of digestive enzymes on each other, 1909, A., ii, 682.

pressor bases in urine. II., 1910, A., ii, 528; 1911, A., ii, 631.

pharmacology and therapeutics of lecithin and phytin, 1912, A., ii, 585.

Bainbridge, Francis Arthur, adaptation of the pancreas, 1904, A., ii, 424. the lymph-flow from the pancreas,

the lymph-flow from the pancreas, 1905, A., ii, 100.

the post-mortem flow of lymph, 1906, A., ii, 782.

effects of ligature of one ureter, 1907, A., ii, 113.

prosecretin in relation to Diabetes mellitus, 1908, A., ii, 213.

food-poisoning bacilli and efficiency of rat viruses, 1909, A., ii, 510. Bainbridge, Francis Arthur, the action of certain bacteria on proteins, 1911, A., ii, 1121.

Bainbridge, Francis Arthur, and Arthur Philip Beddard, secretion by the frog's kidney, 1906, A., ii, 469.

secretion by the renal tubules in the frog, 1906, A., ii, 563.

secretin in relation to Diabetes mellitus, 1906, A., ii, 786.

diastatic ferment in the tissues in diabetes, 1907, A., ii, 189.

partial nephrectomy in cats, 1907, A., ii, 377.

Bainbridge, Francis Arthur, and Henry Hallett Dale, contractile mechanism of the gall-bladder, 1905, A., ii, 842.

Bainbridge, James Scott, and Samuel Henry Davies, the essential oil of cocoa, 1912, T., 2209; P., 253.

Bairsto, George Edward, and R. Mercer, aluminium anode-films, 1912, A., ii, 123.

Bairstow, Leonard, and Archibald Douglas Alexander, explosions of mixtures of coal-gas and air in a closed vessel, 1905, A., ii, 815.

Baisch, E. See Max Trautz.

Baitsell, George Alfred. See Lorande Loss Woodruff.

Baker, Bertram Francis. See Roland

Francis Young.

Baker, Frank, the structure of carbonium salts, 1907, T., 1490; P., 192; discussion, P., 193.

the viscosity of ether-alcohol mixtures,

1912, T., 1409; P., 165.

Baker, Frank, and Edward Charles Cyril Baly, the relation between absorption spectra and chemical constitution. Part VII. Pyridine and some of its derivatives, 1907, T., 1122; P., 157. Baker, Herbert Brereton, atomic weight

of tellurium, 1908, A., ii, 483. ionisation of gases by chemical change,

1911, A., ii, 244.

Baker, Herbert Brereton, and George Henry Joseph Adlam, the constancy of water of crystallisation in hydrated salts. Part I., 1911, T., 507; P., 17. Baker, Herbert Brereton, and (Mrs.)

Muriel Baker, gaseous nitrogen trioxide, 1907, T., 1862, P., 239; discussion, P., 240.

the change in the boiling points of the trioxide and tetroxide of nitrogen on drying, 1912, T., 2339; P., 282.

Baker, Herbert Brereton, and Alexander Hutcheon Bennett, the atomic weight of tellurium, 1907, T., 1849; P., 240; discussion, P., 241.

Baker, Herbert Brereton. See also Augustus George Vernon Harcourt.

Baker, Julian Levett, and Frank Edward Day, iodimetric titration of sulphites in presence of alcohol and sugars, 1912, A., ii, 1093.

Baker, Julian Levett, and William Douglas Dick, detection and estimation of small quantities of maltose in the presence of dextrose, 1905, A., ii, 290.

Baker, Julian Levett, and Henry Francis Everard Hulton, estimation of lactose in the presence of the commonlyoccurring sugars, 1911, A., ii, 74.

Baker, (Mrs.) Muriel. See Herbert

Brereton Baker.

Baker, Richard Thomas, and Henry George Smith, relation between leaf venation and the presence of certain chemical constituents in the oils of the Eucalypts, 1903, A., ii, 234.

the pines of Australia, 1911, A., i,

477.

Baker, (Miss) Sarah Martha, a theory regarding the configuration of certain unsaturated compounds; and its application to the metallic ammines and the cinnamic acids, 1909, P., 223. Baker-Young, F. W. See Benjamin

Bakhuis-Roozeboom. See Roozeboom.

Bakker, Gerrit, theory of the capillary film between the homogeneous phases of liquid and vapour. II., 1903, A., ii, 62.

thickness and tension of the capillary

layer, 1905, A., ii, 304.

law of the rectilinear diameter; relation between heat of vaporisation and the critical constants, 1904, A., ii, 310.

theory of capillarity, 1904, A., ii,

thickness of the capillary film between the homogeneous phases of liquid and vapour and its relation to the critical phenomena, 1904, A., ii, 806.

pressure in the capillary layer parallel to its surface, 1906, A., ii, 655.

curved capillary layer and the theory of boiling, 1907, A., ii, 434, 606.

thermodynamics of the capillary layer, 1910, A., ii, 106, 831.

theory of the curved capillary layer, 1912, A., ii, 743.

Bakowski, Artur, the arc spectrum of cerium, 1908, A., ii, 243.

calculation of specific heats of solutions, 1909, A., ii, 375.

Bakscht, A. See Heinrich Goldschmidt.

Bakunin, Marussia, condensations in presence of metals and metallic chlorides [benzylphenol], A., i, 818; 1904, A., i, 312.

action of benzyl chloride on aminophenols, 1906, A., i, 496.

indones and their transformation products in sunlight; behaviour with ozone, 1912, A., i, 344.

explosiveness of the residues from ethereal solutions of nitrophenylindones exposed to light. 1912, A., i, 344.

action of the ultra-violet rays on stereoisomerides of the cinnamic series. II., 1912, A., i, 356.

Bakunin, Marussia, and P. Alfano, action of benzyl chloride on resorcinol and catechol, 1907, A., i, 915.

Bakunin, Marussia, and Gaetano Altieri, benzyl-B-naphthol and derivatives, 1904, A., i, 313.

Bakunin, Marussia, and T. Angrisani, constitution of phenyl-o-nitroindone [4-nitro-2-phenylindone] and of its ozonide, 1912, A., i, 867.

Bakunin, Marussia, and Michele Barberio, benzyl-a-naphthol and derivatives, 1904, A., i, 312.

Bakunin, Marussia, and G. Dragotti, melanic pigments, 1904, A., i, 1041.

Bakunin, Marussia, and E. Lanis, photochemical reactions of the nitrophenylindones. I., 1911, A., i, 992.

Bakunin, Marussia, and Vincenzo Majone, toxicological investigation of strychnine, 1906, A., ii, 507.

Bakunin, Marussia, and L. Parlati, products of dehydration of phenylo-nitrocinnamic acid and the products which accompany this acid when prepared by Perkin's synthesis,

1906, A., i, 664. special isomerism in the phenylnitrocinnamic acids (anhydrides, indones, chlorides, phenylhydrazides, hydr-

azones, and oximes), 1907, A., i, 415.
Bakunin, Marussia, and Vincenzo Petitti, toxicological researches on morphine, 1904, A., ii, 376.

Bakunin, Marussia, and C. Profilo, action of p-nitrobenzyl chloride on p-aminophenol, 1907, A., i, 911.

Balareff, D., the reciprocal transformations of ortho-, pyro-, and metaphosphoric acids on heating, 1910, A., ii, 607.

the hydration of metaphosphoric acid, 1910, A., ii, 951.

products formed when phosphoric oxide dissolves in water, 1911, A., ii, 107.

Balareff, D., can Thomson's thermochemical method be employed to investigate the hydration of metaphosphoric acid, 1911, A., ii, 798.

the hydrates of arsenic pentoxide, 1911, A., ii, 798.

the velocity of hydration of metaphosphoric acid. I., 1911, A., ii, 974.

Balatschinsky, G. See Wladimir N. Ipatieff.

Balavoine, Pierre, detection of foreign oils in nut oil, 1906, A., ii, 589. volumetric estimation of bismuth, 1908, A., ii, 990.

Balbiano, Luigi, the theory of saponification, 1903, A., i, 547; 1904, A., i,

216, 798.

β-p-methoxyphenylpropaldehyde obtained from the isomeric a-pmethoxyphenylpropylene-a\beta-glycols [a-p-methoxyphenylpropane- $\alpha\beta$ diols], 1908, A., i, 901.

separation of allyl and propenyl compounds in ethereal oils, 1909, A., i,

401.

Angeli-Rimini reaction of the aldehydes, 1911, A., i, 987; 1912, A., i,

Balbiano, Luigi, and Luigi Angeloni, 1:3-dimethylcyclohexane derived from camphoric acid, 1904, A., i, 860.

Balbiano, Luigi, and Vincenzo Paolini, [interaction of mercuric acetate with terpenes and compounds containing the C₃H₅ group]; a correction, 1904, A., i, 261.

composition of light petroleum, 1906,

A., i, 473.

Balbiano, Luigi, Vincenzo Paolini, Francesco Bernardini, Enrico Luzzi, Giacomo Mammola, Umberto Tonazzi, and Gion Vespignani, interaction of mercuric acetate with terpenes and compounds containing the C₃H₅ group. II., 1904, A., i, 72.

Balbiano, Luigi, Vincenzo Paolini and G. de Conno, stereoisomeric y-pmethoxyphenyl-βγ-propylene glycols $[\gamma - p$ -methoxyphenylpropane- $\beta \gamma$ -diols],

1907, A., i, 522.

Balbiano, Luigi, Vincenzo Paolini, Angelo Nardacci, Umberto Tonazzi, Enrico Luzzi, Francesco Bernardini, D. Cirelli, Giacomo Mammola, and Gion Battista Vespignani, action of aqueous solutions of mercuric acetate on olefinic compounds, 1906, A., i, 186.

Balbiano, Luigi and Pietro Zeppa, Italian petroleum. II., 1904, A., ii, 45.

Balcom, Reuben Wilfred. See Georg Bredig.

Baldes, Karl. See Gustav Embden.

Baldoni, Alessandro, biological impor-

tance of iron, 1905, A., ii, 46. poisons applied to the outer surface of the mammalian heart, 1905, A., ii,

behaviour of sodium salicylate in the organism, 1908, A., ii, 1060.

estimation of quinine in urine and in blood, 1912, A., ii, 1219.

Baldwin, Helen, acetonuria following chloroform and ether anæsthesia, 1906, A., ii, 108.

changes in the bile occurring in some infectious diseases, 1908, A., ii, 212.

influence of lactic acid ferments on intestinal putrefaction in a healthy individual, 1910, A., ii, 144.

Baldwin, Wesley M., relation of pancreas to sugar metabolism, 1910, A., ii,

Baleau, Hermann. See Charles Edward Ham.

Balhorn, Hans. See Johannes Thiele. Balicka-Iwanowska, (Mme.) Gabrielle, decomposition and regeneration of proteins in plants, 1903, A., ii,

449. physiological rôle of phosphoric acid in the nutrition of plants, 1907, A.,

ii, 386. Balke, Clarence William. double fluorides of tantalum, 1905, A., ii,

atomic weight of tantalum, 1910, A., ii, 962.

Balke, Clarence William, and Edgar Fahs Smith, derivatives of complex inorganic acids. V., 1904, A., ii, 179.

columbium, 1908, A., ii, 1043.

Balke, Clarence William. See also Edgar Fahs Smith.

Ball, John, the meteorite of El Nakhla El Baharia, 1912, A., ii, 361.

Ball, Walter Craven, complex nitrites of bismuth, 1905, T., 761; P., 129; discussion, P., 130.

the slow decomposition of ammonium chromate, dichromate, and trichromate by heat, 1908, P., 136; 1909, T., 87.

a new method for the detection of sodium, cæsium, and rubidium, 1909, T., 2126; P., 284; discussion, P., 284.

estimation of sodium and caesium as bismuthinitrites. Part I. Estimation of sodium, 1910, T., 1408; P., 169.

Ball, Walter Craven, compounds produced by the simultaneous action of nitrites and hyposulphites on nickel salts; a method for the detection of nickel in the presence of much cobalt, 1910, P., 329.

changes in the absorption spectra of "didymium" salts, 1912, A., ii,

877.

A., fatty substances and Balland, acidity of flours, 1904, A., ii, 74.

composition of carobs of different origins, 1904, A., ii, 582.

distribution of phosphorus in foods,

1907, A., ii, 126.

Ballandier, J. B., some colour reactions, 1904, A., ii, 792.

Ballner, Franz, sterilisation of drinking water by chlorine and bromine, 1904, A., ii, 68.

Balló, Rezsö, solidification of binary mixtures of the saturated monobasic fatty acids and water, 1910, A., i, 355.

Balló, Rezső, and Emil Dittler, the binary systems Li2SiO3-Al2(SiO3)3, Li₄SiO₄-Al₄(SiO₄)₃, LiAlO₂-SiO₂, and the lithium aluminosilicate minerals, 1912, A., ii, 758.

Balls, (Miss) Kathleen, John Theodore Hewitt, and Sidney Herbert Newman, studies in the azine series. Part II., 1912, T., 1840; P., 231.

Bally, Oscar, syntheses in the anthracene series, and new dyes, 1905, A., i,

Bally, Oscar, Roland Scholl, and G. Lentz, action of glycerol and sulphuric acid on amino-compounds and on compounds free from nitrogen belonging to the anthracene group: benzanthrone and its reduction products. Observations on the nomenclature of complex ring-systems of the anthracene group, 1911, A., i, 677.

Balthasar, Karl, volumetric estimation of calcium oxide in presence of dissolved silica, 1909, A., ii, 831.

Balthazard, V. See Charles Bouchard. Baly, Edward Charles Cyril, spectra of neon, krypton, and xenon, 1904, A., ii, 3.

the absorption spectra of chlorobenzene, the dichlorobenzenes and the chlorotoluenes, 1911, T., 856; P.,

theory of geometrical and stereoisomerism, 1911, A., ii, 451.

toxicity of paints, 1912, A., 533.

Baly, Edward Charles Cyril, (Miss)
Katherine Alice Burke, and (Miss)
Effic Gwendoline Marsden, the absorption spectra of the nitrates in relation to the ionic theory, 1909, T., 1096; P., 144; discussion, P., 145.

Baly, Edward Charles Cyril and John Norman Collie, the ultra-violet absorption spectra of aromatic compounds. Part I. Benzene and certain monosubstituted derivatives, 1905, T., 1332;

P., 203.

Baly, Edward Charles Cyril, John Norman Collie, and Herbert Edmeston Watson, the relation between absorption spectra and chemical constitution. Part XIII. Some pyrones and allied compounds, 1908, P., 268;

1909, T., 144.

Baly, Edward Charles Cyril, and Cecil Henry Desch, the ultra-violet absorption spectra of certain enol-ketotautomerides. Part I. Acetylacetone, and ethyl acetoacetate, 1904, T., 1029; P. 157.

the ultra-violet absorption spectra of certain enol-keto-tautomerides. Part II., 1905, T., 766; P., 84; discus-

sion, P., 85.

the relation between absorption spectra and chemical constitution. Part IX. The nitroso- and nitro-groups, 1908,

T., 1747; P., 173.

Baly, Edward Charles Cyril, Walter Henry Edwards, and Alfred Walter Stewart, the relation between absorption spectra and chemical constitution. Part III. The nitroanilines and the nitrophenols, 1906, T. 514; P., 35; discussion. P., 35.

discussion, P., 35.

Baly, Edward Charles Cyril, and
(Miss) Elinor, Katharine Ewbank,
the ultra-violet absorption spectra
of aromatic compounds. Part II.
The phenols, 1905, T., 1347; P.,

203

the ultra-violet absorption spectra of aromatic compounds. Part III. Disubstituted derivatives of benzene, 1905, T., 1855; P., 210.

Baly, Edward Charles Cyril, and Rudolf Krulla, a theory of fluorescence, 1912,

T., 1469; P., 196.

Baly, Edward Charles Cyril, and (Miss) Effic Gwendoline Marsden, the relation between absorption spectra and chemical constitution. Part XII. Some amino-aldehydes and -ketones of the aromatic series, 1908, T., 2108; P., 235; discussion, P., 236.

Baly, Edward Charles Cyril, (Miss) Effic Gwendokine Marsden, and Alfred Walter Stewart, the relation between absorption spectra and chemical constitution. Part V. The isonitrosocompounds, 1906, T., 966; P., 126; discussion, P., 127.

Baly, Edward Charles Cyril, and Francis Owen Rice, chemical reactivity and absorption spectra. Part. I, 1912,

T., 1475; P., 197.

chemical reactivity and absorption spectra. Part II. The variation in absorption produced by a solvent, 1912, P., 312.

Baly, Edward Charles Cyril, and Konrad Schaefer, the relation between absorption spectra and chemical constitution. Part X. Unsaturated acids of the benzene series, 1908, T., 1806; P., 207.

Baly, Edward Charles Cyril, and Alfred Walter Stewart, the relation between absorption spectra and chemical constitution. Part II. The a-diketones and quinones, 1906, T., 502; P., 34.

Baly, Edward Charles Cyril, and William Bradshaw Tuck, the relation between absorption spectra and chemical constitution. Part VI. The phenylhydrazones of simple aldehydes and ketones, 1906, T., 982; P., 142; discussion, P., 143.

[spectra of derivative of naphthacene-

quinone], 1907, T., 426.

the relation between absorption spectra and chemical constitution. Part XI. Some aromatic hydrocarbons, 1908,

T., 1902; P., 223.

Baly, Edward Charles Cyril, William Bradshaw Tuck, and (Miss) Effic Gwendoline. Marsden, the relation between absorption spectra and chemical constitution. Part XIV. The aromatic nitro-compounds and the quinonoid theory, 1910, T., 571; P., 51; discussion, P., 51.

the relation between absorption spectra and chemical constitution. Part XV. The nitrated azo-compounds, 1910, T., 1494; P., 166; discussion, P., 167.

Baly, Edward Charles Cyril, William Bradshaw Tuck, (Miss) Effic Gwendoline Marsden, and (in part) (Miss) Maud Gazdar, the relation between absorption spectra and chemical constitution. Part VIII. The phenylhydrazones and osazones of α-diketones, 1907, T., 1572; P., 194.

Baly, Edward Charles Cyril. See also Frank Baker and Alfred Walter

Stewart.

Bambach, Adolf. See Robert Stollé.

Bamber, Montague Kelway, estimation of the adulterant in citronella oil, 1903, P., 292.

Bamberg, R. See Reinhold von Walther. Bamberger, Eugen, imino-\psi-quinols,

1903, A., i, 83. behaviour of anthranil, phenylhydroxylamine and o-hydroxylaminobenzaldoxime towards hydroxylamine and air, 1903, A., i, 84.

oxidation of ethylamine, 1903, A., i,

methyl benzeneazobenzylidenenitron-

ate, 1903, A., i, 285. determination of the structure of amines by means of Caro's persulphuric acid, 1903, A., i, 324.

o-hydroxylamino-, o-nitroso-, and oazoxy-benzyl alcohols, 1903, A., i,

constitution of anthranil, 1903, A., i,

behaviour of p-alkylated phenols towards Caro's reagent, 1903, A., i, 624.

oxidation of o-aminobenzaldehyde and its relation to benzoxazole, 1903, A., i, 634.

isomerism of diazoxides, 1904, A., i,

action of methyl sulphate on anthranil and o-aminobenzaldehyde, 1904, A.,

transformations with arylhydroxylamine and quinol derivatives, 1907,

A., i, 516.

action of ethyl- and methyl-alcoholic sulphuric acid on as-m-xylylhydroxylamine. I. Xyloquinol ether,

1907, A., i, 517.

action of ethyl- and methyl-alcoholic sulphuric acid on as-m-xylylhydroxylamine. II. Iminoxyloquinol ethers, 1907, A., i, 518.

transformations of 2:4-dimethylquinol ethyl ether, 1907, A., i., 521.

anthranil. XI., 1909, A., i, 509. anthranil. XIII. Diazotisation of anthranils and conversion of arylanthranils into acridones, 1909, A., i, 510.

XVII. Heller's recent exanthranil. periments in connexion with an-

thranil, 1910, A., i, 277.

two solid polymeric nitroso-ψ-cumenes, 1910, A., i, 549.

historical notes on C-nitroso-compounds, 1910, A., i, 706.

behaviour of acetic anhydride at a high temperature, 1911, A., i, 103.

Bamberger, Eugen, oo'-azoxybenzalde-hyde, 1911, A., i, 694.

relation between bisnitroso-compounds arylnitrosohydroxylamines, 1911, A., i, 996.

phenylmethyltriazole; a correction, 1912, A., i, 55.

Cazeneuve's diphenylcarbodiazide and diphenylcarbazone, 1912, A., i, 56.

Bamberger, Eugen, and Oskar Baudisch, action of hydrogen peroxide on nitrosoacetanilide and spontaneous decomposition of the latter, 1909, A., i, 907.

oxidation of normal diazohydroxides with hydrogen peroxide, 1909, A.,

i, 977.

unusual oxidation of an azo-compound,

1912, A., i, 733.

Bamberger, Eugen, and Louis Blangey, synthesis of quinols, 1903, A., i,

action of magnesium methyl iodide on p-xyloquinone and toluquinone,

1911, A., i, 883.

Bamberger, Eugen, Louis Blangey, and Josef Brun, action of dilute sulphuric acid on phenyl- and p-tolyl-hydroxylamine, in the presence and the absence of phenol, 1912, A., i, 691.

Bamberger, Eugen, and Josef Brun, action of alcoholic sulphuric acid on 1:3-dimethylquinol, 1907, A., i, 520.

Bamberger, Eugen, and Max Czerkis, behaviour of aminophenols towards Caro's reagent, 1904, A., i, 238.

oxidation of m- and p-nitrophenols with Caro's reagent, 1904, A., i, 238.

oxidation of phenol with Caro's re-

agent, 1904, A., i, 238.

Bamberger, Eugen, and Eduard Demuth, action of alkali hydroxides on oaziminobenzoic acid, 1903, A., i,

oxidation of o-aminobenzaldehyde to

anthranil, 1903, A., i, 432.
Bamberger, Eugen, and Franz Elger, reduction of o-nitroacetophenone; the first indigo synthesis, 1903, A., i, 560.

anthranil. VIII., 1904, A., i, 93. photochemistry of o-nitrated benzaldehydes, 1910, A., i, 267.

Bamberger, Eugen, and Andor Fodor, anthranil. XVIII. Methods of preparation of o-nitrosobenzaldehyde, 1911, A., i, 60.

Bamberger, Eugen, Andor Fodor, and Oskar Baudisch, o-nitrosobenzalde-

hyde, 1909, A., i, 589.

Bamberger, Eugen, and Johannes Frei, mixed tetrazo-compounds, 1904, A., i. 123.

action of aliphatic alcohols on 1:3-dimethylquinol in the presence of concentrated sulphuric acid, 1907, A., i, 519.

Bamberger, Eugen, and W. Ham, behaviour of certain para-substituted nitrosobenzenes towards sulphuric acid, 1911, A., i, 684.

Bamberger, Eugen, and Hans Hauser, nitrosophenylhydrazine, 1910, A., i,

776.

Bamberger, Eugen, and Rudolf Hübner, the three isomeric nitronitrosobenzenes, 1904, A., i, 115.

reduction of o-nitroazo-compounds,

1904, A., i, 117.

oxidation of p-phenylenediamine, 1904,

A., i, 118.

Bamberger, Eugen, and Emil Kraus, action of alkali hydroxides on s-tri-bromodiazobenzene, 1907, A., i, 161.

Bamberger, Eugen, and Sven Lindberg, phenylanthranil (2-phenyl-ψ-benz-

oxazole), 1909, A., i, 511.

anthranil. XVI. Relation of anthroxanic acid (2-anthranilcarboxylic acid) to anthranil, 1910, A., i, 189.

Bamberger, Eugen, and Jarl Lublin, anthranil. XII. Anthranil and methyl-

anthranil, 1909, A., i, 509.

Bamberger, Eugen, and Wilhelm Pemsel, phenylazoethane, 1903, A., i, 282.

nitroso-, isonitroso-, and nitro-derivatives of aldehydehydrazones, 1903, A., i, 283.

acetaldehydephenylhydrazone, 1903,

A., i, 284.

action of amyl nitrite on m-nitrobenzylidenephenylhydrazone, 1903, A., i, 285.

behaviour of benzaldehydephenylhydrazone towards nitrous acid and amyl nitrite, 1903, A., i, 285.

action of amyl nitrite on anisaldehydephenylmethylhydrazone, 1903,

A., i, 286.

[action of amyl nitrite on phenyl-mnitrobenzylidenehydrazine], 1909, A., i, 56.

Bamberger, Eugen, and Frank Lee Pyman, ethyl o-hydroxylaminobenzoate, 1903, A., i, 822.

reduction of o-nitrobenzoic acid and its esters, 1909, A., i, 573.

Bamberger, Eugen, and Emil Reber, action of phenylhydrazine on ketonic 2:4-dimethylquinol, 1907, A., i, 643.

Bamberger, Eugen, and E. W. Remmert, anthranil. X. A new reduction product of o-nitrobenzaldehyde, 1907, A., i, 163.

Bamberger, Eugen, and Leo Rudolf, influence of certain substituting groups on the oxidation of tertiary amines to amine oxides, 1907, A., i, 122.

action of hydroxylamine on 2:4-dimethylquinol and its ethers, 1907,

A., i, 606. amino-oxides of leuco-bases of the diand tri-phenylmethane series, 1908,

A., i, 1011.

Bamberger, Eugen, and Richard Seligman, oxidation of the oximes, 1903,

A., i, 99. oxidation of methylamine, 1903, A., i, 152.

oxidation of aliphatic amines of the type: C'NH₂, 1903, A., i, 322.

oxidation of aliphatic amines of the type: CH·NH₂, 1903, A., i, 323. oxidation of aldehyde-ammonia, 1903,

A., i, 401.

oxidation of ethylenediamine, 1904,

A., i, 18.

Bamberger, Eugen, Leon Ter-Sarkissjanz, and Josef de Werra, action of hydrochloric acid on m-tolylhydroxylamine, 1903, A., i, 25.

Bamberger, Eugen, Umetaro Suzuki (Mlle.) Marie Finkelstein, and Julius Potschiwauscheg, nitroglyoxime, 1912,

A., i, 839.

Bamberger, Eugen, and Michael M. Tichwinsky, action of zinc ethyl on diazobenzene chloride, 1903, A., i, 131.

[phenyldiethyltriazine], 1903, A., i, 371.

Bamberger, Eugen, and Josef de Werra, control experiments with chloro-mtoluidines and chloro-m-aminobenzoic acids, 1903, A., i, 21.

Bamberger, Eugen, and Alexander Wetter, diazotisation of nitrobenzene,

1904, A., i, 352.

Bamberger, Eugen, and S. Wildi, oxidation of aminoindazoles and a remarkable method of formation of dichloroindazole, 1907, A., i, 164.

Bamberger, Heinrich, estimation of methyl alcohol in formaldehyde, 1904,

A., ii, 786.

Bamberger, Max, radioactivity of mineral springs in the Tyrol, 1908, A., ii, 649.

radioactivity of certain springs in Upper Austria, 1909, A., ii, 110.

Bamberger, Max, radioactivity of certain spring waters of the Semmering Province, 1909, A., ii, 110.

a new apparatus for the preparation of liquid and solid air for demonstra-

tions, 1911, A., ii, 106.

Bamberger, Max, and Karl Krüse, radioactivity of the mineral springs of the Tyrol. II. and III., 1910, A., ii, 570; 1911, A., ii, 1049.

Bamberger, Max, and Anton Landsiedl, occurrence of urea in plants, 1903,

A., ii, 567.

chemistry of celery (Apium graveolens), 1905, A., ii, 52.

chemistry of the scleroderms, 1905, A., ii, 852.

chemistry of the scleroderms. II. Scleroderma aurantium (S. vulgare),

1907, A., ii, 45. Polyporus rutilans, 1909, A., ii, 922. chemistry of Polyporus frondosus,

1911, A., ii, 920. Bamberger, Max, and Arthur Praetorius,

autoxidation of anthragallol. II., 1903,

A., i, 103. Bamberger, Max, and Heinrich Renezeder, natural resins [" Ueberwallungsharze"]. VII. Oxidation of lariciresinol, 1903, A., i, 643.

See Rudolf Friedrich Bames, Ernst.

Weinland.

Bamford, (Miss) Hannah, and John Lionel Simonsen, the constitution of benzenetetracarboxylic acids, the 1910, T., 1904; P., 206.

Banasinski, E. See Joseph de Kowalski. Bancelin, M., viscosity of emulsions,

1911, A., ii, 586.

viscosity of suspensions and the determination of Avogadro's number, 1911, A., ii, 1067.

Bancels. See Larguier des Bancels.

Bancroft, Frank W., validity of Pflüger's law for parameeium, 1906, A., ii, 104.

relative concentration of calcium ions in reference to the reversal of the polar effects of the galvanic current in paramœcium, 1906, A., ii, 869.

Bancroft, J. Austen. See Nevil Norton

Evans.

Wilder Dwight, chemical Bancroft, potential and electromotive force, 1903, A., ii, 627.

crystallisation in binary systems, 1904,

A., ii, 242.

indirect analyses in multi-component systems, 1905, A., ii, 685.

the van't Hoff-Raoult formula, 1906, A., ii, 523.

Bancroft, Wilder Dwight, photochemistry and the phase rule, 1907, A., ii,

non-miscibility and the mass law,

1908, A., ii, 161.

electrochemistry of light, 1908, A., ii, 448, 549, 788; 1909, A., ii, 200, 362, 454, 632, 847.

chemical reactions of phosphorescence,

1909, A., ii, 950.

I., II., the theory of emulsification. and III., 1912, A., ii, 542, 834.

electrical endosmose, 1912, A., ii, 623. action of water vapour on gelatin, 1912, A., ii, 838.

photochemical oxidation benzene, 1912, A., ii, 1021.

Bandrowski, Ernst [Titus] von, and Alexander Prokopeczko, action of benzene on azoxybenzene in presence of aluminium chloride, 1904, A., i, 635.

Banerjee, Manindra Nath, apparatus for the determination of equivalents of metals and for the estimation of carbon dioxide both directly and indirectly, 1910, A., ii, 897.

the action of Allium sativum (garlie) juice on lead and mercury, 1911,

P., 234.

the causes of the differences in the action of sodium and potassium on water, 1911, A., ii, 109.

the interaction of phosphorus and potassium hydroxide solution, 1912, P., 50.

Banerjee, Manindra Nath, and Satish Chandra Banerjee, the action of nascent hydrogen on nitric acid, 1911, P., 326.

a method of estimating tin in its ores, alloys, and compounds, 1912,

P., 102.

Banerjee, Satish Chandra. See Manindra Nath Banerjee and George Clarke, jun.

Bang, Ivar, chemistry of lymphatic organs, 1903, A., ii, 664, 739; 1904, A., ii, 426.

chemical investigations on lymphatic organs. II. Constitution of natural histon nucleate, 1904, A., i, 127.

the rennin action of blood serum, 1904, A., ii, 422.

preparation of taurocholic acid, 1905, A., i, 750.

precipitins, 1905, A., i, 956.

are proteolytic and rennetic ferments identical? 1905, A., ii, 100.

nucleic acid from the thymus, 1907, A., i, 266.

Bang, *Ivar*, estimation of sugar, 1907, A., ii, 136; 1908, A., ii, 235, 739. liver diastase in pancreatic diabetes, 1907, A., ii, 900.

guanylic acid, 1908, A., i, 70; 1910,

A., i, 647, 906.

pepsin and rennet, 1908, A., i, 236. cobra poisoning and hæmolysis, 1908, A., ii, 721; 1909, A., ii, 681; 1910, A., ii, 229.

physico-chemical relations of red-blood corpuseles, 1909, A., ii, 413.

diastases. I., 1911, A., i, 591.

estimation of sugar and of phosphoric acid; preparation of methylglycuronic acid, 1911, A., ii, 664.

titration of diabetic sugar, 1911, A.,

ii, 664.

the chemical occurrences in milk curdling by rennet, 1911, A., i, 826. the distribution of reducing substances in blood, 1912, A., ii, 180.

the estimation of sugar in urine, 1912,

A., ii, 210.

Bang, Ivar, and Gösta Bohmansson, the method of estimating sugar in urine, 1910, A., ii, 163.

Bang, Ivar, and John Forssman, hamolysin formation, 1906, A., ii, 558.

Bang, Ivar, Malte Ljungdahl, and Verner
Bohm, glycogen metabolism in the rabbit's liver, 1907, A., ii, 487, 634, 898.
Bang, Ivar, H. Lyttkens, and J. Sand-

Bang, Ivar, H. Lyttkens, and J. Sandgren, estimation of blood-sugar, 1910,

A., ii, 554.

Bang, Ivar, and Ernst Overton, the action of cobra poison, 1911, A., ii, 316.

the action of crotalus poison, 1911,

A., ii, 913.

Bang, Ivar, and C. A. Raaschou, preparation of guanylic acid, 1903, A., i, 780.

Bannister, Charles Olden, and W. Mc-Namara, effect of calcium on the ammonium molybdate method of lead assay, 1912, A., ii, 689.

Banthien, Hans. See Rudolf Schenck.
Banzhaf, Edwin J., antitoxic globulin.

I., 1908, A., ii, 412. deterioration of diphtheria antitoxin,

1910, A., ii, 734.

Banzhaf, Edwin J., and Robert Banks Gibson, fractionation of agglutinins and antitoxin, 1907, A., i, 884. antitoxic globulin. II., 1908, A., ii,

412.

Barabasz, L., and Léon Marchlewski, the chlorophyll group. V. The identity of chlorophyllpyrrole and hæmopyrrole, 1909, A., i, 948. Baragiola, W. I., and Ch. Godet, the state of combination of sulphuric acid in wine, 1912, A., ii, 981.

Baragiola, W. I., and Paul Huber, judging wines by the low alkalinity of the ash, 1911, A., ii, 662.

Baragiola, W. I. See also Karl von der Heide.

Baranowski, St. See Josef Tambor.

Barber, M., phosphotungstates of some amino-acids, 1906, A., i, 633.

Barberio, Michele, action of benzyl chloride on naphthols; formation of anthracene as a by-product, 1904, A., i, 312.

microchemical reaction of the semen and its application in medico-legal investigations, 1906, A., ii, 208.

first products of decomposition of the testicular pulp of the ram by means of cold dilute sodium hydroxide solution, 1907, A., ii, 374.

new method of staining the tubercle bacillus, 1907, A., ii, 381.

successive preparation of mono- and di-nitrosoresorcinols and of resorubrin, 1908, A., i, 161.

the Leo process for the estimation of the acidity of the monometallic phosphates in gastric juice, 1908, A., ii, 532.

Barberio, Michele. See also Marussia Bakunin.

Barbero, Cesare. See Arrigo Mazzucchelli.

Barbier, Hen-A. See Auguste Lumière. Barbier, [François Antoine] Philippe, ethylenediamine compounds of cadmium, 1903, A., i, 403.

the violet manganic metaphosphate described by Gmelin, 1903, A., ii,

151.

a violet ammonio-manganic phosphate, 1903, A., ii, 151.

synthesis of an aldehyde with the odour of violets; β-cyclocitralide-nepropenal, 1907, A., i, 779.

potassium ammonium oxalate, 1908, A., i, 601.

11, 1, 001.

a new variety of paragonite mica, 1908, A., ii, 604.

a chemical difference between orthoclase and microcline, 1908, A., ii, 704.

chlorophyllite from Vizézy, 1908, A., ii, 705.

analysis of the microline from the pegmatites of Mesvres, 1908, A., ii, 955.

analysis of the christianite of Simiouse, 1908, A., ii, 956.

Barbier, [François Antoine] Philippe, origin of the introduction of magnesium into organic syntheses, 1910, A., i, 308.

separation of alumina and ferric oxide,

1911, A., ii, 70.

composition of potash felspars, 1911, A., ii, 735.

Barbier, Philippe, and Ferdinand Gonnard, beryl from Montjeu (Saône-et-Loire), 1910, A., ii, 418.

beryl and muscovite from Biauchaud (Puy-de-Dôme), 1910, A., ii, 418.

phillipsite from Sirgwitz, Silesia, 1910, A., ii, 418.

analyses of some French felspars, 1910,

A., ii, 419.

Barbier, Philippe, and Victor Grignard, menthane-1:8-dicarboxylic acid and a new dicyclic ketone, 1907, A., i, 852.

new method for the hydration of

pinene, 1908, A., i, 94.

active pinonic and pinic acids, 1908, A., i, 852; 1910, A., i, 555.

transformation of pinonic acid into m-

xylylacetic acid, 1909, A., i, 301. new method for the hydration of pinene. II. Partial proximate analysis and purification of crude pinene. III. Examination of the alcohols formed and origin of fenchyl alcohol, 1909, A., i, 501. liquid pinene hydrochloride,

1910,

A., i, 400.
Barbier, Philippe, and Georges Léser, preparation of dimethylacrylic acid, 1905, A., i, 628.

conversion of cinnamaldehyde into cinnamyl alcohol, 1905, A., i, 653.

Barbier, Philippe, and René Locquin, action of organo-magnesium compounds on methyl acetylpyrotartrate, 1911, A., i, 708.

conversion of substituted paraconic acids into the isomeric cyclopropanedicarboxylic acids, 1911, A., i,

new method of synthesis of methyl

ketones, 1911, A., i, 725.

Barbier, Philippe, and A. Prost, existence of a monoclinic soda felspar, isomorphous with orthoclase, 1908, A.,

Barbier, Philippe, and Paul Sisley, formation of as-safranines, 1905, A., i, 840; 1907, A., i, 160.

new mode of formation of di-p-aminodiphenylamine, 1906, A., i, 51.

s- and as-phenosafranines, 1906, A., i, 51, 989.

Barbier, Philippe, and Paul Sisley, formation of s-safranines, 1907, A., i,

aposafranine and its homologues, 1907, A., i, 563.

synthesis of phenylated s-anilinophenosafranine, 1908, A., i, 64. the safranines, 1908, A., i, 225.

Barbier, Philippe. See also Ferdinand

Gonnard. Barbieri, Giuseppe A., alkalimetric esti-

mation of iodine, 1905, A., ii, 350. titration of nitrous acid with quadrivalent cerium, 1905, A., ii, 553.

higher forms of combination of silver,

1906, A., ii, 612.

cuprous iodide, 1907, A., ii, 462.

oxidation of cerous to ceric compounds, 1907, A., ii, 466.

ceric hydroxide, 1907, A., ii, 467. new method of preparing ceric salts; ceric iodate, 1907, A., ii, 467.

bivalent silver, 1907, A., ii, 767.

complex molybdates of the rare earths, 1908, A., ii, 595; 1911, A., ii,

thorium arsenates, 1911, A., ii, 207. the analogy between copper and silver, 1912, A., ii, 763.

argentic persulphate, 1912, A., ii, 941.

Barbieri, Giuseppe A., and Filippo Calzolari, cobaltic fluoride, 1905, A., ii, 393.

labile hydrated forms fixed by means of an organic base, 1911, A., i,

the compounds of hydrated metallic salts with hexamethylenetetramine; (labile hydrated forms fixed by means of an organic base), II., 1911, A., i, 266.

compounds of salts of [metals of] the rare earths with hexamethylenetetramine, 1911, A., i, 268.

persulphates of bivalent metals, 1911, A., ii, 889.

Barbieri, Giuseppe A., and J. Calzolari, new compounds of quadrivalent cerium, 1910, A., ii, 779

Barbieri, Giuseppe A., and F. Lanzoni, hydrated additive products of metallic dichromates; (labile hydrated forms fixed by means of an organic base), III., 1911, A., i, 268.

Barbieri, Giuseppe A., and G. Pampanini, the ferriammines, 1911, A., i,

Barbieri, Giuseppe A., and A. Volpino, catalytic properties of the rare earth elements. I., 1907, A., ii, 465.

Barbieri, Giuseppe A. See also Felice Garelli, and Giuseppe Plancher.

Barbieri, N. Alberto, protagon, 1905, A., i, 621.

proximate analysis of yolk of egg, 1907, A., ii, 708.

chemical composition of ox-bile, 1909, A., ii, 819.

non-existence of free or combined lecithins in the yolk of eggs, 1910, A., i, 704.

chemical composition of the nervous system, 1911, A., ii, 413.

the retina does not contain the chemical constituents of the optic nerve, 1912, A., ii, 664.

the colouring matter of egg-yolk or ovochromin, 1912, A., ii, 783.

non-existence of free or combined lecithins in the yolk of eggs and in biological structures, 1912, A., ii, 957.

Barbieri, Pietro. See Giacomo Pighini. Barboni, I., analysis of commercial calcium citrate, 1912, A., ii, 1106.

Barboni, Igino. See Angiolo Funaro.

Barboni, J. See G. Armani.

Barbour, Erwin Hinckley and Cassius A. Fisher, calcite-sand crystals, 1903, A., ii, 156.

Barcroft, Joseph, estimation of urea in blood, 1903, A., ii, 343.

modification of Bohr's gas receiver,

1905, A., ii, 551. oxygen tension in submaxillary glands

and other tissues, 1906, A., ii, 178.
differential method of blood-gas analy-

sis, 1908, A., ii, 319, 529. the effect of altitude on the dissocia-

tion curve of blood, 1911, A., ii, 211.

Barcroft, Joseph, and Thomas Gregor Brodie, gaseous metabolism of the kidney, 1905, A., ii, 99, 787.

Barcroft, Joseph, and Mario Camis, dissociation curve of blood, 1909, A., ii, 815.

Barcroft, Joseph, and Walter Ernest Dixon, gaseous metabolism of mammalian heart, 1907, A., ii, 366.

Barcroft, Joseph, and Philip Hamill, estimation of oxygen in salt solution, 1906, A., ii, 798.

Barcroft, Joseph, and Harold Leonard Higgins, determination of the constants of the differential blood-gas apparatus, 1911, A., ii, 765.

Barcroft, Joseph, and Archibald Vivian Hill, the nature of oxyhæmoglobin, 1910, A., i, 288. Barcroft, Joseph, and William Oliver Redmond King, effect of temperature on the dissociation curve of blood, 1910, A., ii, 50.

Barcroft, Joseph, and George Ralph Mines, effect of hirudin on blood-

gases, 1908, A., ii, 117.

Barcroft, Joseph, and Paul Morawitz, estimation of gases in human blood by the chemical method, 1908, A., ii, 319.

Barcroft, Joseph, and Franz Müller, formation and estimation of methemoglobin, 1912, A., i, 58.

estimation of methæmoglobin, 1912,

A., ii, 107.

blood-flow and metabolism in the sub-maxillary gland, 1912, A., ii, 659.

Barcroft, Joseph, and L. Orbeli, influence of lactic acid on the dissociation curve of blood, 1911, A., ii, 124.

curve of blood, 1911, A., ii, 124.

Barcroft, Joseph, and H. Piper, the gaseous metabolism of the submaxillary gland with reference especially to the effect of adrenaline and the time relation of the stimulus to the oxidation process, 1912, A., ii, 782.

Barcroft, Joseph, and Ff. Roberts, dissociation curve of hæmoglobin, 1909,

A., ii, 815.

improvements in the technique of blood-gas analysis, 1910, A., ii, 342.

Barcroft, Joseph, and Lewis Erle Shore, gaseous metabolism of the liver. 1., 1912, A., ii, 1070.

Barcroft, Joseph, and Ernest Henry Starling, oxygen exchange of the pancreas, 1904, A., ii, 827.

Barcroft, Joseph, and Hermann Straub, the secretion of urine, 1910, A., ii, 1090.

Barcroft, Joseph. See also Ernest Henry

Starling.

Bardach, Bruno, simulation of traces of albumin by substances which interfere with the ferrocyanide test, especially in liquids requiring clarification, 1905, A., ii, 128.

a new reaction of proteins, 1908, A.,

ii, 332.

a reaction of aromatic inner anhydrides and anhydride-forming compounds, 1909, A., i, 645.

reaction for acetone, 1909, A., ii,

direct test for acetone in urine, 1910, A., ii, 358.

dimorphism of iodoform, 1911, A., i, 101.

Bardach, Bruno, a reaction for aromatic inner anhydrides based on the modification of the crystalline form of iodoform, 1911, A., ii, 826.

an inner anhydride reaction of albu-

min, 1911, A., ii, 945.

Bardach, Bruno, and Siegmund Silberstein, the guaiacum test for blood and a new modification of the same with sodium, peroxide, 1910, A., ii, 664.

detection of blood with guaiacum resin with the aid of sodium perborate,

1910, A., ii, 911.

Jolles's polarimetric estimation of sugars based on the use of alkali,

1911, A., ii, 663.

Bardach, Friedrich, globular appearance of certain precipitates, 1911, A., ii, 98. Bardach, Friedrich. See also Hugo

Ditz. Bardach, K. See Franz Fischler.

Bardachzi, Franz, protein reactions attributed to tryptophan, 1906, A., i,

blood pigment of Thalassochelys corticata, 1907, A., ii, 106.

the decomposition of blood-pigment, 1911, A., i, 95.

Bardet, G. See Albert Robin.

Bardier, E. See Jacques Émile Abelous. Bardin, Jean. See Alphonse Seyewetz.

Bardroff, Wilhelm, the constitution of the bimolecular cyanides of the fatty acids, 1912, A., i, 752.

Bardt, A. A. See Antony G. Doroschew-

Bardt, H., analysis of cuprous iodide,

1911, A., ii, 1033.

Barendrecht, H. P., enzyme action. II., 1904, A., ii, 551, 719; 1906, A., i, 328.

Barge, Rudolf, and Léon Givaudan, separation of toluene-o- and -p-sulphonamides, 1905, A., i, 124.

Bargellini, Guido, dibromosulphonaphthalic acid, 1904, A., i, 33.

tolylnaphthalimides and naphthylnaphthalimides, 1905, A., i, 210. sulphonic derivatives of naphthalic

anhydride, 1906, A., i, 184.

condensation products of rhodanic acid with aldehydes, 1906, A., i, 383, 536.

action of chloroform and sodium hydroxide on phenols in acetone solution, 1906, A., i, 666.

1:4-dimethyl-2-naphthaquinol, 1907,

A., i, 862.

4-quinol derivatives of the santonin group, 1907, A., i, 931.

Bargellini, Guido, diphenyldimethylhexamethyleneimine, 1907, A., i,

synthesis of isopropylisophthalic acid dimethylphthalidecarboxylic and acid, 1910, A., i, 744.

some derivatives of hydroxyquinol,

1911, A., i, 305.

Bargellini, Guido, and S. Aureli, some derivatives of hydroxyquinol. V., 1911, A., i, 855.

Bargellini, Guido, and Ghersch Avrutin, some derivatives of hydroxyquinol.

I. and II., 1911, A., i, 68.

Bargellini, Guido, and Leda Bini, tetrahydroxybenzenes, 1911, A., i, 211. chalkone and hydrochalkones, 1912, A., i, 118.

Bargellini, Guido, V. Daconto, and Antonio Mannino, action of nitric acid on desmotroposantonin, 1908, A., i, 819.

Bargellini, Guido, and Gino Forli-Forti, a new synthesis of dimethylphthalidecarboxylic acid, 1910, A., i, 744.

B-phenylcoumarins. II., 1911, A., i, 902.

Bargellini, Guido, and Cesare Gialdini, action of ozone on santonin, 1908, A., i, 345.

Bargellini, Guido, and Michele Giua, some derivatives of benzoylpropionic acid; (attempted synthesis of hydroxyl derivatives of naphthalene), 1912, A., i, 356.

Bargellini, Guido, and G. Leonardi, Bphenylcoumarins. I., 1911, A., i,

Bargellini, Guido, and Antonio Mannino, action of sulphuric acid on santonin. I., 1909, A., i, 723.

Bargellini, Guido, and Mario Marantonio, 2':4'-dihydroxyhydrochalkone,

1908, A., i, 801.

Bargellini, Guido, and Ermanno Martegiani, some derivatives of hydroxyquinol, 1911, A., i, 854, 965; 1912, A., i, 292, 981.

Bargellini, Guido, and G. Melacini, certain homologues of naphthalene, 1908,

A., i, 775.

Bargellini, Guido, and Aldo Mieli, influence exerted by a salt in various concentrations on the velocity of decolorisation of aqueous solutions of organic dyes under the influence of light, 1907, A., ii, 77.

Bargellini, Guido, and Olimpia Molina. constitution of certain trimethoxyphthalic acids, 1912, A., i, 773.

Bargellini, Guido, and Silvestro Silvestri, 2:2-methylnaphtha-ψ-quinol, 1907, A., i, 914.

action of sulphuric acid on santonin.

II., 1910, A., i, 39.

Bargellini, Guido. See also Luigi Francesconi and Franz Sachs.

Barger, George, a microscopic method of determining molecular weights, 1903, P., 121; 1904, T., 286; P., 8; discussion, P., 8.

association in mixed solvents, 1905,

T., 1042; P., 204.

saponarin, a new glucoside coloured blue with iodine, 1906, T., 1210; P., 194; discussion, P., 194.

the action of thionyl chloride and of phosphorus pentachloride on the methylene ethers of catechol derivatives, 1908, T., 563; P., 50.

the action of phosphorus pentachloride on the methylene ethers of catechol derivatives. Part III. The cyclic carbonates of dichloroethyl- γ propyleatechol, 1908, T., 2081; P., 237.

isolation and synthesis of p-hydroxyphenylethylamine, an active principle of ergot soluble in water, 1909,

T., 1123; P., 162.

synthesis of hordenine, the alkaloid from barley, 1909, T., 2193; P., 289.

constitution of dichloropiperonal, 1909, A., i, 240.

production of putrefaction bases, 1909, A., i, 701.

the constitution of carpaine. Part I., 1910, T., 466; P., 53.

Barger, George, and Francis Howard Carr, the alkaloids of ergot, 1907, T., 337; P., 27; discussion, P., 27.

Barger, George, and Reginald William Lane Clarke, exidation of pierotoxin, 1912, A., i, 1008.

Barger, George, and Henry Hallett Dale, alkaloids of ergot, 1907, A., i, 79.

79. ergotoxine and other constituents of

ergot, 1908, A., i, 204. physiological action of primary fatty amines, 1909, A., ii, 254.

the active principles of ergot, 1909,

A., ii, 689. 4-\beta-aminoethylglyoxaline (\beta-imin-azolylethylamine) and the other

azolylethylamine) and the other active principles of ergot, 1910, T., 2592; P., 327.

a third active principle in ergot extracts; preliminary note, 1910, P., Barger, George, and Henry Hallett Dale, the presence in ergot and physiological activity of β-iminazolylethylamine, 1910, A., ii, 736.

chemical structure and sympathomimetic action of amines, 1910, A.,

ii, 984.

4-β-aminoethylglyoxaline, a depressor constituent of intestinal mucosa, 1911, A., ii, 217.

Barger, George, and Arthur James Ewins, application of the microscopic method of molecular weight determination to solvents of high boiling point, 1905, T., 1756; P., 250.

note on the molecular weight of epine-

phrine, 1906, P., 38.

the action of thionyl chloride on the methylene ethers of catechol derivatives. Part II. Piperonyloin, piperil, and hydropiperoin, 1908, T., 735; P., 60.

the synthesis of thionaphthen derivatives from styrenes and thionyl chloride, 1908, T., 2086; P., 237.

the action of phosphorus pentachloride on the methylene ethers of catechol derivatives. Part IV. Derivatives of dihydroxyphenyl-acetic, -glycollic, and -glyoxylic acids, 1909, T., 552; P., 86.

the alkaloids of ergot. Part II., 1910,

T., 284; P., 2.

some phenolic derivatives of β -phenylethylamine, 1910, T., 2253; P., 248.

the constitution of ergothioneine; a betaine related to histidine, 1911,

T., 2336; P., 305.

Barger, George, and (Miss) Ellen Field, blue adsorption compounds of iodine. Part I. Starch, saponarin, and cholalic acid, 1912, T., 1394; P., 157; discussion, P., 157.

Barger, George, and Hooper Albert Dickinson Jowett, the synthesis of substances allied to epinephrine, 1905,

T., 967; P., 205.

Barger, George, and William Vernon Shaw, chemical and physiological assay of Digitalis tinctures, 1904, A., ii, 793.

Barger, George, and Walter William
 Starling, B-2-methoxynaphthylpropionic acid and methoxyperinaphthyldrindone, 1911, T., 2030; P., 258.
 Barger, George, and George Stanley

Barger, George, and George Stanley Walpole, further syntheses of p-hydroxyphenylethylamine, 1909, T., 1720; P., 229. Barger, George, and George Stanley Walpole, pressor substances from putrid meat, 1909, A., ii, 254, 416.

See also Pieter van Barger, George.

Romburgh.

Barillé, A., action of carbon dioxide under pressure on the metallic phosphates, 1904, A., ii, 27.

action of ammonium citrate on calcium phosphate; diverse reactions,

1908, A., ii, 496.

part played by the dissociation of carbophosphates in nature, 1909, A.,

existence of carbophosphates in milk; their precipitation by pasteurisation, 1909, A., ii, 820.

apparatus for the estimation of carbon dioxide in milk, 1910, A., ii,

74.

rôle of the constituents of dissociation of tricalcium carbophosphate in the formation of osseous tissue and various concretions, having as a basis calcium phosphate and calcium carbonate, 1910, A., ii, 523.

formation of dental "tartar" by dissociation of the carbophosphates of

saliva, 1911, A., ii, 741.

action of seltzer water on lead, tin, and antimony; causes of poisoning by chemical alteration, 1911, A., ii, 889.

action of seltzer water on aluminium,

1912, A., ii, 943.

Barillet, C. L. See André Brochet.

Barker, Bertha L. See Eugene Lindsay Opie.

Barker, C. R. See Frederick Bickell

Guthrie.

Barker, Harold C., thermoelectromotive forces of potassium and sodium with platinum and mercury, 1907, A., ii, 739.

Barker, Jonathan T., physico-chemical study of the complex copper-glycine sulphates, 1908, A., i, 323.

experimental determination thermodynamic calculation of the vapour pressures of toluene, naphthalene, and benzene, 1910, A., ii,

Barker, Lewellys Franklin, and Benson Ambrose Cohoe, considerations on protein diet with reference to the various forms of nitrogen it contains, 1906, A., ii, 102.

Barker, Lewellys Franklin. See also

Emil Abderhalden.

Barker, Perry. See Azariah T. Lincoln.

Barker, Thomas Vipond, contributions to the theory of isomorphism based on experiments on the regular growth of crystals of one substance on those of another, 1906, T., 1120; P., 111, 112.

note on the iodates and periodates of the alkali metals and the ammonium radicle, 1907, P., 305; 1908,

T., 15.

the regular growth of soluble salts on each other, 1907, A., ii, 240.

parallel growths of crystals and isomorphous miscibility, 1908, A., ii,

some new inorganic salts, 1911, T.,

1326; P., 198.

note on a colour change in \$-penitrophenol brought about by sunlight,

1911, P., 158.

studies in chemical crystallography. Part I. Co-ordination, isomorphism, and valency, 1912, T., 2484; P.,

crystallographic notes on inosite, potassium nitrate, and carbamide nitrate, 1912, A., i, 416.

crystallochemical analysis, 1912, A.,

ii, 1207.

Barkla, Charles Glover, secondary Röntgen radiation, 1906, A., ii, 413.

phenomena of X-ray transmission, 1910, A., ii, 8.

typical cases of ionisation by X-rays, 1910, A., ii, 920.

the spectra of the fluorescent Röntgen radiations, 1911, A., ii, 839.

Barkla, Charles Glover, and V. Collier, absorption of X-rays and fluorescent X-ray spectra, 1912, A., ii, 619.

Barkla, Charles Glover, and Charles A. Sadler, secondary X-rays and the atomic weight of nickel, 1907, A., ii, 731.

absorption of Röntgen rays, 1909, A.,

ii, 457.

Barkla, Charles Glover, and Lewis Simons, ionisation in gaseous mixtures by Röntgen radiation, 1912, A., ii, 222.

Barkow, Carl. See Emil Erlenmeyer,

Barlow, Percival Smith, the osmotic pressure of sugar solutions in mixtures of alcohol and water, 1905, P., 242; 1906, T., 162.

osmotic pressure of dilute aqueous

solutions, 1906, A., ii, 149.

osmotic pressures of alcoholic solutions, 1905, A., ii, 507; 1906, A., ii, 273.

Barlow, William, and William Jackson Pope, a development of the atomic theory which correlates chemical and crystalline structure and leads to a demonstration of the nature of valency, 1906, T., 1675; P., 264; discussion, P., 264.

the relation between the crystalline form and the chemical constitution of simple inorganic substances, 1907, T., 1150; P., 142; discussion, P.,

note on the theory of valency, 1907, P., 15.

on polymorphism, with especial reference to sodium nitrate and calcium carbonate, 1908, T., 1528; P., 193.

relation between the crystal structure and the chemical composition, constitution and configuration of organic substances, 1910, T., 2308; P., 251.

Barlow, William Edward, exact estimation of sulphur in vegetable and other organic substances, 1904, A.,

ii, 82.

a globulin occurring in the chestnut,

1905, A., i, 397.

solubility of silver chloride in hydrochloric acid and sodium chloride solutions, 1906, A., ii, 852.

the binary and ternary alloys of cadmium, bismuth, and lead, 1910, A., ii, 1066.

Barmwater, [Peter Heinrich] Ferdinand, conductivity of mixtures of electrolytes, 1904, A., ii, 10; 1906, A., ii,

gasometric estimation of metallic iron in ferrum redactum, 1905, A., ii, 654.

Barnard, Edith E. See Julius Stieglitz.

Barnard, Harry E., and Harry E. Bishop, improved condensation apparatus, 1906, A., ii, 655.

Barnebey, O. L., rare earth reactions in non-aqueous solvents, 1912, A., ii,

Barnebey, O. L., and Robert M. Isham, rapid and accurate method for the estimation of titanium, 1910, A., ii,

Barnes, Ernest J. See Andrew Mc-William.

Barnes, Howard Turner, Ebenezer Henry Archibald, and Douglas McIntosh, molecular weight determinations by means of platinum thermometers, 1905, A., ii, 238.

Barnes, Howard Turner, and G. W. Shearer, hydrogen peroxide cell. 1908, A.; ii, 344.

production of hydrogen peroxide from aluminium and zinc, 1908, A., ii,

Howard Turner. Barnes. See also Ernest Rutherford.

Barnes, James, spectrum of magnesium, 1905, A., ii, 389.

Barnes, Stuart K. See Charles Lathrop Parsons.

Barnett, Edward de Barry, the action of hydrogen dioxide on thiocarbamides, 1909, P., 305; 1910, T.,

note on the preparation of thiobenzanilide, 1911, P., 8.

note on the action of ethylene oxide on hydrazine hydrate, 1912, P., 259.

Barnett, Edward de Barry, and Samuel Smiles, note on phenolic thetines and their action with benzoyl chloride, 1908, P., 123.

the intramolecular rearrangement of diphenylamine o-sulphoxides, 1909, T., 1253; P., 74, 195; 1910, T., 186; P., 10.

derivatives of S-phenylphenazothionium. Part III. 1910, T., 362;

P., 47. derivatives of S-alkylphenazothionium, 1910, T., 980; P., 92.

Barnett, Edward de Barry. See also Harold Leete.

Barnett, George de Forest, and Walter Jones, recovery of adenine, 1911, A., i, 403.

Barnett, Robert Edward, magnalium and other light alloys, 1905, A., ii, 636.

Barnett, Raymond Theodore Fred. Gilbert Thomas Morgan.

Barnicot, J., the iodine reaction in leucocytes, 1906, A., ii, 558.

Barnstein, Ferdinand, malt germs, 1906, A., ii, 701. Baron, Harold, Frederic George Percy

Remfry, and Jocelyn Field Thorpe, the formation and reactions of iminocompounds. Part I. Condensation of ethyl cyanoacetate with its sodium derivative, 1904, T., 1726; P., 243.

Baroni, E., testing glass vessels as to neutrality, 1905, A., ii, 198. detection of nitrates in alkali iodides, 1906, A., ii, 578.

Baroni, E., and O. Borlinetto, solubility of alkaloids in an aqueous boric acid-glycerol solution, 1911, A., i,

Baroni, E., and O. Borlinetto, reaction of quinine and other alkaloids with

calomel, 1912, A., ii, 105.

Baroni, E., and G. B. Guidi, testing effervescing sodium tartrate, so-called "effervescing citrate of magnesia," 1905, A., ii, 355. Barosi, C. See Ettore Molinari.

Barr, Guy. See Henry John Horstman Fenton.

Barr, William M., spectrum and the bromides of columbium, 1908, A., ii,

Barraja. See Battesti.

Barral, Etienne [Victor], estimation of phenols in drugs, 1903, A., ii, 338. chlorination of phenyl carbonate in the presence of iodine, 1904, A., i,

chlorination of phenyl carbonate in the presence of antimony chloride, 1904, A., i, 493.

two new reactions of acetanilide, 1904, A., ii, 301.

colour reactions of pilocarpine, 1904,

A., ii, 302. source of error in estimating ammonia,

1910, A., ii, 155.

tests for salicylic acids, 1912, A., ii,

reactions of sulphosalicylic acid, 1912,

A., ii, 609.

Barral, Étienne, and E. Grosfillex, preparation of tetrachlorophenol,

1903, A., i, 163.

John Oglethorpe Wakelin, lethal action of acids and bases on Paramæcium aurelia, 1904, A., ii,

nature of methylene blue-eosin stain-

ing, 1906, A., ii, 785.

reaction velocity between opsonin and red blood corpuscles, 1907, A., i, 456. constants of the first and second dis-

sociations of quinine, 1910, A., i, 336. action of radium bromide on the skin of the rabbit's ear, 1910, A., ii, 983.

Barratt, John Oglethorpe Wakelin, and Edward S. Edie, action of methyleneblue on cotton fibre, 1907, A., ii, 847.

Barratt, John Oglethorpe Wakelin, and Albert Buckley Harris, electric osmosis and concentration of electrolytes, 1912, A., ii, 420.

electro-osmosis, 1912, A., ii, 729.

Barratt, John Oglethorpe Wakelin. also Vaughan Harley.

Barratt, Thomas, the numbers and ranges of the a-particles emitted by the emanation and active deposit of thorium, 1912, A., ii, 408.

Barratt, Thomas. See also Ernest Marsden.

Barraud, Aimé, estimation of sulphur in iron and steel, 1907, A., ii,

Barre, Maurice, some double sulphates of calcium, 1909, A., ii, 667.

double sulphates, 1909, A., ii, 733. solubility of silver sulphate in alkali

sulphates, 1910, A., ii, 710. double sulphates of thorium, 1910,

A., ii, 718.

decomposition of thorium sulphate by

water, 1910, A., ii, 718. thorium sulphate, 1910, A., ii, 781.

double sulphates formed by lanthanum and cerium sulphates with the alkali sulphates, 1911, A., ii, 42.

double salts formed between sparingly soluble sulphates and alkali sul-

phates, 1911, A., ii, 979.

double carbonates of calcium, 1912, A., ii, 254, 350.

preparation of anhydrous bromides, 1912, A., ii, 549.

solubility of thorium sulphate in sulphuric acid and in solutions of lithium sulphate, 1912, A., ii, 771.

Barrée, Maurice, transformation points of copper-aluminium alloys; variation of electrical resistance with temperature, 1909, A., ii, 1011.

Barrett, Ernest, a study of the dissociation of the salts of hydroxylamine in aqueous solution, 1910, P., 233.

Barrett, Ernest, and Arthur Lapworth, the velocity of reaction of bromine with some unsaturated acids in aqueous solution, 1907, P., 18.

the influence of acids and alkalis on the velocity of formation of acetoxime, 1907, P., 307; 1908, T.,

85. Barrett, William Fletcher, William Brown, and Robert Abbott Hadfield, physical properties of an extensive series of alloys of iron. IV. Thermal V. Micro-structure, conductivity. 1905, A., ii, 503.

Barrett, William Henry. See Harold Brewer Hartley.

Barringer, Benj. S. See Theodore B. Barringer, jun.

Barringer, Theodore B., jun., and Benj. S. Barringer, a comparison of the total nitrogen excretion of either kidney in normal individuals, 1910, A., ii, 1091.

Barrow, Fred. See Percy Faraday Frankland and Alexander McKenzie.

Barroweliff, Marmaduke, the constituents of the essential oil of American pennyroyal; occurrence of a dextro-menthone, 1907, T., 875; P., 114.

Barrowcliff, Marmaduke, and Frederic Stanley Kipping, attempts to prepare isomeric quaternary salts, 1903, T., 1141; P., 202.

Barroweliff, Marmaduke, and Frederick

Belding Power, the constitution of chaulmoogric and hydrocarpic acids, 1907, T., 557; P., 70.

Barroweliff, Marmaduke, Frank Lee Pyman, and Frederic George Percy Remfrey, aromatic arsonic acids, 1908,

T., 1893; P., 229.

Barroweliff, Marmaduke, and Frank Tutin, chemical examination of the root and leaves of Morinda longiflora, 1907, T., 1907; P., 248.

the configuration of tropine and ψ-tropine and the resolution of atropine, 1909, T., 1966; P., 256;

discussion, P., 257. Marmaduke. Barrowcliff. See

Frederick Belding Power.

Barschall, Hermann, the molecular weight of dextrin from honey from coniferous plants, 1908, A., i, 767. specific heats of solids at low temperatures, 1911, A., ii, 580.

heat of evaporation of oxygen, 1911,

A., ii, 582.

Barschall, Hermann. See also Friedrich Auerbach, and Jacobus Henricus van't Hoff.

Barsilowsky, Jacob N., reaction of potassium ferricyanide with aromatic polyamines, 1905, A., i, 549.

Barss, W. R., measurements of radioactivity by means of a-rays, 1912, A., ii, 616.

ionisation by collision in gases and vapours, 1912, A., ii, 884.

Bartal, Aurel von, preparation and purification of carbon tetrabromide, 1905, A., ii, 450.

new fractionating tap, 1905, A., ii,

action of sulphur on carbon tetrabromide, 1905, A., ii, 704.

carbonyl bromide, 1906, A., i, 731. difference of selenium from sulphur in the stability of its compounds, 1907,

A., ii, 341. action of carbonyl chloride on aluminium haloid compounds. I. and II., 1907, A., ii, 775, 957.

bromide, 1906, A., ii, 746.

action of selenium on carbon tetra-

Bartal, Aurel von, carbon diselenide, 1906, A., ii, 848.

Lancien's radioactive molybdenum

compound, 1908, A., ii, 10. arrangement for liquefying and distilling easily condensable gases and low-boiling liquids, 1908, A., ii,

Barteczko, Paul. See Fritz Ephraim. Bartell, F. E., permeability of porcelain and copper ferrocyanide membranes, 1911, A., ii, 1072.

pore diameters of osmotic membranes,

1912, A., ii, 628.

Bartell, F. E. See also Samuel Lawrence Bigelow. Bartells, E. J. See Richard Sidney

Curtiss. Bartells, G. C., jun. See Azariah T.

Lincoln. Bartelt, Eberhardt. See Wilhelm Vau-

Bartelt, Konrad, and Hans Schönewald, influence of the quality of the glass on the accuracy of the nitrogen estimations by Kjeldahl's method, 1904, A., ii, 842.

Bartelt, Konrad. See also Hans Schönewald and Friedrich Wilhelm

Semmler.

Barth, Georg, beer analysis by means of the refractometer, 1905, A., ii, 660. Barth, Otto, methods of increasing the

resistance of technical alloys to chemical action, 1912, A., ii, 649. action of the opium alkaloids with special reference to pantopon, 1912,

A., ii, 1197.

Barthe, [Joseph Paul] Léonce, purification of pyridine, 1905, A., i, 546. action of ethylene dibromide on ethyl sodiocyanoacetate, 1906, A., i, 175. some new bromo-derivatives of pyridine, 1907, A., i, 792.

action of sulphosalicylic acid sodium diborate, 1908, A., i, 271.

action of sulphosalicylic acid on trisodium phosphate, 1910, A., i,

phosphates of uranyl and of amines, 1911, A., i, 526.

Barthe, Léonce, and Adolphe Minet. action of cacodylic and methylarsinic acids on antimony trichloride, 1909, A., i, 560.

Barthe, Léonce. See also P. Carles. Bartholdy. See Mendelssohn-Bartholdy. Bartholomäus, Erich. See Hans Fischer.

Bartlett, Frederic H., effect of rarefied air on blood pressure, 1904, A., ii, 54.

Bartling, Richard, condensation of isodialuric acid with thiocarbamide, 1905, A., i, 420.

Bartmann, Alfons, the "sparing action"

of fat, 1912, A., ii, 779.

Bartolotti, Pietro, and Adolfo Linari, derivatives of phenol-ketones, 1903, A., i, 177.

Bartonec, Hugo, the estimation of tungsten in tungsten-steel, 1909, A., ii, 834.

Bartos, V. See Karl Andrlik.

Bartow, Edward, and B. H. Harrison, estimation of ammonia nitrogen in water in presence of hydrogen sulphide, 1910, A., ii, 998.

Bartow, Edward, and Justa M. Lindgren, some reactions during water

treatment, 1907, A., ii, 866.

Bartow, Edward, and Elmer Verner McCollum, syntheses of derivatives of quinoline, 1904, A., i, 686.

Bartow, Edward, and Andrews W. Sellards, preparation of nitration of m-ethyltoluene, 1905, A., i, 424. Bartsch, C. See Paul Jacobson.

Bartsch, Kurt, derivatives of a- and \betanaphthacoumarins, 1903, A., i, 648. effect of calcium cyanamide on the energy of germination, 1906, A., ii, 481.

Barttlingck, Georg. See Rudolf Fried-

rich Weinland.

Barus, Carl, colloidal nuclei and ions in dust-free air saturated with alcohol vapour, 1906, A., ii, 651.

Barvír, Jindřich Ladislav, [hornblende from Bohemia], 1905, A., ii, 176.

Bary, Paul, mode of dissolution of colloidal substances, 1911, A., ii, 590. osmotic phenomena in non-conducting media, 1911, A., ii, 702.

approximate value of the molecular weight of caoutchouc, 1912, A., i,

Bary, Paul, and L. Weydert, apparently reversible character of the vulcanisation reaction of caoutchouc by sulphur, 1911, A., i, 1003.

Barzetti, E. See Fernando Ageno. Basadonna, M. See H. Cantoni.

Basch, E. E., estimation of hardness in water, 1904, A., ii, 151.

decomposition of barium nitrate by heat, 1905, A., ii, 87.

use of barium carbonate for the purification of water, 1905, A., ii,

Basch, Georg, behaviour of sajodin [calcium iodobehenate]in the organism, 1908, A., ii, 521.

Baschieri, Adolf, properties of barium ferrate, 1906, A., ii, 857.

Baschieri, Enrico. See Raffaelle Nasini.

Baschieri, Ennio, constitution of zeolites, 1909, A., ii, 589; 1911, A., ii,

constitution of ilvaite, 1909, A., ii, 589; 1911, A., ii, 300.

Basci, S. See Paul Pfeiffer.

Base, Daniel, determination of the yield of formaldehyde in various methods of liberating the gas for the disinfection of rooms, 1906, A., ii, 709.

Bashford, Ernest Francis, conference of passive immunity on the same species, and on a species other than that providing the antitoxic serum, 1904, A.,

ii, 61.

Baskerville, Charles, mercurous phide, 1903, A., ii, 729.

action of ultra-violet light on rare earth oxides, 1904, A., ii, 108.

thorium, carolinium, berzelium, 1904, A., ii, 663; 1905, A., ii, 395.

purification of praseodymium, 1905,

A., ii, 458.

coloration of didymium glass by radium chloride, 1906, A., ii,

Baskerville, Charles, and H. H. Bennett, arsenic pentachloride, 1903, A., ii, 208.

Baskerville, Charles, and George F. Catlett, chemistry of the rare earths; lanthanates, 1904, A., ii, 260.

Baskerville, Charles, and W. J. Crozier, relative stability of cadmium potassium iodide and its application in the estimation of ozone, 1912, A., ii, 1208.

Baskerville, Charles, and Hazel Holland, chemistry of the rare earths; attempts to prepare praseodymium and neodymium alums; new double sulphates, 1904, A., ii, 261.

Baskerville, Charles, and George Frederick Kunz, [phosphorescence of] kun-

zite, 1904, A., ii, 601.

Baskerville, Charles, and L. B. Lockhart, action of radium emanations on minerals and gems, 1905, A., ii, 622.

phosphorescence of zinc sulphide through the influence of condensed gases obtained by heating rare-earth minerals, 1905, A., ii, 624.

Baskerville, Charles, and Eugene G. Moss, chemistry of the rare earths; lanthanum alums; new double sulphates, 1904, A., ii, 260.

Baskerville, Charles, and Reston Stevenson, chemistry of the rare earths; neodymium; preparation of pure material, and efforts to decompose it into its constituents, 1904, A., ii, 260.

apparatus for drying flasks, etc., 1910,

A., ii, 602.

the oxidation of ferrous salts, 1911, A., ii, 729.

Baskerville, Charles, and John William Turrentine, chemistry of the rare earths; praseodymium and its citrate, 1904, A., ii, 261.

Baskerville, Charles, and Fritz Zerban, inactive thorium, 1905, A., ii, 95.

Baskoff, A., jecorin and other lecithinlike substances in the liver of the horse, 1908, A., i, 1029.

lecithin-glucoses and jecorin, 1909,

A., i, 701.

lecithin and jecorin in the liver of normal dogs and those poisoned with alcohol, 1909, A., ii, 908.

Basler, Adolf, excretion and re-absorption in the kidney, 1906, A., ii, 468.

Basler & Co., J., preparation of isobornyl oxalate, 1908, A., i, 429.

Basler Chemische Fabrik, preparation of phthalic and benzoic acids, 1903, A., i, 487, 561.

preparation of phenylglycine and its homologues, 1904, A., i, 153.

preparation of amino- and hydroxyanthraquinones and their halogen derivatives, 1904, A., i, 512.

preparation of sodium oxide, 1904,

A., ii, 333.

preparation of indoxyl and its derivatives, 1906, A., i, 542.

1:3-dialkyl ethers of pyrogallol, 1906, A., i, 742.

preparation of 1:3-dimethylpyrogallol carbamate, 1907, A., i, 920.

preparation of carbamates of 2:6-dialkyloxyphenols, 1908, A., i, 635.

[preparation of the alkali derivatives of aromatic primary and secondary amines], 1909, A., i, 220.

[preparation of a thioindigoid dye from acenaphthenequinone], 1909, A., i, 251.

preparation of 5:5-dialkyliminobarbituric acids (5:5-dialkylmalonylguanidines), 1909, A., i, 266.

[1-diazo-2-oxynaphthalene-3-carboxylic acid and its azo-derivatives], 1909, A., i, 536.

Bass, Robert, the behaviour of the glucosides, especially arbutin, in the organism, 1912, A., ii, 471.

Bassett, Henry, jun., the mechanism of the reduction of potassium dichromate by sulphurous acid, 1903, T., 692; P., 54.

the corrosion of an Egyptian image,

1903, P., 194.

contributions to the study of the calcium phosphates. I. The hydrates of the calcium hydrogen orthophosphates, 1906, P., 315.

phates, 1906, P., 315.
contributions to the study of the calcium phosphates. II. The action of ammonia gas on the calcium hydrogen orthophosphates, 1906, P., 315; discussion, P., 316.

soil electrolysis with formation of a liquid sodium-potassium alloy, 1907,

A., ii, 344.

calcium phosphates. III. The system CaO—P₂O₅—H₂O, 1908, A., ii, 675.

Bassett, Henry, jun., and Hugh Stott
Taylor, the interaction of metallic
oxides and phosphoryl chloride,
alone and in the presence of certain
organic compounds, 1911, T., 1402;
P., 155.

calcium nitrate. Part I. The twocomponent system: calcium nitratewater. Part II. The three-component system: calcium nitratenitric acid-water at 25°, 1912, T., 576; P., 48.

Bassett, Henry, jun. See also Adolf von Baeyer and Antoine Guntz.

Bassett, Harry Preston, and Firman Thompson, preparation and properties of an oxydase occurring in fruits, 1911, A., ii, 425.

Bassett, Henry Preston. See also Harry Clary Jones and Edwin Fremont Ladd.

Bastet, M. C. See Jacob Böeseken.

Bastianini, Aurelio. See Luigi Francesconi.

Batěk, Alexander, separation of thorium and the cerite earths by normal sodium sulphite, 1905, A., ii, 461.

Batěk, Alexander. See also Bohuslav Brauner.

Bateman, Ernest. See Treat Baldwin Johnson.

Bateman, H., a method of calculating the number of degrees of freedom of a molecule among which the partition of energy is governed by the principal temperature, 1909, A., ii, 210.

Bateman, H. See also Ernest Rutherford.

Bateman, W. G. See Robert Eckles Swain. Bates, Frederick, and John Charles Blake, influence of basic lead acetate on the rotation of sucrose in aqueous solution, 1907, A., ii, 406.

Bates, F. W., effect of light on insulation

by sulphur, 1911, A., ii, 836.

Bates, Stuart J., iodine coulometer and the value of the Faraday; a correction, 1912, A., ii, 1130.

Bates, Stuart J. See also John Bishop Tingle and Edward W. Washburn.

Batey, John Percy, formation of hypoiodites and their action on sodium thiosulphate; a source of error in certain iodine titrations, 1911, A., ii, 436.

Batey, John Percy. See also Edmund Knecht.

Batik, injurious action of the sun's rays on acetone, 1910, A., i, 543.

Batik, Jaroslav. See Ferdinand Ulzer. Batscha, Bernhard. See Josef Herzig.

Batschinski, Alexius J., law of the rectilinear diameter, 1903, A., ii, 10; 1904, A., ii, 385.

dependence of viscosity of liquid substances on the temperature and chemical constitution, 1903, A., ii, 12.

relation between heat of vaporisation and critical magnitudes, 1903, A., ii, 409

an attempt to explain physically the periodic regularity of the chemical elements, 1903, A., ii, 416.

polymerisation of orthomeric liquids, especially of acetic acid, 1904, A., ii, 326.

modified van der Waals' equation, 1907,

A., ii, 74.

determination of degree of molecular association in liquids, 1911, A., ii,

Batt, Ludwig. See Rudolph Fittig.

Battaglia, Aristide, action of formaldehyde on the ammonium derivative of ethyl nitromalonate, 1908, A., i, 396.

Battandier, J. A., new source of thymol, 1903, A., i, 165.

Battegay, Martin, volumetric estimation of sodium sulphide, 1903, A., ii, 756.Battegay, Martin. See also Emilio

Battegay, Martin. See also Emilio Noelting.

Battelli, Angelo, specific heats of liquids which solidify at very low temperatures, 1907, A., ii, 330.

Battelli, Angelo, A. Occhialini, and Silvio Chella, radioactivity [of the thermal waters of S. Giuliano], 1906, A., ii, 824. Battelli, Angelo, and Annibale Stefanini, nature of osmotic pressure, 1905, A., ii, 629.

relation between osmotic pressure and surface tension, 1907, A., ii, 233.

Battelli, Fréd, the reputed alcoholic fermentation of animal tissues, 1904, A., i, 276.

oxidation of formic acid by extracts of animal tissues in the presence of hydrogen peroxide, 1904, A., ii, 428.

Battelli, Fréd, and (Mile.) Lina Stern, catalase in different animal tissues,

1904, A., ii, 499. mode of action of philocatalase, 1905,

A., i, 623.
philocatalase and anticatalase in animal tissues, 1905, A., ii, 406.

the substance which renders active the philocatalase in animal tissues, 1905, A., ii, 644.

oxidation of organic substances by ferrous sulphate in the presence of animal extracts, 1906, A., ii, 107.

moderating action of catalase on oxidations produced by extracts of animal tissues, 1906, A., ii, 107.

oxidation in tissues in the presence of ferric salts, 1906, A., ii, 184.

the occurrence of anticatalase in the animal organism, 1908, A., i, 589.

the peroxydases of animal tissues, 1908, A., ii, 964. uricase in animal tissues, 1909, A., ii,

749. "accessory breathing" in animal

tissues, 1909, A., ii, 1029. alcohol-oxydase in animal tissues,

1910, A., ii, 980. the aldehydase in animal tissues, 1910,

A., ii, 1085. the oxidation of succinic acid by animal tissues, 1911, A., ii, 132.

the oxidation of citric, malic, and fumaric acids by animal tissues, 1911, A., ii, 412.

pnein, 1911, A., ii, 748.

the action of trypsin on the different oxidative processes in animal tissues, 1911, A., ii, 808.

antipneumin, 1911, A., ii, 1008.

the primary and accessory respiration, 1912, A., ii, 178.

Battelli, Fréd. See also Alexis Bach.
Battesti, and Barraia, soluble ferment

Battesti, and Barraja, soluble ferments in the human kidney, 1903, A., ii, 561. Battisti. See *Frederico* Giolitti.

Bau, Arminius, the enzyme melibiase, and comparative studies of maltase, invertase, and zymase, 1904, A., i, 464.

Bau, Arminius, crystallised melibiose, 1904, A., i, 475.

Baubigny, Henri, estimation of manganese in acid solution by means of persulphates, 1903, A., ii, 184, 335, 512.

separation of alkalis from manganese peroxide, 1903, A., ii, 184.

mode of oxidation of manganese salts by alkali persulphates in acid solution, 1903, A., ii, 548.

nickelo-nickelic oxide, 1906, A., ii, 91, 170.

estimation of cadmium, 1906, A., ii, 307, 493.

conditions under which metallic sulphides are precipitated, 1907, A., ii, 21.

analytical characters of barium and strontium, 1907, A., ii, 301.

detection of calcium, 1907, A., ii, 652.

separation of silver chloride from silver iodide, 1908, A., ii, 321,

silver iodide, 1908, A., ii, 321. estimation of halogen elements in organic chlorobromo-compounds, 1908, A., ii, 530.

study of the oxidation phenomena produced by iodic and bromic acids, 1908, A., ii, 577.

the solubility of silver iodide in ammonia, 1908, A., ii, 691.

action of heat on silver sulphite and its alkali double sulphites; formation of a dithionate, 1909, A., ii,

constitution of dithionates and sul-

phites, 1910, A., ii, 497. estimation of dithionic acid and di-

thionates, 1910, A., ii, 69. action of heat and light on silver

sulphite and its alkali double sulphites; amount of dithionate obtained, 1910, A., ii, 125.

necessity for exactness in describing reactions; [action of heat on sulphites], 1910, A., ii, 125.

separation and purification of dithionates produced in the decomposition of silver sulphite or its double salts, 1910, A., ii, 290.

estimation of very small amounts of bromine in presence of chlorides and iodides, 1911, A., ii, 532.

fluorescein as an indicator of bromine, 1912, A., ii, 200.

action of alkali sulphites on copper salts, 1912, A., ii, 351.

formation of dithionic acid in the action of alkali sulphites on copper salts, 1912, A., ii, 447.

Baubigny, Henri, the method of decomposition of copper sulphite, 1912, A., ii, 647.

double sulphites of the alkalis and mercury, 1912, A., ii, 1175.

Baubigny, Henri, and Georges Chavanne, new process for estimating halogens in organic compounds, 1903, A., ii. 510.

new method of estimating the halogen elements in organic compounds. II., chlorine and bromine, 1904, A., ii, 203.

Baubigny, Henri, and Paul Rivals, preparation of pure iodine, 1904, A., ii 23

action of boric acid on iodides; its use for the separation of iodine from iodides in the presence of bromides and chlorides, 1904, A., ii, 81.

conditions under which iodine can be separated in the form of cuprous iodide from a mixture of alkali chlorides, bromides, and iodides, 1904, A., ii, 81. separation of iodides from chlorides

separation of iodides from chlorides and bromides in a mixture of alkali halogen salts by conversion into iodic acid, and preparation of pure iodine, 1904, A., ii, 81.

Baud, Émile, aluminium fluoride, 1903, A., ii, 150.

cryolites, 1903, A., ii, 214.

dimethylpyroarsonic acid, 1904, A., i, 801.

compound of aluminium sulphate with sulphuric acid, 1904, A., ii, 37.

some compounds of the chlorides and fluorides of aluminium, 1904, A., ii, 176.

compounds of aluminium chloride with carbonyl chloride, 1905, A., ii, 525.

ortho- and pyro-arsenic acids, 1907, A., ii, 761.

aqueous solutions of pyridine, 1909, A., i, 120.

the system water-pyridine, 1909, A., i, 957.

cryoscopy in concentrated solutions,

1910, A., ii, 268. molecular heat of fusion, 1911, A., ii, 581.

a general law of dissolution, 1912, ii, 233, 331.

concentrated solutions, 1912, A., ii, 1147.

Baud, Émile, and A. Astruc, arsenic and methylarsonic acids, 1907, A., ii, 605.

Baud, Emile, and L. Gay, the system water-liquid ammonia; agreement of the results with the existence of a hydrate of ammonia, 1909, A., ii, 558.

crystallisation temperatures of binary mixtures, 1910, A., ii, 689.

Baud, Émile. See also A. Astruc.

Baudisch, Oskar, action of nitrous acid on p-dimethylamino- and p-diethylamino-benzoic acids, 1907, A., i, 131.

state of combination of sulphur in the keratin molecule, 1908, A., i, 710.

quantitative separations by means of ammonium "cupferron" (nitrosophenylhydroxylamine), 1910, A., ii,

preparation of alkali and ammonium salts of nitrosoarylhydroxylamines,

1911, A., i, 125.

nitrate and nitrite assimilation, 1911, A., ii, 523; 1912, A., ii, 1202.

quantitative separation with "cupferron," 1911, A., ii, 939.

development of colours on fibres by light energy, 1911, A., ii, 952.

nitrate and nitrite assimilation; new hypothesis of the formation of the precursors of proteins in plants, 1912, A., ii, 286.

Baudisch, Oskar, and J. H. Coert, a new observation with Angeli's aldehyde reaction, 1912, A., i, 605.

Baudisch, Oskar, Gilbert Stanley Hibbert, and William Henry Perkin, jun., the reduction of 4-hydroxy-otoluic acid, 1909, T., 1870; P., 249.

Baudisch, Oskar, and Nikolaus Karzeff,

o-nitrosophenol, 1912, A., i, 441.

Baudisch, Oskar, and Erwin Mayer,
photochemical lecture experiments of plant physiological interest, 1912, A., ii. 750.

Baudisch, Oskar, and William Henry Perkin, jun., the reduction of 6hydroxy-o-toluic acid, 1909, T., 1883; P., 249.

Baudisch, Oskar. See also Eugen Bamberger and Ferdinand Breinl.

Baudouin, A., electric osmose in methyl alcohol, 1904, A., ii, 380, 466.

Baudouin, A. See also H. Claude. Baudran, G., action of calcium permanganate on alkaloids, 1905, A., ii, 107.

action of calcium permanganate on tetanic and diphtheritic toxins and on tuberculin, 1905, A., ii, 407.

chemical oxydases, 1905, A., ii, 632. chemical oxydases acting in the presence of hydrogen peroxide, 1906, A., ii, 18.

Baudran, G., Koch's bacilli; medium containing glycerophosphates; maximum proportion of iron and manganese, 1910, A., ii, 531.

Baudrexel, August, a new method of estimating alcohol vapour, 1911, A.,

ii, 1036.

Baudrexel, August. See also Wilhelm Völtz.

Bauer, Edmond, dissociation constants of weak acids, 1906, A., ii, 649.

temperature of the oxyhydrogen flame, 1909, A., ii, 657.

radiation and temperature of the flame of the Bunsen burner, 1909, A., ii, 106, 453.

Bauer, Edouard, reduction of \$\beta\$-diketones, 1912, A., i, 415.

action of sodamide on ab-dibenzoylbutane, 1912, A., i, 777.

Bauer, Edouard. See also Albin Haller and Paul Thiébaud Muller.

Bauer, Friedrich, action of sulphuric acid on butane-ay-diol, 1904, A., i, 279.

the constitution of inosic acid and the pentose of muscle, 1907, A. i, 1098.

Bauer, Franz Wilhelm, the indophenine reaction, 1904, A., i, 519, 914.

Bauer, G. A. See Hermann Apitzsch. Bauer, Hugo, preparation of dialkyl-phthalides, 1904, A., i, 417.

addition of bromine to carbon atoms united by a double linking, 1904, A., i, 841.

action of organo-magnesium compounds on phthalic anhydride, 1905, A., i, 210.

action of organo-magnesium compounds on doubly unsaturated ketones, 1905, A., i, 278.

nature of the carbon double linking, 1905, A., i, 729.

apparatus for determining the melting point of asphalt, 1905, A., ii, 863.

dialkylphthalides. I. 5-amino- and 5-hydroxy-diethylphthalide, 1908, A., i, 274.

a-dinaphthyl ketone, 1909, A., i,

action of organo-magnesium compounds on anhydrides of dicarboxylic acids, 1909, A., i, 585.

action of organo-magnesium compounds on 4-methoxyphthalic anhydride, 1911, A., i, 871.

Bauer, Hugo, and Ernst Breit, action of a 50 per cent. mixture of glacial acetic and sulphuric acids on \$\beta\$-benzyl-\$\beta\$styrylpropiophenone and its derivatives, 1906, A., i, 517.

Bauer, Hugo, and Hedwig Dieterle, the nature of the carbon double linking. III. The bromides of anisylidenecinnamylideneacetone, 1911, A. i, 881.

the pyrazoline transformation of unsaturated hydrazones, 1911, A., i,

921

Bauer, Hugo, and H. Moser, nature of the carbon double linking. II. Addition of bromine, 1907, A., i, 307.

Bauer, Hugo, and Ewald Wols, action of organo-magnesium compounds on homophthalic anhydride, 1911, A., i, 871.

Bauer, Hugo. See also Arthur Hantzsch, Carl Hell, and Heinrich Wieland.

Bauer, Julius, swelling capacity of nerve tissue, 1911, A., ii, 1006.

Bauer, Julius, and Stephan Engel, the chemical and biological differentiation of the three proteins of cow's and human milk, 1911, A., ii, 307.

fibrinogen. I. The biological differentiation of the three proteins of blood plasma, 1912, A., i, 735.

Bauer, Karl. See Julius Schmidt.

Bauer, Koloman, the chemical test for diseases due to nerve degeneration; the formation of alkylamines, 1908, A., ii, 717.

Bauer, Leo. See Robert Gnehm.
Bauer, Otto, hydrates of barium
hydroxide, 1903, A., ii, 426.

barium oxide and its hydrates: the preparation of a new hydrate, 1906, A., ii, 26.

Bauer, Otto. See also Emil Heyn and Friedrich Willy Hinrichsen.

Bauer, Richard, a rapid method for the detection of lactose and galactose in urine, 1907, A., ii, 310.

Bauer, Rudolph, imino-chlorides of oxalic acid, 1907, A., i, 603; 1909,

A., i, 466.
[4-methylisatin], 1909, A., i, 208.
preparation of isatin and its methyl

derivative, 1908, A., i, 695. 4-amino-1-methoxybenzene-2-sulphonic acid, 1909, A., i, 470.

Bauer, Rudolf. See also Berthold Rassow.

Bauer, Wilhelm. See Hans von Pechmann.

Baugé, Georges, a crystalline chromous tartrate, 1904, A., i, 556.

Baum, C. See Ferdinand Henrich.

Baum, Erich, formation of furoyl derivatives by means of pyromucic chloride; synthesis of pyromykuric acid, 1904, A., i, 910; 1905, A., i, 149. Baum, Erich, apparatus for extracting liquids with chloroform, 1905, A., ii, 57.

a fractionating column, 1911, A., ii, 467.

Baum, Erich. See also Franz Feist.
 Baum, Fritz, a new product of pancreatic autodigestion, 1903, A., ii, 225.

Baum, [Karl] Fritz, preparation of derivatives of cyanogen bromide and of cyanamide, 1908, A., i, 252.

organic salts of carbamide and acylcarbamides, 1908, A., i, 252.

Traube's pyrimidine synthesis, 1908, A., i, 292.

a simple method of preparation of pure cyanamide, 1910, A., i, 613.

Baum, Fritz. See also Paul Hoering.
Baumann, Artur. See Heinrich
Wieland.

Baumann, Eugen. See Ernst Dorn.

Baumann, Emil Paul, blood changes after hæmorrhage, 1903, A., ii, 306.

specific gravity of blood, 1904, A., ii, 183.

Baumann, Louis. See Emil Abderhalden.

Baumann, Luc., Georges Thesmar, and Jos. Frossard, formaldehyde sodium hydrogen hyposulphite, 1905, A., i, 260.

Baumann, Morand Leo. See Hermann Finger.

Baumann, Otto. See Berthold Rassow. Baumann, Paul, apparatus for electroanalytical determinations with a mercury cathode, 1911, A., ii, 925.

the applicability of the mercury cathode, especially in the electroanalytical separation of metals, 1912, A., ii, 489.

Baume, Georges, the gases sulphur dioxide, dimethyl ether, and methyl chloride, 1908, A., ii, 372.

freezing points of gaseous mixtures at very low temperatures, 1909, A., ii, 545.

gaseous mixtures; freezing-point curves of gaseous systems, 1911, A., ii, 581.

Baume, Georges, and Néoptolème Georgitses, fusibility curves of certain binary systems volatile at very low temperatures, 1912, A., ii, 329.

Baume, Georges, and Albert F. O. Germann, fusibility curves of gaseous mixtures: oxonium systems formed by acetylene, ethylene, nitric oxide, and methyl ether, 1911, A., i, 830.

Baume, Georges, and Georges Pamfil, fusibility curves of gaseous mixtures; compounds of hydrogen chloride and of sulphur dioxide with methyl alcohol, 1911, A., i, 414.

fusibility curves of volatile systems: mechanism of the formation of

esters, 1912, A., ii, 1039.

Baume, Georges, and François Louis Perrot, absolute density of hydrogen sulphide, 1908, A., ii, 940.

density of methane; atomic weight of

carbon, 1909, A., i, 77.

freezing-point curves of gaseous mixtures: compounds of methyl ether and methyl alcohol with ammonia, 1910, A., ii, 825.

fusibility curves of gaseous mixtures: systems formed by carbon dioxide and hydrogen sulphide with methyl alcohol and methyl ether, 1911, A., ii, 696.

atomic weight of chlorine, 1912, A., ii,

Baume, Georges, and Demetrius E. Tsakalotos, variation of vapour tension as a function of the temperature and the determination of ebullioscopic constants, 1907, A., ii, 227.

Baume, Georges. See also Ettore

Cardoso.

Baumert, Georg, polarimetric estimation of starch in bananas, 1912, A., ii,

Baumert, Georg, and Paul Holdefleiss, estimation of manganese in drinking

water, 1904, A., ii, 782.

Baumert, R., azo-colouring matters of the pyridine series, 1906, A., i, 909. simplification of Dennstedt's method of combustion, 1907, A., ii, 909.

Baumgarten, A., and Ernst Peter Pick, behaviour of nutrose given subcutaneously, and its relation to the excretion of kynurenic acid and allantoin, 1907, A., ii, 42.

Baumgarten, A., and Hugo Popper, acetonuria in dogs, 1907, A., ii, 41.

Baumgarth, Robert. See Theodor

Posner.

Baumhauer, Heinrich [Adolf], regular intergrowth of rutile and hæmatite, 1906, A., ii, 456; 1907, A., ii, 362.

double platinocyanides of calcium, strontium, and barium, etc., 1907, A., i, 689.

double refraction and dispersion of some double platinocyanides, 1907, A., ii, 917.

crystallo-optical investigations, 1909,

A., ii, 841.

Baumhauer, Heinrich [Adolf], crystallographic-optical investigations platinocyanides [double picrates], 1911, A., i, 431.

arsenoferrite, a new member of the iron-pyrites group, 1912, A., ii, 949.

Baumhauer, Heinrich, and Charles Otto Trechmann, barytes from the Binnenthal, Switzerland, 1908, A., ii, 508.

Baumhauer, Heinrich. See also Emil Fromm and Edgar Wedekind.

Baumstark, Robert, estimation of the products of putrefaction in urine and fæces by means of Ehrlich's aldehyde reaction, 1903, A., ii, 619.

Baumstark, Robert and Otto Cohnheim, physiology of movements and digestion in the intestine, 1910, A.,

ii, 518.

digestion of connective tissue, 1910, A., ii, 522.

Baumstark, Robert, and Leo Mohr, metabolism in inanition. II. Intestinal putrefaction, 1907, A., ii, 282.

Baur, Emil, conditions of formation of orthoclase and albite, 1903, A., ii,

autoxidation of cerous salts, 1903. A.. ii, 729.

colour-sensitive silver chloride, 1904, A., ii, 4.

distillation of hydrofluosilicic acid. 1904, A., ii, 119.

absorption of oxygen by alkaline cerous solutions, 1904, A., ii, 339. systems containing silicic and hydro-

fluoric acids, 1904, A., ii, 608. relation between electrolytic dissociation and dielectric constant, 1906,

A., ii, 144, 827. basis of stoicheiometry, 1906, A., ii,

[deduction of the stoicheiometric laws], 1908, A., ii, 573.

method of carbon dioxide assimilation. 1908, A., ii, 790.

estimation of sugar in meat, 1909, A., ii, 354.

[photochemistry], 1910, A., ii, 381. fuel batteries, 1910, A., ii, 574.

periodic system of the elements, 1911, A., ii, 480.

[nature of the photochlorides of silver and their potential in light], 1911, A., ii, 681.

Baur, Emil, and Friedrich Becke, hydrothermal silicates, 1911, A., ii, 991.

Baur, Emil, and Arthur Glaessner, equilibrium between iron oxides and carbon monoxide and carbon dioxide, 1903, A., ii, 423.

Baur, Emil, and Arthur Glaessner, electromotive behaviour of the oxides of cerium, 1903, A., ii, 586.

vapour density of hydrofluosilicic

acid, 1904, A., ii, 119.

Baur, Emil, and Eduard Polenske, separation of starch and glycogen, 1907, A., ii, 56.

Baur, Emil, and Gerardus Leonardus Voerman, iron and chromium nitrides.

1905, A., ii, 715.

Baur, Emil. See also Wilhelm Kerp and Wilhelm Muthmann.

Bauriedel, Friedrich. See Alexander Gutbier.

Baxandall, Frank E. See (Sir) Joseph Norman Lockyer.

Baxter, Gregory Paul, estimation of phosphoric acid by means of ammonium phosphomolybdate, 1903, A., ii, 180.

atomic weight of iron, II. Analysis of ferrous bromide, 1904, A., ii,

specific gravities of lithium chloride, bromide, and iodide, 1904, A., ii,

revision of the atomic weight of iodine, 1905, A., ii, 81, 579.

atomic weight of bromine, 1906, A., ii. 740.

solubility of potassium permanganate; a correction, 1907, A., ii, 265.

modified spectroscopic apparatus, 1908,

A., ii, 337.

apparatus for the centrifugal draining of small quantities of crystals, 1908,

A., ii, 369.

revision of the atomic weights of silver and iodine. II. Ratio of silver to iodine, 1911, A., ii, 112.

changes in volume on solution in water of the halogen salts of the alkalis, 1911, A., ii, 589.

Baxter, Gregory Paul, Arthur Clarence Boylston, and Robert Arnold Hubbard, solubility of potassium permanganate,

1906, A., ii, 856.

Baxter, Gregory Paul, Arthur Clarence Boylston, Edward Mueller, Newton Henry Black, and Philip Burwell Goode, refractive power of the halogen salts of lithium, sodium, and potassium in aqueous solution, 1911, A., ii,

Baxter, Gregory Paul, and Francis Newton Brink, specific gravities of the iodides of sodium, potassium, rubidium, cæsium, calcium, strontium, and barium, 1908, A., ii, 377.

Baxter, Gregory Paul, Laurie Lorne Burgess, and Herbert Wilkens Daudt. refractive index of water, 1911, A., ii, 557.

Baxter, Gregory Paul, and Harold Canning Chapin, the atomic weight of neodymium. I. Analysis of neodymium chloride, 1911, A., ii, 285.

Baxter, Gregory Paul, Victor Cobb, and Thorbergur Thorvaldson, a revision of the atomic weight of iron. III., 1911,

A., ii, 287.

Baxter, Gregory Paul, and Fletcher Barker Coffin, atomic weight of cobalt. IV. Analysis of cobaltous chloride, 1906, A., ii, 858.

atomic weight of arsenic; analysis of silver arsenate, 1909, A., ii,

Baxter, Gregory Paul, and Herbert Wilkens Daudt, the carrying down of soluble oxalates by oxalates of the rare earths, 1908, A., i, 312.

Baxter, Gregory Paul, and Harry Louis Frevert, titration of ferrous iron with permanganate in presence of hydrochloric acid, 1905, A., ii, 653.

Baxter, Gregory Paul, and Roger Castle Griffin, estimation of phosphoric acid by means of ammonium phosphomolybdate. II., 1905, A., ii, 857.

Baxter, Gregory Paul, and Charles Hendee Hickey, pure nitrogen from nitrous and nitric oxides and ammonia,

1905, A., ii, 314.

Baxter, Gregory Paul, Charles Hendee Hickey, and Walter Chapin Holmes, vapour pressure of iodine, 1907, A., ii, 253.

Baxter, Gregory Paul, and Murray Arnold Hines, specific gravities of cadmium chloride and cadmium bromide, 1904, A., ii, 257.

revision of the atomic weight of cadmium; analysis of cadmium chlor-

ide, 1905, A., ii, 321.

revision of the atomic weight of man-

ganese, 1907, A., ii, 28.

Baxter, Gregory Paul, Murray Arnold
Hines, and Harry Louis Frevert, revision of the atomic weight of cadmium. II, 1906, A., ii, 541.

Baxter, Gregory Paul, Murray Arnold Hines, and Edward Mueller, revision of the atomic weight of chromium. I. Analysis of silver chromate, 1909, A., ii, 487.

Baxter, Gregory Paul, and Robert Arnold Hubbard, insolubility of ferric hydroxide in ammoniacal solutions, 1906, A., ii, 902.

Baxter, Gregory Paul, and Richard Henry Jesse, jun., revision of the atomic weight of chromium. II. Analysis of silver dichromate, 1909, A., ii, 488.

Baxter, Gregory Paul, and Grinnell Jones, atomic weight of phosphorus. I. Analysis of silver phosphate, 1910,

A., ii, 288.

Baxter, Gregory Paul, and Arthur Becket Lamb, specific gravity of zinc chloride,

1904, A., ii, 257.

Baxter, Gregory Paul, Charles James Moore, and Arthur Clarence Boylston, revision of the atomic weight of phosphorus. II. Analysis of phosphorus tribromide, 1912, A., ii, 347.

Baxter, Gregory Paul, and Thorbergur Thorvaldson, a revision of the atomic weight of iron. IV. The atomic weight of meteoric iron, 1911, A., ii, 288.

Baxter, Gregory Paul, and George Stephen Tilley, revision of the atomic weights of iodine and silver, 1909, A., ii, 225.

Baxter, Gregory Paul, and R. D. Warren, the efficiency of calcium bromide, zinc bromide, and zinc chloride as drying agents, 1911, A., ii, 268.

Baxter, Gregory Paul, and John Hunt Wilson, atomic weight of lead. I. Analysis of lead chloride, 1908, A., ii, 281.

Baxter, Gregory Paul, and Truman S.
Woodward, the ultra-violet absorption
spectrum of aqueous solutions of neodymium chloride, 1911, A., ii, 351.

Baxter, Gregory Paul, and Joaquin Enrique Zanetti, estimation of oxalic acid by permanganate in presence of hydrochloric acid, 1905, A., ii, 490.

Baxter, Gregory Paul. See also Theodore William Richards.

Bay, Isidore, action of diphenylamine on nitric acid, 1905, A., i, 340.

estimation of carbon disulphide in benzene, 1908, A., ii, 226.

new process for the estimation of sulphur in organic substances, 1908, A., ii, 319.

a new method of estimating phosphorus in organic compounds, 1908, A., ii, 531.

Bay, Isidore, and Just Alix, evolution of carbon in fuels, 1905, A., ii, 246.

Bay, Isidore. See also Just Alix and Léo Vignon.

Bayer, Alexander, estimation of ammonia, 1903, A., ii, 688.

separation and estimation of pyridine and ammonia, 1912, A., ii, 1009.

estimation and separation of copper by means of hydroxylamine hydrochloride, 1912, A., ii, 1212. Bayer & Co., Friedrich. See Farbenfabriken vorm. Friedrich Bayer & Co. Bayer, Gustav, the circulation of the

bile, 1908, A., ii, 969.

bile hæmolysis. III. The reasons of the increased rate of bile hæmolysis in concentrated salt solutions, 1908, A., ii, 969.

methods of rendering adrenaline and catechol reactions more delicate,

1909. A., ii, 839.

Bayer, Heinrich, plasteinogen, 1904, A., ü. 187.

Bayer, Joseph. See Ludwig Kalb. Bayer, Richard. See Walter König.

Bayeux, Raoul, experiments made on Mont Blanc, in 1909, on variations in glycemia and hæmatic glycolysis at a very high altitude, 1910, A., ii, 875.

Bayliss, William Maddock, the kinetics of tryptic action, 1905, A., ii,

201.

adsorption phenomena, with special reference to the action of electrolytes and the ash-constituents of proteins, 1906, A., ii, 344.

causes of rise in electrical conductivity under the influence of trypsin, 1908,

A., ii, 118.

the permeability of the frog's skin, 1908, A., ii, 712.

adsorption and its connexion with enzyme action, 1909, A., ii, 27.

properties of colloidal solutions. I. The osmotic pressure of Congo-red and of some other dyes, 1909, A., ii, 648.

"anomalous" adsorption, 1911, A., ii,

properties of colloidal systems. II. Adsorption as preliminary to chemical reaction, 1911, A., ii, 866.

properties of colloidal systems. III. Osmotic pressure of electrolyticallydissociated colloids, 1911, A., ii, 867.

synthetic action of enzymes, 1912, A., i, 328.

the nature of enzyme action. II.

The synthetic properties of antiemulsin, 1912, A., i, 328.

Bayliss, William Maddock, and Ernest Henry Starling, pancreatic secretin, 1903, A., ii, 316.

proteolytic activities of pancreatic juice, 1903, A., ii, 668.

relation of enterokinase to trypsin, 1905, A., ii, 273.

Bayliss, William Maddock. See also Robert Henry Aders Plimmer.

Bayne-Jones, Stanhope, the presence of prothrombin and thromboplastin in the blood platelets, 1912, A., ii, 459.

Bayo, Enrique. See Rafael Cerero. Bazett, H. C., refractory period of the frog's sartorius, 1908, A., ii, 308.

Bazlen, Max, hyposulphurous acid, 1905, A., ii, 240.

benzaldehydesulphoxylates, 1910, A.,

Bazlen, Max, and August Bernthsen, sodium hyposulphite, 1910, A., ii, 291.

Beadle, Clayton, and Henry Potter Stevens, the so-called "insoluble" constituent of caoutchouc and its influence on the quality, 1912, A., i., 789.

influence of temperature on hydration of and absorption of alkali by regenerated cellulose, 1912, A., i, 947.

Beal, George Denton. See Marston Taylor

Beam, William, estimation of humus, especially in heavy clay soils, 1912, A., ii, 820.

Beans, Hal Truman. See Marston Taylor Bogert and Floyd Jay Metzger.

Bearce, H. W. See N. S. Osborne.

Béard, Noël, estimation of vanadium, 1905, A., ii, 288.

Beard, Stanley Hoskings. See John Joseph Sudborough.

Bearder, Ernest Arthur. See Arthur George Green.

Beardsley, Alling Prudden. See Henry Lord Wheeler.

Bearn, A. R., and Wilhelm Cramer, zymoids, 1907, A., i, 576.

Bearn, A. R. See also Wilhelm Cramer. Beattie, Frederick S., abnormal biochemical products of the rue anemone, 1908, A., ii, 1065.

Beattie, James Martin, hæmochromatosis in diabetes, 1903, A., ii, 675.

Diplococcus rheumaticus, 1904, A., ii, 363.

Beattie, James Martin, and A. G. Yates, sugar tests and pathogenicity in the differentiation of streptococci, 1911, A., ii, 1019, 1122.

Beatty, R. T., the production of cathode particles by homogeneous Röntgen radiations, 1910, A., ii, 674.

the ionisation of heavy gases by Xrays, 1911, A., ii, 245.

Beatty, Wallace Appleton, action of carbon monoxide on sodium alkyloxides alone and in the presence of salts of fatty acids, 1903, A., i, 726.

Beatty, Wallace Appleton. See also Phæbus A. Levene.

Beauchamp, P. de. See Yves Delage. Beaudoin, G. See A. Jaboin.

Beaufour, Henri, some ethers of cinnamyl alcohol, 1912, A., i, 621.

Beaujeu, Jaubert de. See Chaspoul.

Beaulard, F., the specific inductive capacity of water and benzene, 1906, A., ii, 3.

absorption of electrical waves by alcohols, 1910, A., ii, 680.

Beaume, I., pinacone from methyl isopropyl ketone, 1903, A., i, 727.

Bebeschin, K., extractive material of ox kidneys, 1911, A., ii, 748.

Beburischwili, (Mme.) T. See Julius Salkind.

Becaia, M. See Petr. G. Melikoff. Bécamel, G. See Charles Astre. Beccard, Erich. See Otto Diels.

Beccari, Lodovico, cholic acid, 1904, A., i, 12.

reaction of ethyl a-cyanopropionate with benzaldehyde, 1904, A., i, 62.

Bechamp, derivatives of "thioindigo, 1909, A., i, 600.

Becherescu, Petre. See Franz Sachs. Bechhold, [Jacob] Heinrich, a condensation product of indoxylic acid and

nitrosoantipyrine, 1904, A., i, 200. flocculation of colloids and bacteria agglutination, 1904, A., ii, 650.

theory of colloids, 1905, A., ii, 511. formation of structures in jellies, 1905,

A., ii, 513.

peculiar behaviour of hexabromodiresorcinol in alkaline solution, 1906, A., i, 173.

inhibition of Nylander's sugar reaction by the presence of mercury and chloroform in the urine, 1906, A., ii,

"internal antisepsis", 1907, A., ii, 641. investigation of colloids by the filtration method, 1908, A., ii, 24.

permeability of ultra-filters, 1908, A., ii, 823.

phagocytosis, 1909, A., ii, 160.

semi-specific chemical disinfectants, 1910, A., ii, 435.

pulsating ultrafiltration, 1911, A., ii, 385.

Bechhold, Heinrich, and Paul Ehrlich, relationship between chemical constitution and disinfecting properties, 1906, A., ii, 383.

Bechhold, Heinrich, and J. Ziegler, influence of other substances on the rate of diffusion in jellies, 1906, A, ii, 656.

BECK

Bechhold, Heinrich, and J. Ziegler, precipitation membranes in jellies and the constitution of gelatin jelly,

1906, A., ii, 738.

gout; solubility of uric acid and sodium urate in serum; influence of inorganic electrolytes on the separation of uric acid and urates from serum : influence of radium emanation, 1909, A., ii, 916.

action of membranes, 1910, A., ii,

191.

gout, 1910, A., ii, 329.

Becht, Frank C. See Anton Julius Carlson, J. R. Greer, and Arno B. Luckhardt.

Bechtereff, P., galvanic elements with carbon anodes, 1911, A., ii, 1054;

1912, A., ii, 226.

Beck, Adolf, action of radium rays on the peripheral nerves, 1906, A., ii, 40.

Beck, Erich, preparation of alloys of metals which form nitrides, 1908, A., ii, 837

Beck, Erich. See also Wilhelm Bor-

chers.

Beck, G., action of atropine and other alkaloids on the spontaneous movements of plain muscle, 1906, A., ii,

Beck, Heinrich. See Martin Freund

and Wilhelm Muthmann.

Beck, Karl, relative viscosity of liquids, 1904, A., ii, 646.

estimation of sulphuric acid in the air of accumulator rooms, 1909, A., ii, 344.

Beck, Karl, and Kurt Ebbinghaus, transition temperatures and a method for observing them, 1907, A., ii, 8. determination of viscosity, 1907, A., ii, 232

Beck, Karl, and Paul Hase, isomerism of aldoximes, 1907, A., i, 825.

Beck, Karl, and Philippe Stegmüller, solubility of lead sulphate and lead chromate, and of mixtures and oil colours containing the two salts in dilute hydrochloric acid; the equilibrium between chromate and dichromate in solution, 1910, A., ii, 1067.

Beck, Karl, Wilhelm Treitschke, and Kurt Ebbinghaus, relative viscosity,

1907, A., ii, 232.

Beck, Karl. See also Ernst Beckmann. Beck, Ludwig. See Walter Dieckmann,

Beck, Paul, analysis of sodium nitrate (Chili saltpetre), 1905, A., ii, 899. evaluation of [commercial] red lead, 1908, A., ii, 777.

Beck, Paul N. See Pierre Weiss.

Beck, [Carl] Richard, [amphibole-anthophyllite from Sweden], 1903, A., ii,

gases enclosed in tektites, 1911, A., ii,

Beck, Richard, and Theodor Döring, a remarkable iron ore from Bohemia, 1908, A., ii, 397.

Beck, Theodor. See Fritz Fichter.

Beck, Thomas Constantine. See William Jackson Pope.

Beck, Wilhelm. See Wilhelm Schneider. Becke, Friedrich [Johann Carl]. Emil Baur.

Beckel, August, hydroxylupanine, 1910, A., i, 694.

d-lupanine, 1911, A., i, 743.

Beckenkamp, Jakob, an occurrence of native iron, 1904, A., ii, 666.

dioxides of elements of the fourth group of the periodic system, 1907, A., ii, 34.

chalcopyrite crystals from Japan, 1907,

A., ii, 101, 362.

monoxides and monosulphides of the elements of the second group of the periodic system, 1908, A., ii, 280.

Becker, Arno. See Berthold Rassow. Becker, Arthur, diffusion of alkali salt vapours in flames and the measurement of the velocity of flames, 1912, A., ii, 1043.

Becker, August, preparation of argon by means of electric sparks, 1903, A., ii, 653.

increase of conductivity of dielectrics caused by the action of radium rays, 1906, A., ii, 322.

radioactivity of ashes and lava from the recent eruption of Vesuvius, 1906, A., ii, 515.

internal friction and density of the Bunsen flame, 1908, A., ii, 153.

the carriers of electricity in gases, 1911, A., ii, 957.

Becker, Bernhard. See Fritz Fichter. Becker, C. Th., and Reginald Oliver Herzog, the sense of taste. I., 1907, A., ii, 896.

Becker, Felix, condensation of vapours, 1911, A., ii, 1063.

Becker, Franz. See Martin Freund.

Becker, Georg, estimation of parachymosis and time laws of human rennin ferment, 1905, A., ii, 732.

Becker, Gustav, aluminous and titaniferous augites, 1904, A., ii, 51.

Becker, Georg Albert. See Walter König. Becker, George Ferdinand, and Arthur Louis Day, the linear force of growing crystals, 1905, A., ii, 807.

Becker, Hans, the decarburisation of iron by gaseous oxidising agents, 1910, A., ii, 298.

See also Alfred Becker. Hans. Coehn.

Becker, Kurt. See Karl-Elbs.

Becker, Paul. See Hermann Decker.

Becker, R., Hübener's caoutchouc tetrabromide; the estimation of mineral rubber and similar products in rubber, 1911, A., ii, 545, 1036.

Hübener's method of estimating caoutchouc as its bromide, 1912, A.,

ii, 1102.

Becker, Victor. See Rudolf Nietzki.

Becker, Walther, and Julius Meyer, action of hydrogen selenide on nitriles, 1904, A., i, 698.

atomic weight of silicon, 1905, A., ii,

246.

Becker, Walther. See also Heinrich

Lührig and Lothar Wöhler. Becker, Wilhelm, detection of mercury

in urine, 1910, A., ii, 75. zinc formaldehydesulphoxylate, 1910, A., i, 298.

Beckerhoff, Heinrich. See Richard Anschütz.

Beckmann, Ernst [Otto], a hand-spectroscope for chemists, 1903, A., ii, 521.

determination of molecular weights. VII., 1903, A., ii, 533.

a third modification of aldoximes,

1904, A., i, 897.

freezing point and boiling point experiments in connexion with molecular weight determinations, 1904, A., ii, 235.

modifications of the thermometer used in the determination of molecular weights and for the measurement of small differences of temperature, 1905, A., ii, 300.

determination of molecular weights in boiling concentrated sulphuric acid,

1905, A., ii, 676.

vapour current method for the determination of molecular weights at high temperatures, 1905, A., ii,

lecture experiment for the demonstration of solid solutions, 1905, A., ii,

estimation of higher alcohols in spirits, 1905, A., ii, 768.

molecular weights of certain inorganic substances, 1906, A., 11, 845.

lamps for spectra. V. New and simple spectrum lamp for analytical work, 1907, A., ii, 209.

Beckmann, Ernst, formulæ of mercurous chloride, bromide, and iodide, of cuprous chloride, and of the chlorides of thallium and the alkali metals, 1907, A., ii, 739.

electrical heating in ebullioscopic determinations and in fractional distillation, 1908, A., ii, 1014.

attempts to resolve racemic camphoric acid and isoborneol into active components, 1909, A., i, 169.

optically active menthones, 1909, A.,

i, 245.

a porcelain vacuum reservoir for liquid air, 1909, A., ii, 392.

ebullioscopic and cryoscopic measurement of molecular weights in iodine, 1909 A., ii, 642.

metronome interrupters for electromagnetic stirrers in freezing-point apparatus, 1909, A., ii, 642.

sodium lamps for polarisation measure-

ments, 1912, A., ii, 1049.

sulphur trioxide, sulphuryl chloride, sulphuryl oxychloride, and chromyl chloride as ebullioscopic solvents, 1912, A., ii, 1136.

Beckmann, Ernst, Karl Beck, and Hans Schlegel, uses of metallic calcium,

1905, A., i, 335.

Beckmann, Ernst, Eugen Bernhard, Drusu Eremie-Popa, and Werner Gabel, ebullioscopic behaviour of aliphatic acids with abnormal vapour densities, 1907, A., ii, 71.

Beckmann, Ernst, and Peter Danckwortt, employment of cryoscopy in the analysis of spices and other drugs, 1907, A.,

ii, 508.

Beckmann, Ernst, and R. Dütschke, behaviour of N-alkylaldoximes towards benzenesulphonyl chloride, phthalyl chloride, and picryl chloride, 1904, A., i, 1023.

Beckmann, Ernst, M. Ebert, Hans Netscher, and E. Schulz, behaviour of N-alkylaldoximes towards iodine and the condition of iodine in solutions, 1909, A., i, 652.

Beckmann, Ernst, and Werner Gabel, molecular weight of indigotin, 1906,

A., i, 900.

molecular weights of inorganic compounds in boiling quinoline, 1907,

A., ii, 24. Beckmann, Ernst, Werner Gabel, Franz Kirchhoff, Otto Liesche, Georg Lockemann, and Drusu Eremie-Popa, mole-

cular weight of iodine and the ebullioscopic method in the case of comparatively volatile substances, 1907, A., ii, 340.

Beckmann, Ernst, and Rud. Hanslian, compounds of selenium with chlorine and bromine, 1910, A., ii, 287.

and bromine, 1910, A., ii, 287.

Beckmann, Ernst, and Kurt Haring, ebullioscopic determinations with heating by alternating current, 1912, A., ii, 431.

Beckmann, Ernst, Kurt Haring, Rud.
Hanslian, and Julius von Bosse, acetic
acid as an ebullioscopic solvent, 1912,
A., ii, 331.

Beckmann, Ernst, and Fritz Junker, ebullioscopic determinations in phosgene, ethyl chloride, and sulphur dioxide, 1907, A., ii, 927.

Beckmann, Ernst, Fritz Junker, and Theodor Klopfer, compounds of sulphur and chlorine, 1909, A., ii,

137.

Beckmann, Ernst, Otto Liesche, and Theodor Klopfer, sources of error in the ebullioscopic method and attempts to remove them, 1908, A., ii, 663.

Beckmann, Ernst, and Georg Lockemann, determination of molecular weight and conductivity in nitrobenzene, 1907, A., ii, 845.

Beckmann, Ernst, and Hans Netscher, oximino-compounds, 1909, A., i, 390.

Beckmann, Ernst, and Johannes Scheiber, N-alkylketoximes, 1907, A., i, 829.

Beckmann, Ernst, and Percy Waentig, photometric measurements with the coloured Bunsen flame, 1910, A., ii, 1.

Beckmann, Ernst, Percy Waentig, and M. Niescher, cryoscopic determinations at low temperatures (-40° to -117°), 1910, A., ii, 581.

Beckmann, Ernst, and Walter Weber, improvements in the ebullioscopic method, 1912, A., ii, 234.

ebullioscopic determinations at low temperatures from -35.7° to -82.9°,

1912, A., ii, 431.

Beckmann, Ernst, Walter Weber, and Julius von Bosse, pressure regulators for ebullioscopic determinations, 1912, A., ii, 534.

Beckmann, Ernst. See also Johannes Scheiber.

Beckmann, H., estimation of antimony

in hard lead, 1907, A., ii, 655.

Beckstroem, Rudolf. See Hermann
Thoms.

Beckurts, Heinrich [August], action of bromine on strychnine, 1905, A., i, 918.

estimation of the alkaloids in the leaves and stalks of *Datura arborea*, 1906, A., ii, 909.

Beckurts, Heinrich, and Georg Frerichs, action of high temperatures on alkaloids when these are fused with carbamide. I. Narcotine and hydrastine, 1903, A., i, 717.

alkaloids of angostura bark, 1904, A.,

i, 84.

Beckurts, Heinrich, Georg Frerichs, Carl Beyer, and Ludwig Hartwig, thio-fatty anilides, 1906, A., i, 650.

Beckurts, Heinrich, Georg Frerichs, and A. Lachwitz, angostura bases, 1906,

A., i, 34.

Becquerel, [Antoine] Henri, magnetic deviation and nature of certain radiations emitted by radium and polonium, 1903, A., ii, 256.

the radiation from polonium and from

radium, 1903, A., ii, 257.

radiation from polonium and the secondary radiation which it pro-

duces, 1903, A., ii, 402.

residual conductivity and ionisation of solid paraffin under the influence of radium radiation, 1903, A., ii, 465.

radium radiation, 1903, A., ii, 465. some properties of the a-rays of radium, 1903, A., ii, 523; 1905, A., ii, 665.

the scintillating phosphorescence which certain substances present under the action of the radium rays, 1904, A., ii, 6.

spontaneous emission of light by certain uranium salts, 1904, A., ii, 221.

radioactivation by means of uranium, 1905, A., ii, 567.

properties of the a-rays emitted by radium and by substances rendered active by radium emanation, 1906, A., ii, 212.

phosphorescence of uranyl salts in liquid air, 1907, A., ii, 213.

phosphorescence, 1907, A., ii, 322.

spectra of non-dissociated compounds, 1908, A., ii, 139.

some phosphorescent spectra, 1908, A., ii, 243.

memorial lecture on (Lodge), 1912, T., 2005; P., 247.

Becquerel, Henri, Jean Becquerel, and Heike Kamerlingh Onnes, phosphorescence at very low temperatures, 1909, A., ii, 630.

phosphorescence of uranyl salts at very low temperatures, 1910, A., ii, 371.

Becquerel, Jean, action of anæsthetics on the sources of n-rays, 1904, A., ii, 602.

simultaneous emission of n- and n_1 -rays, 1904, A., ii, 602.

anæsthesia of metals, 1904, A., ii, 602. contribution to the study of n- and n₁-rays, 1904, A. ii, 602.

- Becquerel, Jean, action of a magnetic field on n- and n_1 -rays, 1904, A., ii, 602.
 - comparable effects of β -rays and n-rays, or of α -rays and n_T-rays, on a phosphorescent surface, 1904, A., ii, 602.
 - the nature of n- and n₁-rays, and the radioactivity of substances which emit these radiations, 1904, A., ii, 641.
 - the refraction of n- and n₁-rays, 1904, A., ii, 642.
 - variations of the absorption bands of a crystal in a magnetic field, 1906, A., ii, 317.
 - the correlation between the variations of the absorption bands of a crystal in a magnetic field, and the magnetic rotatory polarisation, 1906, A., ii, 421.
 - variations of the absorption bands of crystals of tysonite in a magnetic field, 1907, A., ii, 147.
 - use of very low temperatures for spectrum analysis, and for the study of the magneto-optical phenomena of solutions, 1908, A., ii, 3.
 - the variations of the absorption bands of didymium and erbium salts in a magnetic field, 1908, A., ii, 78.
 - influence of temperature changes on the absorption in solid substances, 1908, A., ii, 78.
 - a phenomenon attributable to positive electrons in the spark spectra of yttrium, 1908, A., ii, 334.
 - dispersion of magnetic rotatory power in the neighbourhood of bands of absorption in the case of rare earths, 1908, A., ii, 647.
 - positive electrons, 1908, A., ii, 751. rotatory power at low temperatures and the relations between the absorption of light and rotatory polarisation in crystals of cinnabar, 1909,
 - A., ii, 107.
 certain optical and magneto-optical
 properties of crystals at low tem-
 - perature, 1909, A., ii, 200. the influence of cathodic on canal rays,
 - 1909, A., ii, 288. hypothesis of positive electrons, 1909, A., ii, 367.
 - new type of magnetic decomposition of absorption bands of crystals; simultaneous production of systems circularly polarised in opposite senses, 1909, A., ii, 454.
 - duration of phosphorescence of uranyl salts, 1911, A., ii, 238.

- Becquerel, Jean, and Heike Kamerlingh Onnes, absorption spectra of crystals of the rare earths and the changes which they undergo in a magnetic field at the temperatures of liquefaction and solidification of hydrogen, 1908, A., ii, 338.
- Becquerel, Jean. See also Henri Becquerel.
- Becquerel, Paul, complete extraction of water and gas from seeds, 1904, A., ii, 677.
 - action of ethyl ether and chloroform on dry seeds, 1905, A., ii, 474.
 - action of liquid air on the life of seeds, 1905, A., ii, 604.
 - action of carbon dioxide on the latent life of some dried grains, 1906, A., ii, 385.
- Becquet, Marcel, the nature of the compound of iodine and tannin, 1912, A., i. 791.
- Beddard, Arthur Philip, Marcus Seymour Pembrey, and Edmund Ivens Spriggs, carbon dioxide in venous blood and alveolar air in cases of diabetes, 1904, A., ii, 622; 1908, A., ii, 718.
- Beddard, Arthur Philip. See also Marcus Seymour Pembrey and Francis Arthur Bainbridge.
- Bedeau, variation of the electromotive force of voltaic cells with the temperature, 1912, A., ii, 13.
- Bedford, Charles Henry, and Robert Leonard Jenks, estimation of higher alcohols in spirits; the ester iodine method, 1907, A., ii, 405.
- method, 1907, A., ii, 405. Bedford, Fred. See Ernst Erdmann.
- Bedford, Matthew Hume, columbates, 1905, A., ii, 831.
 Bedford, T. G., depression of freezing
- Bedford, T. G., depression of freezing point in very dilute aqueous solutions, 1910, A., ii, 389.
- Bedson, Peter Phillips, paraffin wax from the Ladysmith Pit, Whitehaven Collieries, 1908, A., ii, 115.
 - proximate constituents of coal, 1908, A., ii, 302.
- Bee, James. See Thomas Hill Easter-field.
- Beebe, Silas Palmer, chemistry of malignant growths. I., 1904, A., ii, 429.
 - effect of alcohol on the excretion of uric acid in man, 1904, A., ii, 673.
 - inorganic constituents of tumours, 1904, A., ii, 755.
 - chemistry of malignant growths. III. Nucleo-histon as a constituent of tumours, 1905, A., ii, 408.

Beebe, Silas Palmer, action of parathyroid extract, 1907, A., ii, 641. protection to acetonitrile poisoning by

thyroid feeding, 1909, A., ii, 509.

Beebe, Silas Palmer, and Bertram Henry Buxton, production of fat from protein by Bacillus pyocyaneus, 1905, A., ii, 108.

new apparatus, 1905, A., ii, 514.

Beebe, Silas Palmer, and Philip Anderson Shaffer, chemistry of malignant growths. IV. The pentose-content of tumours, 1905, A., ii, 742.

Beebe, Silas Palmer. See also Eleanor van Alstyne, Russell Henry Chittenden, Elizabeth Cooke, and Louis Warner

Riggs

Beeck-Vollenhoven, Hendrik van. Otto Wallach.

Beekman, Johannes Willem. See Arnold

Frederik Holleman. Beer, Edwin, lime deposits in the kidneys,

1904, A., ii, 65.

Beer, Hans. See Emil Knoevenagel. Beer, Karl. See Robert Behrend. Beer, Robert. See Hans Meyer.

Beers, William Herbert. See Percy

Goldthwait Stiles.

Beger, Carl, solubility in gastric juice of the nitrogenous constituents of sheep's fæces, 1904, A., ii, 186.

sinacid butyrometer and its use for sheep's, goats', and cows' milk, 1906,

A., ii, 131.

Gerber's salt-method [for the estimation of fat in milk], 1906, A., ii,

effect of different fats, both emulsified and not emulsified, on the production of milk, 1906, A., ii, 563.

laboratory appliances for analytical

practice, 1910, A., ii, 747. Beger, Carl, Gustav Fingerling, and August Morgen, estimation of the nitrogen in creatine by Kjeldahl's method, 1903, A., ii, 753.

Beger, Carl. See also August Morgen. Beger, Max, the luminescence of ozone,

1910, A., ii, 287.

See Latham Clarke. Beggs, Sydney A. Béhal, Auguste, an isomeride of borneol, B-campholenol, and some derivatives, 1904, A., i, 329.

campholene derivatives, 1904, A., i,

514. preparation of esters of the cyclic series. 1909, A., i, 145.

preparation of aldehydes and acid anhydrides, 1909, A., i, 164.

preparation of anhydrides of cyclic and aliphatic acids, 1909, A., i, 302.

Béhal, Auguste, a new tertiary menthol: conversion of pinene into menthene, 1910, A., i, 572.

proposals for a nomenclature of heterocyclic substances and its extension to cyclic substances in general and to acyclic compounds, 1912, A., i, 342.

Béhal, Auguste, and A. Detœuf, a new derivative of carbamide, chlorocarbamide, 1911, A., i, 957.

action of monochlorocarbamide on

ketones, 1912, A., i, 73.

Béhal, Auguste, and Marcel Sommelet, synthesis of aldehydes, 1904, A., i,

preparation of alkyloxy-glycols, 1907, A., i, 275, 460.

preparation of fatty, aromatic, and hydroaromatic aldehydes, 1907, A., i, 282.

Béhal, Auguste, and Marc Tiffeneau, some phenolic ethers containing the ψ-allyl chain, R.CMe:CH2, 1904, A., i, 742; 1905, A., i, 883.

synthesis of phenols and phenyl ethers containing the isoallyl (propenyl)

group, 1908, A., i, 260.

phenolic ethers containing the ψ -allyl side-chain 'CMe:CH2. I. Preparation, properties, and nomenclature. II. Anisic and homoanisic series, 1908, A., i, 261.

phenolic ethers containing the \u03c4-allyl side-chain CMe:CH2. III. Hydrooxytoluic series; synthesis of thymol. IV. Vanillic, veratric, and piperonylic series, 1908, A., i, 630.

phenolic ethers containing the \u03c4-allyl side-chain, CMe:CH2; o-hydroxytoluic series. IV., 1910, A.,

374.

See Conrad von Seelhorst. Behn, H. Behn, Ulrich [Andreas Richard], heat of sublimation of carbon dioxide and heat of vaporisation of air, 1903, A.,

ii, 711.

Behn, Ulrich, and Hans Geiger, modification of Kundt's method of producing dust-figures by stationary waves, and new determination of C_p/C_v for helium, 1908, A., ii, 99.

Behn, Ulrich. See also Jacobus Henricus

van't Hoff.

Behncke, W. See A. Kickton. Behnke, Max. See Otto Wallach.

Behnsen, Feodor, influence of oxide formation and of thermal treatment on the magnetism of copper, 1912, A., ii,

Behr, Gustav Edward. See Theodore William Richards.

Behr, Val. See Karl Bernhard Leh-

Behre, Alfred, detection of arsenic [in fabrics], 1908, A., ii, 533.

the formation of succinic acid in the animal body in chronic oxalate poisoning, 1912, A., ii, 968.

Behre, Alfred. See also Ludwig Claisen. Behre, Paul. See Wilhelm Biltz.

Behrend, Lotte. See Emil Abderhalden. Behrend, [Anton Friedrich] Robert, oxidation of uric acid in alkaline solution, 1904, A., i, 950.

[birotation of dextrose], 1905, A., i,

dextroses and their phenylhydrazones and oximes, 1907, A., i, 481. β-dextrose, 1911, A., i, 14.

a simple valve for water pumps, 1911,

A., ii, 796.

Behrend, Robert, and Karl Beer, trihydroxymethyldiliydrouracil, 1908, A., i, 840.

Behrend, Robert, and Ludwig Fricke, oxidation of trimethyluracil, 1903, A., i, 739.

Behrend, Robert, and Hermann Friedrich, dialuric acid, 1906, A., i, 311.

Behrend, Robert, and Hans Hennicke, action of thiocarbimides on ethyl aminocrotonate, 1906, A., i, 312.

Behrend, Robert, and Paul Hesse, condensation of ethyl aminocrotonate with thiocarbimides, 1904, A., i, 379.

Behrend, Robert, and Carl Hufschmidt, oxidation of methylated methyluracils, 1906, A., i, 310.

nitration of trimethyluracil, 1906, A., i, 311.

Behrend, Robert, and Theodor Klinckhard, condensation of \$-naphthaldehyde with methylsuccinic acid, 1911, A., i, 294.

Behrend. Robert, and Friedrich Lohr, phenylhydrazones of dextrose, 1908,

A., i, 765.

Behrend, Robert, Wilhelm Ludewig, and Theodor Klinckhard, synthesis of 4hydroxyphenanthrene, 1911, A., i, 288.

Behrend, Robert, and Martin Mertelsmann. sulphonation of benzene, 1911,

A., i, 189.

Behrend, Robert, Eberhard Meyer, and Franz Rusche, condensation products from glycoluril and formaldehyde, 1905, A., i, 419.

Behrend, Robert, and Rudolf Niemeyer, condensation of hydantoin with formaldehyde, 1909, A., i, 257.

Behrend, Robert, and Hans Osten, nitration in the presence of phosphoric oxide, 1906, A., i, 229.

Behrend, Robert, Hans Osten, and Karl Beer, trihydroxymethyldihydrouraeil,

1906, A., i, 309.

Behrend, Robert, and Willy Reinsberg. phenylhydrazones of dextrose, 1911, A., i, 83.

Behrend, Robert, and Paul Roth, birotation of dextrose, 1904, A., i, 716.

Behrend, Robert, and Roland Schultz, oxidation of uric acid in alkaline solution, 1909, A., i, 272.

Behrend, Robert, and Karl Struve, oxidation of methyluracil, 1911, A., i, 158.

Behrend, Robert. See also G. Eberhardt and Adriaan Lindner.

Behrendt, Emil C., quick method for the estimation of sugar in urine, 1904, A., ii, 96. analysis of urine, 1904, A., ii, 218.

Behrendt, Emil C. See also Karl Braun,

and Iwan Koppel.

Behrens, Johannes, manurial experiments with calcium cyanamide, 1909, A., ii, 260.

amount of hydrocyanic acid in reedmillet, 1909, A., ii, 514.

Behrens, Johannes. See also August

Michaelis.

Behrens, Otto. See Heinrich Biltz. Behrens, Theodor Heinrich, the microchemical analysis of organic compounds, 1903, A., ii, 246.

microchemical detection and discrimination of the phenols, 1903,

A., ii, 455.

p-nitrophenylhydrazine as a microchemical reagent, 1904, A., ii, 98.

reactions for the microchemical detection of organic bases, 1904, A., ii, 845.

action of organic acids on metals of the cerium and yttrium groups, 1905, A., i, 167.

Beierle, Karl, crystallised sulphur from the muschelkalk of Bruchsal, Baden,

1906, A., ii, 368.

Beilby, George Thomas, hard and soft states in metals, 1904, A., ii, 647. phosphorescence caused by the B- and

γ- rays of radium. Parts I. and II.,

1905, A., ii, 293.

George Thomas, and Hubert Beilby, Noel Beilby, influence of phase changes on the tenacity of ductile metals at the ordinary temperature and at the boiling point of liquid air, 1905, A., ii, 803.

Beilby, Hubert Noel. See George Thomas Beilby.

Beilstein, Friedrich Konrad, obituary

notice of, 1911, T., 1646.

Bein, Willy, expansion of ethyl ether and of some mixtures of the ether and ethyl alcohol, 1909, A., i, 80.

mathematical investigation of the relationships occurring in the equilibrium of binary mixtures in solution and in vapour, 1909, A., ii, 471.

Bein, Willy. See also Johann Domke. Beintker, action of reducing agents on compounds of hæmoglobin, 1908, A.,

i. 709.

Béis. Constantin, action of mixed organomagnesium compounds on amides; new method of preparing ketones, 1904, A., i, 15.

action of organo-magnesium compounds on phthalimide and phenylphthalimide, 1904, A., i, 503, 671.

action of mixed organo-magnesium compounds on imides, 1906, A., i, 884.

estimation of tartaric acid in natural

products, 1910, A., ii, 662.

new method for the estimation of glycerol in wines, 1910, A., ii, 756; 1912, A., ii, 813.

estimation of tartaric acid in wine products, 1910, A., ii, 758.

Beiser, M. See Bronislaw Radziszewski. Beisswenger, Alfred. See Fritz Fichter and Hugo Kauffmann.

Beistle, Charles P., estimation of sulphur and phosphorus in plant substances, 1903, A., ii, 325.

Beistle. Charles P. See also William Frear.

Beitler, O. See Erich Beschke.

Beitzke, Hermann, and Carl Neuberg, anti-ferments, 1905, A., ii, 336.

Beketoff, Nikolai N., chemical energy in connexion with the phenomena exhibited by radium, 1903, A., ii, 623.

energy of the elements, 1908, A., ii, 478.

attempt to explain the properties of radium, 1909, A., ii, 953.

Beketoff, Nikolai N., and Wl. Beketoff, mutual rearrangement in molten masses of mixtures of halogen salts, 1904, A., ii, 657.

Beketoff, Wl. See Nikolai N. Beketoff. Bekier, E., the spontaneous crystallising power of bismuth and antimony, 1912, A., ii, 1178.

Bekier, E. See also Ludwik Bruner.

Belak, Alexander, the action of phloridzin on gaseous metabolism and on the work of the kidneys, 1912, A., ii, 1062.

Belasio. See Wilhelm Körner.

Belasio, R., analysis of the metals and of the commonest metallic alloys by electrolytic methods, 1912, A.,

electrolytic estimation of zinc in the presence of ammoniacal salts, 1912,

A., ii, 1096.

electrolytic separation of iron and manganese; analysis of ferro-manganese, 1912, A., ii, 1097.

analysis of white metals for bearings, ornaments, and type, 1912, A., ii,

1098.

electrolytic estimation of the tin in metal foil of lead, tin, and antimony externally tinned, 1912, A., ii, 1099. detection of antimony and of tin in

metallic alloys, 1912, A., ii, 1099.

Belenowsky, I. See Leo Pissarjewsky. Beljaeff, N. T., thermoluminescent limestone from Visima Utka, 1907, A., ii, 363.

Bell, Albert Edward, new method of detecting turmeric, 1903, A., ii, 251.

James Munsie, compensation Bell, method of determining the rate of oxidation of hydrogen iodide, 1903, A., ii, 275.

iron salts in voltameter solutions, 1904, A., ii, 155.

free energy and heat capacity, 1905, A., ii, 434.

dimeric equilibria, 1905, A., ii, 684. composition of solid phases in fourcomponent systems, 1907, A., ii, 607; 1911, A., ii, 973.

rate of extraction of plant food constituents from the phosphates of calcium and from loam soil, 1910,

A., ii, 745.

Bell, James Munsie, and Melville L. Buckley, solubility of bromine in aqueous solutions of sodium bromide. 1912, A., ii, 247.

solubility of iodine in aqueous solutions of bromides of potassium and sodium, 1912, A., ii, 248.

Bell, James Munsie, and Frank Kenneth Cameron, flow of liquids through capillary spaces, 1906, A., ii, 833.

Bell, James Munsie, and Alexander L. Feild, distribution of ammonia between water and chloroform, 1911, A., ii, 591.

Bell, James Munsie, and Walter C. Taber, solubility of gypsum in solutions of ammonium sulphate, 1906, A., ii, 352.

Bell, James Munsic, and Walter C. Taber, supposed ammonium syngenite, 1907, A., ii, 867.

action of lime in excess on copper sulphate solutions, 1908, A., ii, 107.

solubility of gypsum in copper sulphate solutions, 1908, A., ii, 107.

the three-component system CuO, SO₃, H₂O at 25°, 1908, A., ii, 382.

Bell, James Munsie, and Joseph Ellis Trevor, fundamental functions of onecomponent ideal-constituent gases, 1905, A., ii, 374.

Bell, James Munsie. See also Frank Kenneth Cameron and Robert A. Hall.

Bell, Marcus. See Cecil Napier Hake. Bell, William Blair, a clinical method of estimating the amount of calcium in the urine and other physiological fluids, 1912, A., ii, 808.

Bellaire-Wörschweiler, Fr. C., automatic filtering of solutions by maintaining a constant level, 1911, A., ii,

Bellars, Albert Ernest. See Robert Selby Morrell.

Bellazzi, Luigi, action of certain gases on autolysis, 1908, A., ii, 1055.

Bellenoux, E. S., calcium nitrate in agriculture, 1905, A., ii, 478.

Bellet, E. See Victor Grignard.

Belli, Carlo Maurizio, the metabolic value of salt, 1903, A., ii, 666.

C., radioactivity of gaseous products of Etna, 1907, A., ii, 732.

Bellier, J., detection of foreign oils in nut oil, 1905, A., ii, 292.

new method of milk analysis, 1905, A., ii, 618.

beeswax from Annam, 1906, A., i, 924. Schlagdenhauffen's reaction [detection of magnesium], 1906, A., ii, 396.

Belloc, G., spontaneous decarburisation of steel, 1903, A., ii, 297.

decarburisation of steel and of thin metallic plates by evaporation under reduced pressure, 1903, A., ii, 484.

osmosis through silica tubes, 1905, A., ii, 443.

gases occluded in steels, 1908, A., ii, 108.

gases occluded in a special nickel steel, 1908, A., ii, 852.

Bellocq, H., detection and estimation of albumin in urines, 1904, A., ii, 796.

Belloni, Ernesto, presence of l-borneol in the ethereal oil from the buds of Pinus maritima, 1906, A., i, 520. ethereal oil of the buds of Pinus mari-

tima, 1906, A., i, 525.

iron formates, 1909, A., i, 283.

Belloni, Ernesto. See also Giuseppe Biscaro and Oreste Carrasco.

Bellucci, Italo, monochloroplatinic acid, 1903, A., ii, 155.

platinic acid, 1904, A., ii, 180.

compound thiocyanates of palladium, 1905, A., i, 122.

hexahydroxyplatinic acid, 1905, A., ii, 327.

[platinum compounds], 1905, A., ii,

hydrated palladium dioxide, 1906, A., ii, 35.

direct synthesis of the glycerides. II., 1911, A., i, 416.

Bellucci, Italo, D. Bachilli, and E. Garron, direct synthesis of the glycerides, 1912, A., i, 935.

Bellucci, Italo, and Lilio Bellucci, sulphide compounds of nickel and cobalt, 1908, A., ii, 196.

Bellucci, Italo, and Federico Carnevali, Roussin's salts, 1907, A., 472.

molecular magnitude of the ferronitro-

sosulphides, 1907, A., ii, 960. Bellucci, Italo, and C. Cecchetti, Rous-

sin's salts, 1907, A., ii, 29. Bellucci, Italo, and Pietro de Cesaris. Roussin's salts, V., 1908, A., ii,

ferronitrosulphides, VI., 1908, A., ii,

probable constitutional formulæ of the ferronitrosulphides, 1908, A., ii,

dichloropalladous acid, 1909, A., ii, 150.

Bellucci, Italo, and Ettore Clavari, higher oxide of nickel, 1905, A., ii, 823; 1907, A., ii, 474.

Bellucci. Italo, and F. Dominici, cobaltous potassium cobaltite, 1907, A., ii, 354.

Bellucci, Italo, and Riccardo Manzetti, direct synthesis of the glycerides, 1911, A., i, 259, 515.

Bellucci, Italo, and Nicola Parravano, stannic compounds, 1904, A., ii, 822.

constitution of the stannates, 1904, A., ii, 823.

stannates, 1905, A., ii, 40.

new series of isomorphous salts, 1905, A., ii, 395.

constitution of certain plumbates, 1906, A., ii, 87.

colloidal plumbic acid, 1907, A., ii,

properties of the plumbic hydrosol, 1907, A., ii, 87.

Bellucci, Italo, and Stefano Rubegni, acid functions of nickel dioxide, 1907, A., ii, 94.

Bellucci, Italo, and G. Sabatini, an isomeride of potassium ferricyanide,

1911, A., i, 430.

case of structural isomerism in the metallic cyanides, 1911, A., i, 430.

Bellucci, Italo, and Domenico Venditori, Roussin's salts [nitrosulphides of iron], 1905, A., ii, 253.

nitrosulphides of iron, 1905, A., ii,

Bellucci, Lilio. See Italo Bellucci. Beloff, S. See Nicolai M. Kijner.

Belonowski, G., the relation of toxins to the cells of the organism, 1907, A., ii, 712.

the products of Bacillus coli communis symbiosis with lactic bacilli, 1907, A., ii, 903.

Belowsky, Max, the supposed meteorite ("leucite-uranolith") of Schafstädt, near Merseburg, 1909, A., ii, 592.

Belton, Francis George, existence of a definite lead potassium sulphate, 1905, A., ii, 457.

Belynsky, S. W. See Sergius F. Schemtschuschny.

Belzer, Arie Hendrik Jan, velocity of transformation of tribromophenol bromide into tetrabromophenol, 1903, A., ii, 415.

Bemberg, J. P., preparation of formyl esters of cellulose, 1908, A., i, 321.

Bement, Alburto, sampling of coal and classification of analytical data, 1906, A., ii, 579.

improved Orsat apparatus, 1905, A.,

ii, 855.

Bemmelen, Jakob Maarten van, absorption compounds of hydrogel, 1904, A., ii, 18.

products of weathering of silicates in clay, volcanic and laterite soils respectively, 1905, A., ii, 89.

absorption of water by clay, 1905, A., ii, 90.

metastannic and metazirconic acids,

1905, A., ii, 461.

absorption compounds. IX. Difference between hydrates and hydrogels and the modifications of hydrogels (zirconic and metazirconic acids), 1906, A., ii, 430.

silicic acids obtained by Tschermak,

1908, A., ii, 838.

properties of hydrogels when dehydrated, 1909, A., ii, 234.

composition of volcanic soil from Java, 1909, A., ii, 428.

Bemmelen, Jakob Maarten van, the weathering of clays. II., 1909, A., ii, 580.

the different modes of weathering of silicates in the earth's crust, 1910, A., ii, 419.

Benary, Erich, new synthesis of tetronic acid, 1906, A., i, 381.

ethyl chlorocyanoacetoacetate and its derivatives, 1908, A., i, 600.

acylation of ethyl B-aminocrotonate and analogous compounds, 1909, A., i, 888.

derivatives of acetyltetronic

1910, A., i, 434.

dehydracetic acid, 1910, A., i, 435. sulphur derivatives of ethyl chlorocyanoacetoacetate, 1910, A., i, 579.

synthesis of pyrrole and furfuran derivatives from dichloroethyl ether, ethyl acetoaceta ammonia, 1911, A., i, 319. acetoacetate,

synthesis of pyridine derivatives from dichloroethyl ether and ethyl-ßaminocrotonate, 1911, A., i, 320.

action of halogeno-fatty acid haloids esters of malonic acid. II. Synthesis of tetramic acid, 1911, A., i, 672.

Benary, Erich. See also Hans Stobbe. Bence, Gyula. See Sándor Korányi.

Benda, Ludwig, secondary aromatic arsinic acids, 1908, A., i, 747. o-aminoarylarsinic acids, 1910, A., i,

5-nitro-2-aminophenylarsinic

1912, A., i, 61.

p-phenylenediaminearsinic acid, 1912, A., i, 62.

o-aminophenylarsinic (o-arsanilic) acid, 1912, A., i, 63.

3-nitro-4-hydroxyphenylarsinic acid, 1912, A., i, 64.

4-amino-3-hydroxyphenylarsinic acid and its products of reduction, 1912, A., i, 148.

the nitration of arsanilic acid, 1912, A., i, 328.

2:8-diaminoacridine, 1912, A., i, 651.

Benda, Ludwig, and Alfred Bertheim. nitrohydroxyarylarsinic acids, 1912, A., i, 63.

Benda, Ludwig, and Robert Kahn, some homologues and derivatives of arsanilic acid. I., 1908, A., i, 591.

See also Benda. Ludwig. Bertheim and Robert Kahn.

Bender, Carl, estimation of sulphur in coal by Eschka's process, 1905, A., ii,

Bender, Friedrich. See Hans Reitter.

Bender, Fritz. See August Michaelis. Bender, Oskar, preparation of sulphuric

acid, 1903, A., ii, 684.

Bendix, Ernst, and Alfred Schittenhelm, excretion of uric acid, administered in various ways to rabbits, 1904, A., ii,

Bendix, Ernst. See also Alfred Schittenhelm.

Bendixsohn, Kurd. See Franz Fischer. Bénech, Elophe, and L. Guyot, [action of gastric juice on fats], 1903, A., ii, 558.

action of glycerol extracts of gastric mucous membrane on monobutyrin, 1903, A., ii, 665.

Benecke, Ernst Wilhelm, formation of oxalic acid in green plants, 1904,

A., ii, 508.

poisonous action of various salts on Spirogyra and the antidotal effect of calcium salts, 1907, A., 11, 808.

Czeslau. See Wilhelm Benedek,

Steinkopf.

Benedek, L., chemical constitution of iron-pyrites and pyrolusite, 1911, A., ii, 44.

Benedicenti, Alberico, a green pigment derived from indole in urine. I., 1907, A., ii, 980.

urinary pigments derived from indole,

1908, A., ii, 1057.

the red urinary pigment derived from indole. II., 1909, A., i, 834. Benedicks, Carl [Axel Fredrik], atomic

volumes of the rare earths and their significance for the periodic classification, 1904, A., ii, 384.

colloidal solutions, 1905, A.,

689.

applicability of van der Waals' equation to the solid state, 1906, A., ii, 10.

deduction of the stoicheiometrical laws, 1906, A., ii, 530.

manganese-garnet containing yttrium, 1907, A., ii, 36.

the so-called allotropic copper, 1907, A., ii, 548.

solubility of graphite in iron, 1908, A., ii, 275.

the hardness and electrical resistance of solid solutions of metals, 1909, A., ii, 207.

new method for the measurement of great reaction and admixture velocities, 1910, A., ii, 280.

solid colloidal systems in metallography, 1911, A., ii, 25.

the Ovifak iron, a natural carbon steel, 1911, A., ii, 287.

Benedicks, Carl [Axel Fredrik], the synthesis of meteoric iron, 1911, A., ii, 495.

the crystallisation of white cast iron,

1911, A., ii, 728.

Benedicks, Carl, and Ragnar Arpi, the variation of the melting point of eutectic mixtures, 1907, A., ii, 666.

a metallographic hygroscope, 1912, A., ii, 804.

Benedict, Francis Gano, studies in body temperature. I. Influence of inversion of the daily routine, 1904, A., ii, 421.

cutaneous excretion of nitrogenous substances, 1906, A., ii, 107.

nutritive requirements of the body, 1906, A., ii, 689.

an apparatus for studying the respiratory exchange, 1909, A., ii, 592. automatic pipette for sodium hydr-

oxide solution, 1909, A., ii, 611. a comparison of the direct and indirect determination of oxygen consumed by man, 1910, A., ii, 511.

Benedict, Francis Gano, and A. R. Diefendorf, urine in starvation, 1907,

A., ii, 492.

Benedict, Francis Gano, and Louis E. Emmes, the influence on metabolism of non-oxidisable material in the intestinal tract, 1912, A., ii, 656.

Benedict, Francis Gano, Louis E. Emmes, and J. A. Riche, influence of preceding diet on the respiratory quotient after active digestion has ceased, 1911, A., ii,

Benedict, Francis Gano, and Harold Leonard Higgins, adiabatic calorimeter for use with the calorimetric bomb, 1910, A., ii, 391.

effects on men at rest of breathing gas mixtures rich in oxygen, 1911, A., ii,

the influence on the respiratory exhange of varying amounts of carbohydrates in the diet, 1912, A., ii, 654.

Benedict, Francis Gano, and John Homans, a respiration apparatus for the estimation of carbon dioxide produced by small animals, 1911, A., ii, 408.

the metabolism of hypophysectomised

dogs, 1912, A., ii, 365.

Benedict, Francis Gano, and Charlotte R. Manning, estimation of water in foods and physiological preparations, 1905, A., ii, 349.

water in proteins, 1907, A., i, 454.

Benedict, Francis Gano, and Victor Caryl Myers, elimination and estimation of creatine and creatinine, 1907, A., ii, 492.

Benedict, Francis Gano, and Thomas Burr Osborne, heat of combustion of vegetable proteins, 1907, A., ii, 532.

Benedict, Francis Gano, J. A. Riche, and Louis E. Emmes, control tests of a respiration calorimeter, 1910, A., ii, 511.

Benedict, Francis Gano. See also Wilbur Olin Atwater, Thorne A. Carpenter, Albert E. Emery, and Harold Leonard Higgins.

Benedict, Henrik, hydroxyl-ion concentration of diabetic blood, 1906, A., ii,

Benedict, Stanley Rossiter, detection of nickel and cobalt, 1904, A., ii,

detection of acetates, cyanides, and lithium, 1905, A., ii, 123.

ions and cardiac rhythm, 1905, A., ii,

detection of nickel [in presence of cobalt], 1905, A., ii, 861.

tervalent cobalt and nickel, 1906,

A., i, 333.

use of potassium periodate in the detection of manganese, cobalt, and zinc, 1906, A., ii, 128.

detection of barium, strontium, and calcium, 1907, A., ii, 52.

detection and estimation of reducing sugars, 1907, A., ii, 585; 1909, A., ii, 442.

reduction of alkaline copper solutions by sugars, 1907, A., ii, 821.

influence of salts and non-electrolytes on the heart, 1908, A., ii, 608, preparation of glyoxylic acid as a

reagent, 1909, A., i, 285.

estimation of total sulphur in urine, 1909, A., ii, 827; 1910, A., ii, 239; 1911, A., ii, 330.

estimation of urea, 1911, A., ii, 79. estimation of reducing sugars, 1911,

A., ii, 340. Benedict, Stanley Rossiter, and Frank Gephart, estimation of urea in urine,

1909, A., ii, 103. Benedict, Stanley Rossiter, and Tadasu Saiki, estimation of purine nitrogen

in urine, 1910, A., ii, 166.

Benedict, Stanley Rossiter, and John Ferguson Snell, method for the detection of chlorides, bromides, and iodides, 1903, A., ii, 750.

estimation of chlorides, bromides, and iodides, 1904, A., ii, 145, 771.

Benedict, Stanley Rossiter, and John Ferguson Snell, detection of the more common acids, 1905, A., ii, 609.

Benedict, Stanley Rossiter. See also Lafayette Benedict Mendel.

Beneker, Jay C., a rapid and accurate method for the analysis of white metal, 1912, A., ii, 493.

Benelli, Tito. See Emanuale Paterno. Benenson, J. See Hugo Simonis.

Benesch, Erwin, new method of formation of flaventhren, 1911, A., i, 794.

Benesch, Erwin. See also Robert Kremann.

Bengen, F., potassium hydroxide containing paraffin and colourless alcoholic potassium hydroxide solution, 1910, A., ii, 446.

Bengen, F., and Gunnar Haane, the gastric mucous membrane and gastric juice of the pig, 1905, A., ii, 266.

Bengis, Robert. See Treat Baldwin

Bengough, Guy Dunstan, a method for the measurement of rate of change in solid alloys; preliminary note, 1908, P., 145.

the properties of alloys at high temperatures, 1912, A., ii, 763.

Bengough, Guy Dunstan, and Oswald Freeman Hudson, heat treatment of copper-zinc alloys, 1908, A., ii, 186. Bening, Alexandre. See Dmitri Wagner.

Benner, Raymond Calvier, rapid estimation of copper, silver, cadmium, and bismuth by means of the mercury cathode and stationary anode, 1910, A., ii, 999.

rapid estimation of lead in ores by electrolysis with stationary electrodes, 1911, A., ii, 155.

good substitute for the triangle, 1911, A., ii, 269. platinum

fractionation of the yttrium earths by means of the succinates, 1911, A., ii, 285.

electrically-heated sealed tube furnace, 1911, A., ii, 875.

Benner, Raymond Calvier, and Miner L. Hartmann, rapid estimations and separations by means of a mercury cathode and stationary anode, 1911, A., ii, 148.

Benner, Raymond Calvier, and William H. Ross, rapid estimation of nickel and cobalt by means of the gauze cathode and stationary anode, 1911, A., ii, 443.

rapid estimation of silver and cadmium by means of the gauze cathode and stationary anode, 1911, A., ii, 770.

Benner, Raymond Calvier, and William H. Ross, filtration with alundum plates, 1912, A., ii, 245.

Benner, Raymond Calvier. See also

Victor Lenher.

Bennett, Alexander Hutcheon, estimation of aldehydes in oil of lemon, 1909, A.,

Bennett, Alexander Hutcheon. See also Herbert Brereton Baker.

Bennett, Charles B., the purines of muscle, 1912, A., ii, 463.

Bennett, Charles Thomas, melting point

of resorcinol, 1908, A., i, 529. Bennett, Charles Thomas. See also John Charles Umney.

Bennett, Charles W., a rotating cathode, 1912, A., ii, 622.

tensile strength of electrolytic copper on a rotating cathode, 1912, A., ii,

glycerol as sensitiser, 1912, A., ii, 1020.

Bennett, Charles W. See also Louis Munroe Dennis.

Bennett, H. C. See George McPhail Smith.

Bennett, Hugh Garner, method for the estimation of nitrogen in organic substances, and, in particular, for the estimation of hide substance in leathers and of dissolved hide substance in the soak liquors and lime liquors of the leather factory, 1909, A., ii, 436.

Bennett, Hugh Garner. See also Julius Berend Cohen, and Henry Richardson

Procter.

Bennett, H. H. See Charles Baskerville. Bennewitz, Kurt, decomposition potentials, 1910, A., ii, 385.

Bennigson, F. See K. Friedrich.

Benoist, Eugène. See Albin Haller. Benrath, Alfred, oxidising action of ferric chloride in sunlight, 1905, A., i, 730.

action of concentrated weak acids on metallic chlorides, 1905, A., i, 734.

action of weak acids on metallic chlorides, 1905, A., ii, 705.

synthesis in sunlight, 1906, A., i, 535.

formation of acid salts in alkaline solution, 1906, A., ii, 425.

change of colour of the chlorides of cobalt and copper in solution, 1907, A., ii, 694.

influence of temperature on complex formation in solution, 1908, A., ii, 567.

electrical conductivity of salts and mixtures of salts, 1909, A., ii, 12.

Benrath, Alfred, change of density of liquid systems during chemical reactions, 1909, A., ii, 795.

reduction of ferric chloride by the light of the mercury vapour lamp,

1909, A., ii, 847.

simple and combined photochemical reactions, 1910, A., ii, 813.

photochemical reactions in aqueous solution, 1911, A., ii, 681; 1912, A., ii, 881.

oxidising action of dilute nitric acid in sunlight, 1911, A., ii, 835.

Benrath, Alfred, and Alexander von Meyer, autoxidation of phenanthraquinone in the presence of aromatic hydrocarbons, 1912, A., i, 876.

Benrath, Alfred, and Fritz Sachs, formation of hydrochloric acid in the

stomach, 1905, A., ii, 731.

Benrath, Alfred, and Julius Wainoff, electrical conductivity of salts and mixtures of salts, 1911, A., ii, 847.

See also Theodor Benrath, Alfred.

Curtius, and Robert Stollé.

Bensemann, R., analysis of saltpetre, 1905, A., ii, 481, 555; 1906, A., ii,

analysis of Chili saltpetre, 1906, A., ii,

detection and approximate estimation of small quantities of arsenic, 1909, A., ii, 830.

Benson, (Miss) Clara C., rate of oxidation of ferrous salts by chromic acid,

1903, A., ii, 200.

rates of reactions in solutions containing ferrous sulphate, potassium iodide, and chromic acid, 1903, A., ii. 534.

composition of the surface layers of aqueous amyl alcohol, 1903, A., ii, 715.

a reaction the rate of which is diminished by rise of temperature, 1904, A., ii, 316.

composition of the hourly excretion of urine, 1907, A., ii, 709.

Benson, (Miss) Clara C. See also Archibald Byron Macallum.

Benson, H. K., and Marc Darrin, the oil of Douglas fir, 1912, A., i, 574.

Benson, H. K. See also John Livingston Rutgers Morgan.

Benson, Robert L., and Harry Gideon Wells, study of autolysis by physicochemical methods. II., 1910, A., ii,

Bent, Leavitt N. See William Hultz Walker.

94

Bentheim, Alfons von. See Adolf von Baeyer, and Wilhelm Koenigs.

Bentivoglio, G. See Arnaldo Pintti. Bentley, William Henry, Arthur Friedl, Frederick Thomas, and Charles Weizmann, derivatives of naphthacenequinone, 1906, P., 324; 1907, T., 411, 1588; P., 215.

Bentley, William Henry, Henry Dent Gardner, jun., Charles Weizmann, John Harold Andrew, and Claude Vazeille Temperley, researches on anthraquinones and phthaleins, 1907,

T., 1626; P., 215.

Bentley, William Henry, (Miss) Rona Robinson, and Charles Weizmann, 3-hydroxyphthalic and 3-methoxyphthalic acids and their derivatives, 1907, T., 104.

Bentley, William Henry, and Charles Weizmann, 4-hydroxyphthalic and 4-methoxyphthalic acids, 1906, P.,

323; 1907, T., 98.

researches on the anthraquinones, 1908, T., 435; P., 52.

Benz, G., occurrence of zinc in fruit juices and wines, 1903, A., ii, 322. Benz, Max. See Richard Willstätter.

Benzain, Rudolf, monocalcium silicate, 1905, A., ii, 523.

Benzur, J. See Julius Wohlgemuth. Béraneck, Ed., tuberculins, 1904, A., ii, 195.

Béranger, Lucien. See Paul Freundler. Berblinger, Hans. See Roland Scholl.

Berchem, O. See Gustav Müller.

Berckhemer, R. See Otto Fischer. Berczeller, L., the solubility of the pancreas lipase, 1911, A., i, 758. the so-called "lipolysis" [in blood],

1912, A., ii, 1064.

the lipolytic action of the extracts of various organs, 1912, A., ii, 1078.

the estimation of fats and lipoids in blood, and the so-called lipolysis,

1912, A., ii, 1109.

Berend, Ludwig [Bernhard], and Paul Herms, decomposition of ethyl terephthalyldiacetoacetate and a case of stereoisomerism, 1906, A., i, 853.

Berend, Ludwig, and Fritz Heymann, products of the hydrolysis of ethyl 3:5-dinitrobenzoylacetoacetate, 1904, A., i, 670.

Berent, Alexander von. See Carl Adam Bischoff.

Beresteyn, H. van, new catalytic reaction with finely divided nickel, 1911, A., i,

Beretta, Antonio. See Bernardo Oddo.

Bereza, Stanislaw. See Hermann Staudinger.

Berezowsky, W. See Gerhard Just.

Berg, Armand, estimation of sulphurous acid by means of standard iodine solution, 1903, A., ii, 179.

influence of hydriodic acid on the oxidation of sulphurous acid, 1904, A.,

reaction of aldehydic sugars, 1905, A.,

formula of elaterin, 1906, A., i, 596. estimation of tellurous and telluric acids, 1906, A., ii, 124.

molecular weight of elaterin, 1907, A.,

i, 146.

analysis of certain alloys containing tin or antimony, 1907, A., ii, 881.

elaterin and some of its derivatives, 1909, A., i, 248.

elateric acid, 1909, A., i, 587:

glucoside of Echallium elaterium, 1910, A., i, 499.

action of silver oxide on elaterin, 1910, A., i, 499.

chromotellurates, 1911, A., ii, 611.

safety-valve for water pumps, 1911, A., ii, 714.

enzymatic activity of different organs of Ecballium elaterium; physiological rôle of the pulp surrounding the seeds, 1912, A., i, 380.

Berg, Leonardus Marinus van den.

Nicolaas Schoorl.

Berg, Paul. See Wilhelm Wislicenus. Berg, Ragnar, evaluation of bees' wax, 1903, A., ii, 702, 767.

beeswax, 1908, A., ii, 878.

alkalinity of saliva, 1910, A., ii, 320. the mechanism of the influence of the hardness of water on bodily development, 1910, A., i, 877.

the excretion of phosphates ingested per os, especially of calcium phos-

phate, 1911, A., ii, 134.

estimation of the mineral constituents of foods, 1912, A., ii, 603.

Berg, Ragnar, and Carl Röse, the influence of the salts in drinking water on physical development, 1910, A., ii, 425.

Berg, William N., hydrolysis of different proteins in pepsin-acid solutions, 1908, A., i, 374.

comparative digestibility of proteins in gastric juice, 1909, A., ii, 326.

contraction of striated muscle, 1912,

A., ii, 1077.

Berg, William N., and William John Gies, influence of ions on catalysis produced by pepsin and trypsin, 1907, A., i, 573.

Berg, William N., and Henry Clapp Sherman, estimation of ammonia in

milk, 1905, A., ii, 351.

Berg, William N., and William H. Welker, influence of barium and radium bromides on protein metabolism, 1906, A., ii, 373.

Berg, William N. See also Henry

Clapp Sherman.

Bergau, Walther. See Wilhelm Lossen. Bergdolt, Bernhard. See Emil Knoevenagel.

Bergdolt, Willy. See Conrad Willger-

Bergeat, Alfred, formation of nontronite by the action of solutions of iron sulphate on wollastonite, 1909, A., ii,

Bergell, Clemens. See Otto Mumm.

Bergell, Peter, a comparison between organic and inorganic ferments, 1906, A., i, 56.

hexamethylenetetramine and its salts (cystopurine), 1907, A., i, 392.

new compounds of amino-acids and ammonia, 1907, A., i, 394.

preparation of a double compound of caffeine and lithium benzoate, 1908, A., i, 1004.

Bergell, Peter, and Ferdinand Blumenthal, the influence of the pancreas on the composition of protein, 1904, A., ii, 675.

Bergell, Peter, and Paul Boll, compounds of amino-acids and ammonia. VII.,

1912, A., i, 326.

Bergell, Peter, and Theodor Brugsch, compounds of amino acids and ammonia. VI., 1910, A., i, 546.

Bergell, Peter, and Theodor Dörpinghaus, examination of protein preparations,

1906, A., i, 52.

Bergell, Peter, and Johann Feigl, new compounds of amino-acids and am-

monia, 1908, A., i, 140, 396.

Bergell, Peter, and Robert Pschorr,
physiological action of phenanthrene derivatives, 1903, A., ii, 502.

Bergell, Peter, and Paul Friedrich Richter, chemical constitution and diuretic action in the purine group, 1905, A., ii, 744.

Bergell, Peter, and Hanns von Wülfing, compounds of amino-acids and ammonia. IV. and V., 1910, A., i, 304,

See also Emil Abder-Bergell, Peter. halden, Emil Fischer, and Martin Krüger.

See Johan Frederik , Bergema, F. Eykman.

Berger, Ernest, velocity of decomposition of a mixture of sodium nitrate and ammonium chloride, 1904, A., ii, 483.

a basic ferric phosphite, 1904, A., ii,

action of phosphorus pentachloride on β-naphthol, 1906, A., i, 81. estimation of uncombined sulphur,

1907, A., ii, 129.

phosphoryl bromide, 1908, A., ii, 274. tetranitromethane, 1910, A., i, 807.

Berger, Ernest. See also Georges Darzens.

Berger, Fr., secretion of lithium in the urine and decomposition of lithium iodide in the organism, 1906, A., ii, 692.

Berger, Heinrich. See Adolf Ernest. Berger, H. - W. See George Augustus

Hulett and Moses Gomberg.

Berger, Kurt. See Berthold Rassow. Bergfeld, Ludwig. See Friedrich Krafft. Bergh, Gustaf Fredrik, preparation of acraldehyde, 1909, A., i, 363.

Berghaus, Wilhelm Hermann, action of carbon dioxide, oxygen, and hydrogen on bacteria at various pressures, 1907, A., ii, 803.

production of ammonia by bacteria,

1908, A., ii, 413.

Berghausen, Oscar. See Emil Abderhalden.

Bergholz, Robert. See Arthur Scheunert. Bergius, Friedrich, absolute sulphuric acid as solvent, 1910, A., ii, 398.

use of high pressures in chemical and technical chemical changes, 1912, A., ii, 939.

formation and decomposition of calcium peroxide, 1912, A., ii, 1171. Bergmann, Arno, ultra-red emission

spectra of the alkali [metals], 1908, A., ii, 242, 336.

Bergmann, August. See Iwan von Ostromisslensky.

Bergmann, Edw. and Aloys Junk, testing the stability of nitrocellulose, 1904, A., ii, 687.

Bergmann, Edw. See also Max Busch. Bergmann, Gustav von, change of cystine into taurine in the animal organism, 1903, A., ii, 665.

action of B-naphthalenesulphonyl chloride on the blood, 1904, A., ii,

Bergmann, Gustav von, and Leo Langstein, blood proteins, 1904, A., ii, 826. See Max Le Blanc. Bergmann, L.

Bergmann, Maximilian. See Julius Schmidlin.

Bergmann, W. See Alexander Tschirch.

Bergner, E. See Adolf Sieverts.

Bergs, Engelbert. See Kurl Auwers.

Bergter, F., rate of absorption of gases by charcoal, 1912, A., ii, 334.

Bergtheil, Cyril, the fermentation of the indigo-plant, 1904, T., 870; P., 139. Bergtheil, Cyr.l, and Richard Victor

Briggs, estimation of indigotin in commercial indigo and in indigo-yielding plants, 1906, A., ii, 818; 1907, A., ii, 415; 1908, A., ii, 75.

Bergwitz, K., ionisation phenomena due

to snow, 1909, A., ii, 364.

the chemical decomposition of water by the a-rays of polonium, 1910, A., ii, 377.

Berju, Georg, estimation of phosphoric acid in manures as phosphomolybdic anhydride, 1906, A., ii, 250.

indirect estimation of small quantities of magnesium by weighing as phosphomolybdic anhydride, 1906, A., ii, 706.

Berju, Geory, and Wladislaus Kosinenko, estimation of calcium oxide in burnt lime; solubility of calcium carbonate in solutions of ammonium nitrate, 1905, A., ii, 62.

Berkeley (the Earl of), Right Hon. Randal Thomas Mowbray, some physical constants of saturated solutions. I.,

1904, A., ii, 648.

on the more exact determination of the densities of crystals, 1906, A., ii, 321; 1907, T., 56.

application of van der Waal's equation to solutions, 1907, A., ii, 440.

Berkeley (the Earl of), and Malcolm Percival Applebey, boiling point of water, 1911, A., ii, 1061.

boiling points of some saturated aqueous solutions, 1911, A., ii, 1062.

Berkeley (the Earl of), and Ernald George Justinian Hartley, determination of the osmotic pressures of solutions by the measurement of their vapour pressures, 1906, A., ii, 599.

osmotic pressures of some concentrated aqueous solutions, 1907, A., ii, 234. "dynamic" osmotic pressures, 1909,

A., ii, 553.

Berkeley (the Earl of), Ernald George Justinian Hartley, and C. V. Burton, osmotic pressures of aqueous solutions of calcium ferrocyanide. I. Concentrated solutions, 1909, A., ii, 126.

Berkeley (the Earl of), Ernald George Justinian Hartley, and J. Stephenson, osmotic pressures of calcium ferro-II. Weak solucvanide solutions. tions, 1909, A., ii, 554.

Berkenheim, Boris. See Nikolai Schiloff.

Berkheiser, Elvin J. See Ralph Harper

Berkhold, O. See Otto Kühling.

Berkhout, Albert Dirk. See Walther Borsche.

Berkhout, J. D., estimation of mercury in smokeless powder, 1912, A., ii,

Berl, Ernst, electrolysis of fused organic salts, 1904, A., i, 282.

use of arsenic oxide in the catalysis of sulphur trioxide, 1905, A., ii, 315.

estimation of carbon, hydrogen, and nitrogen in highly combustible liquids, 1910, A., ii, 242.

[absorption and extraction apparatus; weighing pipettes], 1910, A., ii,

538.

Berl, Ernst, and Géza Austerweil, Scheele's sodium hydroxide process,

1907, A., ii, 457.

Berl, Ernst, and Max Delpy, alkaline hydrolysis of glyceryl trinitrate, 1910, A., i, 456.

quantitative colorimetric estimation of small quantities of hydrocyanic

acid, 1910, A., ii, 661.

Berl, Ernst, and Andor Fodor, the nitrogenous products of alkaline hydrolysis of cellulose nitrate, 1911, A., i, 264.

the nitrogen-free products from the alkaline hydrolysis of cellulose

nitrate, 1911, A., i, 265.

Berl, Ernst, and A. G. Innes, estimation of carbon in aliphatic hydroxy-compounds by the wet process, 1909, A., ii, 520.

Berl, Ernst, and A. W. Jurrissen, gasvolumetric analysis with the "decomposition flask," and the estimation of nitrogen in smokeless powders, 1910, A., ii, 240.

assay of calcium carbide, sodium amalgam, and zinc dust with the "decomposition flask," 1910, A., ii,

242

Berl, Ernst, and R. Klaye, highly nitrated cellulose, hydrocellulose, and oxycellulose, 1908, A., i, 504.

gradual nitration of cellulose and denitrification of cellulose nitrate by means of acid mixtures, 1908, A., i,

Berl, Ernst, and August Rittener, action of carbon dioxide on sodium and calcium sulphides and of hydrogen sulphide on sodium carbonate, 1907, A., ii, 864.

Berl, Ernst, and Watson Smith, jun., cellulose esters, 1907, A., i, 289. cellulose nitrates and cellulose aceto-

nitrates, 1908, A., i, 505.

See also Georg Lunge and Berl, Ernst. Alfred Werner.

Berlin, Ernst, new synthesis of γ-homocholine, 1911, A., i, 426.

ether, 1911, homocholine

homocholine and neosine, 1911, A., i,

I. The [physiological] action of homocholine. II. The glycine in crab extract, 1911, A., ii, 516. Berlin, H. See Julius Tröger. Bermbach, Paul, precipitins and anti-

precipitins, 1905, A., ii, 407. anti-precipitins, 1905, A., ii, 730.

Bernard, Ch., assimilation outside the organism, 1905, A., ii, 275.

Bernard, Léon, Bigart, and Henri Labbé, lecithin in suprarenal bodies, 1903,

A., ii, 311. Bernard, Maurice, estimation of chlorine in urine, 1903, A., ii, 98.

detection of proteins, etc., in urine, 1903, A., ii, 119.

Bernard, Noel, physical conditions of tuberisation, 1903, A., ii, 170.

Bernard, V., convenient preparation of chloric acid and its application in analysis, especially in the estimation of tin in bronze and brass, 1906, A., ii, 305.

Bernardi, Alessandro, the influence of the presence of peptones on sugar estimations by Fehling's solution, 1912, A., ii, 697.

'the influence of fish gelatin on sugar estimations by Fehling's solution, 1912, A., ii, 1004.

Bernardi, Alessandro. See also Riccardo Ciusa.

Bernardini, Francesco. See Luigi Bal-

Bernardini, Luigi, the causes which determine the replacement of potassium of leucite in soils, 1909, A., ii,

function of manganese in manuring, 1911, A., ii, 327.

chemical composition of the embryo of rice, 1912, A., ii, 380.

Bernardini, Luigi, and G. Chiarulli, lecithin and lecithides in germinating seeds, 1910, A., ii, 991.

Bernardini, Luigi, and G. Corso, effect of different relations of calcium and magnesium on the development of plants, 1909, A., ii, 606.

Bernardini, Luigi, and Giuseppe Morelli, function of magnesium in green plants, 1912, A., ii, 592.

Bernardini, Luigi, and A. Siniscalchi. influence of varying relations between lime and magnesia on the growth of plants, 1910, A., ii, 61.

Bernardini, Luigi. See also G. Calcagni

and Celso Ulpiani.

Bernardinis, Luigi de. See Gino Abati. Bernardis, G. B., solid solutions among haloids of the same element. I., 1912, A., ii, 1178.

Berndt, Georg., chemical reactions in a magnetic field, 1908, A., ii, 756.

hysteresis of certain iron compounds, 1908, A., ii, 1013.

determination of the quantity of emanation in spring waters, 1912, A., ii, 889.

Bernhard, Eugen. See Ernst Beckmann. Bernhard, Heinrich. See Carl Graebe. Bernhardi-Grisson, R. See Rosenheim.

Bernhardt, Paul, new indicator for the estimation of alkalis in blood, 1911,

A., ii, 1031.

Bernhart, Karl. See Wilhelm Koenigs. Bernheim, René. See Wilhelm Auten-

Bernier, R., characterisation of glycuronic acid in urine, 1910, A., ii, 1121.

Bernier, R., and G. Péron, estimation of small quantities of iodides, alone or in presence of other substances, 1911, A., ii, 435.

estimation of small quantities of iodine in animal fluids, 1911, A., ii, 926.

Bernier, R. See also Léon Grimbert. Bernini, Arciero, influence of temperature on the electrical conductivity of sodium, 1904, A., ii, 156.

influence of temperature on the electrical conductivity of potassium, 1904, A., ii, 378.

magnetisation of the alkali metals, 1904, A., ii, 702.

influence of temperature on the electrical conductivity of lithium, 1905, A., ii, 222.

specific heats and latent heats of fusion of potassium and sodium, 1905, A., ii, 802.

specific heat of calcium and lithium, 1907, A., ii, 225.

thermo-electric power of lithium and

sodium, 1908, A., ii, 255. radioactivity of the gas obtained from

the thermal springs of S. Saturnino (Benetutti-Sardegna), 1911, A., ii, 846.

Bernoulli, August L., optical reflection constants and electromotive condition of chromium, 1905, A., ii, 1.

atomic decomposition and spectral series, 1908, A., ii, 1001.

atomic weight formula based on the law of mass action and Avogadro's rule, 1909, A., ii, 222.

thermo-[electric] forces of solid solutions of metals and Schenck's law,

1910, A., ii, 1030.

the law of Babo and the electron theory of metallic mixed crystals, 1911, A., ii, 363.

Bernoulli, August L. See also Paul

Nordmeyer.

Bernoulli, Walter. See Fritz Fichter. Bernstein, Gustav, cold vulcanisation of caoutchouc, 1912, A., i, 1006.

Bernthsen, August, formula of hyposulphurous acid, 1905, A., ii, 240. chemical nature of methylene-azure,

1906, A., i, 535.

Bernthsen, August. See also Max Bazlen. Berntrop, Johan Conrad, estimation of the amount of arsenic in the arsenic

mirror, 1906, A., ii, 706. estimation of fat, etc., in animal

tissues, 1908, A., ii, 544.

Bernus, Simon, coal tar pitch, 1911, A., i, 271.

Berolzheimer, Ruth. See Samuel Wilson Parr.

Berry, Arthur John, the adsorption of uranium-X by barium sulphate, 1910, T., 196; P., 6.

the occlusion of hydrogen by the palladium-gold alloys, 1911, T., 463;

distillation of binary mixtures of metals in a vacuum. I. Isolation of a compound of magnesium and zinc, 1912, A., ii, 161.

Berry, Arthur John. See also Frederick

Soddy.

Berry, Leslie Hamilton, estimation of halogens in organic substances, 1906, A., ii, 797.

the products of reduction of azoxybenzene; preliminary note, 1908,

P., 211.

Berstein, Isaak, Carle Fraschina, and Stanislaus von Kostanecki, fisetin derivatives containing less oxygen, 1905, A., i, 606.

Bertainchand and E. Gauvry, presence of boron in Tunisian wines, 1910, A.,

ii, 646.

Berté, Enrico, saponification number and dry residue of oil of lemon, 1905, A., ii, 126.

Berté, Enrico, indirect estimation of aldehydes in oil of lemons, 1905, A., ii, 656; 1906, A., ii, 132.

Berté, Enrico, and Romeo, Messina oils; analysis of the oils of lemon, orange, and bergamot, 1909, A., ii, 352.

Bertel, R., breaking down of tyrosine in seedlings, 1903, A., ii, 321.

Bertels,

K., nitroso-m-phenylenediamine, 1904, A., i, 620.

Berthaud, A., elementary demonstration of the law of mass action, 1912, A., ii, 915.

Berthaud, J., new method of forming organic compounds of phosphorus,

1907, A., i, 117.

Bertheaume, [Pierre] Jean, separation of ammonia and amines by means of boiling absolute alcohol, 1908, A., ii, 742.

platinichlorides and periodides of diand tri-methylamine and their employment in the separation of the

bases, 1910, A., i, 365.

new method for estimating the three methylamines and ammonia in mixtures, 1910, A., ii, 663.

estimation of methylamines in presence of large quantities of ammonia,

1910, A., ii, 808.

Bertheim, Alfred, an isomeric aminophenylarsinic acid, 1908, A., i, 590. diazophenylarsinic acid and its products

of decomposition, 1908, A., i, 591. halogenated p-aminophenylarsinic

acids, 1910, A., i, 346.

derivatives of p-aminophenylarsine oxide, 1911, A., i, 593.

nitro- and amino-arsanilic acids, 1911, A., i, 1055.

Bertheim, Alfred, and Ludwig Benda, constitution of the isomeric aminophenylarsinic acids, and of Michaelis's nitrophenylarsinic acid, 1912, A., i, 62.

Bertheim, Alfred, and Frida Leupold, methylated diaminodihydroxyarseno-

benzenes, 1912, A., i, 818.

Bertheim, Alfred. See also Ludwig Benda, Paul Ehrlich, Richard Josef Meyer, and Arthur Rosenheim.

Berthelot, Albert, di-iodotyrosine and its possible application in therapeutics,

1911, A., ii, 636.

Berthelot, Albert, and D. M. Bertrand, the intestinal flora; isolation of a microbe capable of producing \$\beta\$-iminazolylethylamine from histidine, 1912, A., ii, 668. toxicity of β-iminazolylethylamine

[4-\beta-aminoethylglyoxaline],

A., ii, 969.

Berthelot, [Paul Alfred] Daniel, the melting point of gold, 1904, A., ii, 489.

the most probable value of the gas constant R, 1904, A., ii, 705.

exact calculation of molecular weights

of gases, 1907, A., ii, 154. calculation of the compressibility of

gases at about atmospheric pressure by means of the critical constants, 1907, A., ii, 154.

molecular weights of different gases calculated by the method of limiting densities, 1907, A., ii, 155.

atomic weight of nitrogen, 1907, A.,

ii, 680.

scale of molecular weights of gases, 1907, A., ii, 668.

compressibility of gases at about atmospheric pressure, 1907, A., ii,

coloration of certain precious stones under radioactive influences, 1908, A., ii, 8.

Berthelot, Daniel, and Henry Gaudechon, chemical effects of ultra-violet light on gases; polymerising action, 1910, A., i, 349.

photochemical synthesis of carbohydrates from carbon monoxide and water vapour in the absence of chlorophyll; photochemical synthesis of quaternary compounds, 1910, A., i, 543.

chemical effect of ultra-violet light on gases; oxidising actions; combustion of cyanogen and ammonia; synthesis of formic acid, 1910, A.,

ii, 564.

exidising action of ultra-violet light on gases; peroxidation of oxides of nitrogen and sulphur, 1910, A., ii, 606.

mechanism of photochemical reactions and the formation of vegetable substances; decomposition of sugar solutions, 1910, A., ii, 813.

photochemical decomposition of alcohols, aldehydes, acids, and ketones,

1910, A., ii, 814.

principal types of photolysis of organic compounds by ultra-violet light, 1911, A., ii, 86.

photolysis of acids with a complex grouping by ultra-violet light; action of uranium salts as luminous catalysts, 1911, A., ii, 170.

nitrification by ultra-violet light, 1911, A., ii, 240. Berthelot, Daniel, and Henry Gaudechon, comparative action of ultra-violet light on straight chain and cyclic organic compounds; mineral salts in aqueous solution, 1911, A., ii, 242.

photolysis of alcohols, acid anhydrides, ethers and esters by ultra-violet

light, 1911, A., ii, 835.

photolytic decomposition of smokeless powders by ultra-violet light; influence of stabilisers; damaged powders, 1912, A., i, 163.

stability of different types of smokeless powder towards ultra-violet light,

1912, A., ii, 210.

photolytic decomposition of smokeless powders, of picric acid and ammonium picrate by ultra-violet light, 1912, A., ii, 394.

action of ultra-violet rays on gaseous hydrocarbons, 1912, A., i, 741.

photolysis of ketoses by solar and ultra-violet light, 1912, A., i, 750.

the rôle of wave-length in photochemical reactions; analogy between the photochemistry making use of high frequencies and the chemistry of high temperatures, 1912, A., ii, 616.

wave-length of the active radiations in the photochemical synthesis of ternary compounds, 1912, A., ii,

715.

the radiations effective in the photochemical synthesis of quaternary compounds, in the polymerisation of different gases, and in the photolysis of acetone, 1912, A., ii, 822.

different methods of photochemical decomposition of dextrose and galactose according to the wavelength of the radiations, 1912, A., ii, 1120.

Berthelot, Marcellin [Pierre Eugène], limit of the intensity of a current from a voltaic element capable of producing appreciable electrolysis in a voltameter, 1903, A., ii, 3.

Lavoisier's laboratory note-books

1903, A., ii, 16.

researches on voltaic elements depending on the reciprocal action of two saline solutions, 1903, A., ii, 51,

impurities of compressed oxygen, and the part played by them in combustions in the calorimetric bomb, 1903, A., ii, 70.

- Berthelot, Marcellin [Pierre Eugène], transformation of diamond charcoal during oxidation, 1903, A.,
 - a law relating to the electromotive force of voltaic elements based on the reciprocalaction of salt solutions and soluble electrolytes, 1903, A., ii, 258.

law of the electromotive forces of salt solutions; influence of temperature,

1903, A., ii, 259.

law relating to the electromotive forces developed by reciprocal actions of saline solutions, 1903, A., ii, 464.

galvanic elements with one and with two liquids, 1903, A., ii, 525.

a new general relationship between the electromotive forces of salt solu-

tions, 1903, A., ii, 526.

galvanic elements with two liquids; electromotive forces; condensations; transformations of energy at the electrodes, 1903, A., ii, 524.

relationships between galvanic elements with several liquids, 1903,

A., ii, 625.

remarks concerning the relationships between galvanic elements containing the same liquids between two different or identical electrodes, 1903, A., ii, 626.

galvanic elements with several different liquids and identical metallic electrodes, 1903, A., ii, 626.

solubility and polymerisation of cyanogen; reactions between cyanogen and potassium cyanide; thermochemical studies on the solution and polymerisation of cyanogen; the slow oxidation of cyanogen and cyanides by free oxygen, 1904, A., i, 720, 721, 793, 860.

electromotive forces resulting from the contact and reciprocal action of two

liquids, 1904, A., ii, 9.

sublimed carbon, 1904, A., ii, 27.

[action of antiseptic and insecticidal agents], 1904, A., ii, 69.

voltaic elements founded on the reciprocal action of saline liquids and of metallic electrodes; preliminary observations on the methods of measurement and conditions experiment, 1904, A., ii, 154.

emission of water by plants and their spontaneous desiccation, 1904, A.,

ii, 281.

gaseous exchange between the atmosphere and plants separated from their roots and kept in the dark, 1904, A., ii, 363.

Berthelot, Marcellin [Pierre Eugène,] employment of alternating currents in chemistry, and the reactions which they determine, 1904, A., ii, 465; 1905, A., ii, 7.

limits of sensitiveness of odours and emanations, 1904, A., ii, 554; 1905,

A., ii, 20.

chemical effects of light; action of hydrochloric acid on platinum and gold, 1904, A., ii, 569.

emanations and radiations, 1904, A.,

ii, 602; 1905, A., ii, 3.

heat of transformation of black crystallised antimony sulphide into the orange precipitated sulphide, 1904, A., ii, 605.

the state of vaporised carbon 1904,

A., ii, 653.

changes effected by time on hydrocarbon substances of organic origin, 1905, A., i, 169, 501.

chemical effects of light; action of hydrochloric acid on platinum and

gold, 1905, A., ii, 3.

desiccation of plants and vegetable tissues; period of maturation not reversible; final equilibrium in average atmospheric conditions, 1905, A., ii, 50, 413.

absolute desiccation of plants and vegetable substances: period of artificial desicration; reversibility by atmospheric moisture, 1905, A., ii, 51.

desiccation of plants; period of vitality; humectation by liquid water; reversibility imperfect, 1905, A., ii, 51.

some thermochemical rules relating to the possibility and prognostication of reactions, 1905, A., ii, 76.

changes in the dimensions and volume of vegetable organs and tissues under the influence of desiccation, 1905, A., ii, 111.

metals found in the archæological excavations in Egypt, 1905, A., ii, 164. use of the hot and cold tube in the

study of chemical reactions, 1905,

A., ii, 308, 810.

vessels of fused silica—their use in chemistry; permeability of vessels of fused silica, 1905, A., ii, 316, 386, \$10.

chemical combination, 1905, A., ii,

permeability of glass vessels, 1905,

A., ii, 443, 810.

calorimetric methods, especially referring to the determination of the heat of combustion of organic compounds, 1905, A., ii, 504.

Berthelot, Marcellin [Pierre Eugène], insoluble alkaline compounds formed by humic substances and their rôle in vegetable physiology and agriculture, 1905, A., ii, 759.

control experiments [over long periods

of time], 1905, A., ii, 805.

insoluble alkaline compounds in living vegetable tissues, 1906, A., ii, 117.

insoluble potassium compounds in humic matters, 1906, A., ii, 117. suboxides of carbon, 1906, A., ii, 227.

insoluble alkali compounds in living plants: oak leaves, 1906, A., ii,

insoluble potassium compounds in the trunk and bark of oaks, 1906, A., ii, 246.

formation of endothermic compounds at high temperatures, 1906, A., ii,

direct synthesis of nitric acid and the nitrates from their elements at the ordinary temperature, 1906, A., ii, 533.

absorption of nitrogen by organic substances under the influence of radioactive matter, 1906, A., ii, 645.

chemical equilibrium of several bases exposed simultaneously to the action of phosphoric acid, 1906, A., ii, 657.

natural and artificial coloration of amethyst, etc., 1906, A., ii, 863.

observations relating to ethereal equilibrium, and to the mutual displacement of glycerol and the other alcohols, 1907, A., i, 9.

comparison between chemical phenomena determined by a heating resulting from purely calorific causes and those due to a heating produced by electrical actions [electricity], 1907, A., ii, 153.

chemical action of radium, 1907, A., ii. 215.

combination of elementary carbon and nitrogen, 1907, A., ii, 256.

memorial lecture on (Dixon), 1911, T., 2353; P., 270.

Berthelot, Marcellin, and Gustave André. some metals and minerals found in the excavations of the Tell Acropolis of

Susa in Persia, 1906, A., ii, 230. Berthelot, Marcellin, and Henry Gaudechon, einchona alkaloids; [thermochemistry of] quinine and quinidine, 1903, A., i, 773; ii, 197.

cinchona alkaloids; cinchonine, cinchonidine, and cinchonamine, 1903,

A., i, 773; ii, 270.

Berthelot, Marcellin, and Henry Gaudechon, thermochemical investigation of strychnine and brucine, 1905, A., ii, 301, 441.

Berthelot, Marcellin, and Philippe Landrieu, heats of combustion and of formation of certain nitrogenous substances of physiological importance, 1907, A., ii, 230.

Berthold, Adolf, new distillation arrangement for ammonia estimation, 1910,

A., ii, 70.

Berthold, Erich. See Franz Sachs and Alfred Wohl.

Berthoud, A., impossibility of superheating a solid, 1910, A., ii, 825. kinetic theory of gases and thermo-

dynamics, 1911, A., ii, 578. Berti, Pio, potassium bromide as indicator when using Fehling's solution,

1905, A., ii, 57.

solutions of sugar and inorganic salts in dialysis, 1905, A., ii, 682.

asparagine substances [amino-acids in molasses], 1905, A., ii, 759.

Bertiaux, L. See Auguste Hollard.

Bertini, Corrado, products of the condensation of ethyl benzoylacetate with benzaldehyde, 1904, A., i, 167.

Bertocchi, C., composition of Milan milk,

1905, A., ii, 477.

Bertolini, Amilcare, the relationship of surface-tension to the union of toxin and anti-toxin, 1910, A., ii, 987.

Bertolo, Pasquale, fusion of some typical santonin derivatives with potassium hydroxide, 1903, A., i, 261.

action of hydrochloric acid on arte-

misin, 1904, A., i, 177.

decomposition products of a derivative of artemisin (1:4-dimethyl-8-naphthol and propionic acid), 1905, A., i, 224.

new reduction products of artemisin, 1908, A., i, 560.

action of chlorine on "saccharin," 1911, A., i, 858.

artemisinphenylhydrazone, 1911, A., i, 898.

Bertolo, Pasquale, and G. Ranfaldi, two dehydropinacones of artemisin (artemisone and isoartemisone), 1905, A., i, 897.

Bertoni, C. See U. Colacicchi.

Bertozzi, Astenore, toxicity of methylatropinium bromide, homatropine hydrobromide, eumydrine, and atropine sulphate, 1906, A., ii, 475.

Bertram, H., oxidation by the urine,

1905, A., ii, 468. Bertram, H. See also Arthur Binz.

Bertram, Max, arc spectra of neodymium and praseodymium, 1906, A., ii, 410.

Bertram, W., action of methyl chlorotricarballylate on ethyl sodiomalonate and ethyl sodioacetoacetate, 1904, A., i, 12.

action of aniline on anhydrocarboxylic

acids, 1905, A., i, 465.

Bertram, W. See also Richard Anschütz. Bertrand, D. M. See Albert Berthelot.

Bertrand, Gabriel [Emile], presence of arsenic in animals, 1903, A., ii, 91,

arsenic in hen's eggs, 1903, A., ii, 499. employment of the calorimetric bomb to demonstrate the presence of arsenic in the organism, 1903, A., ii, 604.

regulator for fractional distillation under reduced pressure, 1903, A.,

ii, 643.

separator for fractional distillation under reduced pressure, 1903, A., ii, 643.

oxidation of guaiacol by laccase, 1904,

A., i, 157.

pigment of the suprarenal capsules,

1904, A., i, 539.

detection and estimation of traces of arsenic in organs, etc., 1904, A., ii, 85.

biochemistry of the sorbose bacterium,

1904, A., ii, 760.

a new sugar from mountain-ash berries, 1905, A., i, 21.

synthesis and chemical nature of sorbieritol, 1905, A., i, 21.

adrenaline, 1904, A., i, 956; 1905, A., i, 106.

coffee seeds without caffeine, 1905, A., ii, 648.

favourable employment of manganese as manure, 1906, A., ii, 121.

vicianin, a new cyanogenetic glucoside contained in the seeds of vetch, 1907, A., i, 68. estimation of reducing sugars, 1907,

A., ii, 136.

action of tyrosinase on some substances related to tyrosine, 1908, A., i, 236.

perseulose, a new crystalline sugar with seven carbon atoms, 1908, A., i, 715.

constitution of perseulose, 1909, A., i,

action of the Bulgarian ferment on proteins, 1911, A., ii, 140.

detection and estimation of small quantities of manganese, particularly in organic substances, 1911, A., ii, 542.

Bertrand, Gabriel [Émile], the importance of manganese in the formation of conidia of Aspergillus niger, 1912, A., ii, 377.

extraordinary sensitiveness of Aspergillus niger to manganese, 1912, A.,

ii, 377.

Bertrand, Gabriel, and Henri Agulhon, detection of minute quantities of boron in the organism and in complex mixtures, 1910, A., ii, 241.

estimation of boric acid in complex mixtures, and especially in plant

ashes, 1910, A., ii, 345.

the normal presence of boron in animals, 1912, A., ii, 854.

Bertrand, Gabriel, and P. Bruneau, preparation and properties of crystallised d-talitol, 1908, A., i, 249.

Bertrand, Gabriel, and Arthur Compton, individuality of cellase and emulsin, 1910, A., i, 800.

influence of temperature on the activity of cellase, 1911, A., i, 99.

action of heat on emulsin, 1911, A., i,

influence of the reaction of the medium on the activity of cellase; new character distinguishing it from emulsin, 1911, A., i, 825.

the supposed reversibility of the hydrolysis of salicin by enzymes,

1912, A., i, 592.

Bertrand, Gabriel, and Franz Ducháček, action of a Bulgarian ferment on certain sugars, 1909, A., i, 623.

Bertrand, Gabriel, and Maurice Holderer, cellase and the diastatic decomposition of cellose, 1910, A., i, 212.

new observations on the individuality of cellase, 1910, A., i, 290.

Bertrand, Gabriel, and Maurice Javillier, a highly sensitive method of precipitating zinc, 1907, A., ii, 53.

a method of estimating very small quantities of zinc, 1908, A., ii,

nicotine silicotungstate and on the estimation of nicotine, 1909, A., ii,

influence of manganese on the development of Aspergillus niger, 1911, A., ii, 222,

joint influence of zinc and manganese on the development of Aspergillus niger, 1911, A., ii, 421.

influence of zinc and manganese on the mineral composition of Aspergillus niger, 1911, A., ii, 644.

estimation of nicotine, 1911, A., ii,

827.

Bertrand, Gabriel, and A. Lanzenberg, synthetical crystalline l-iditol, 1906, A., i, 728.

Bertrand, Gabriel, and Jean Lecarme, state of matter in the neighbourhood of the critical point, 1905, A, ii, 627.

Bertrand, Gabriel, and Florentin Medigreceanu, manganese normally in the blood, 1912, A., ii, 459.

presence and distribution of manganese in animal organs, 1912, A., ii, 662. presence of manganese in the animal series, 1912, A., ii, 786.

Bertrand, Gabriel, and V. I. Meyer, ψ -

morphine, 1909, A., i, 601.

Bertrand, Gabriel, and W. Mutermilch, existence of a tyrosinase in wheat bran, 1907, A., i, 811.

coloration of brown bread, 1907, A., ii,

716.

Bertrand, Gabriel, and (Mlle.) L. Rivkind, distribution of vicianin and its diastase in leguminous seeds, 1907, A., ii, 122.

Bertrand, Gabriel, and Felix Rogoziński, hæmoglobin as a peroxydase, 1911, A.,

i, 248.

Bertrand, Gabriel, and M. Rosenblatt, tyrosinase and racemic tyrosine, 1908, A., i, 379.

the fatal temperature for plant tyro-

sinases, 1910, A., i, 530.

Bertrand, Gabriel, M. Rosenblatt, and (Mme.) M. Rosenblatt (née Rozenband), activation of sucrase[invertase] by different acids, 1912, A., i, 148.

comparative hydrolysis of sucrose by various acids in presence of invert-

ase, 1912, A., i, 327.

activity of the sucrase of "aspergillus" in presence of different acids, 1912, A., i, 401.

comparative hydrolysis of sucrose by various acids in presence of the invertase of Aspergillus niger, 1912, A., i, 522.

Bertrand, Gabriel, and (Mlle.) M. Rozenband, action of acids on peroxydase,

1909, A., i, 279.

Bertrand, Gabriel, and Zoltán Vámossy, estimation of arsenic by Marsh's method, 1906, A., ii, 393.

Bertrand, Gabriel, and R. Veillon, action of the Bulgarian ferment on monobasic acids derived from reducing sugars, 1911, A., ii, 221.

Bertrand, Gabriel, and Gustave Weisweiller, action of the Bulgarian ferment on milk, 1907, A., ii, 120.

constitution of vicianin. I., 1908,

A., i, 817.

Bertrand, Gabriel, and Gustave Weisweiller, vicianose, a new reducing sugar containing C11, 1910, A., i. 156.

constitution of vicianose; diastatic hydrolysis, 1910, A., i, 653.

constitution of vicianose and of vicianin, 1911, A., i, 15.

Bertrand, P. See Robert Fosse.

Bertrond, Ew., action of potassium hydroxide on a mixture of phenylacetylene and methylcyclohexanone, 1905, A., i, 775.

action of potassium hydroxide on a mixture of phenylacetylene and acetophenone, 1905, A., i, 775.

Berwerth, Friedrich, and Gustav Tammann, the natural and artificial burnt zone" of meteoric iron and the behaviour of Neumann's lines in heated kamacite, 1912, A., ii, 652.

Berzelius, Jöns Jacob (Freiherr) von, presentation of engraving of, to the Society, by Professor Retzius, 1905,

P., 83.

Beschke, Erich, O. Beitler, M. Kitaj, and S. Strum, 2:7-dimethoxy-9:10-diphenylacenaphthylene and the corresponding dianisyl compounds, 1909, A., i, 917.

Beschke, Erich, and Franz Diehm, 2:8or amphi-chrysoquinone, 1911, A., i,

Beschke, Erich, Georg Köhres, and Ludwig Stoll, isomerism of some unsaturated lactonic acids, 1912, A., i, 889.

Beschke, Erich, Heinrich Rölle, and S. Strum, condensation of 2:7-dihydroxynaphthalene with aromatic aldehydes and ammonia; synthesis of substituted acenaphthylenes, 1909, A., i, 961.

Beschke, Erich, Mariam Winograd-Finkel, and Georg Köhres, synthesis of chrysene, 1911, A., i, 873.

Beschke, Erich. See also Julius von Braun, Martin Freund, and Otto Wallach.

Besson, [Jules] Adolphe, safety condenser for extractions with inflammable solvents, 1906, A., ii, 842.

standardisation of sodium thiosulphate and estimation of sodium sulphide, 1907, A., ii, 811.

action of the silent electrical discharge on dry and moist ammonia, 1911, A., ii, 718.

formation of hydrogen peroxide in the electrical discharge, 1911, A., ii,

preparation of magnesium silicide and its decomposition by acids, 1912, A., ii, 255.

Besson, [Jules] Adolphe, observations on the silicon hydrides, 1912, A., ii,

Besson, Adolphe, and L. Fournier, action of gaseous hydrogen chloride on amorphous silicon, 1909, A., ii,

preparation of silicon chlorides of the silicomethane series, 1909, A., ii,

action of some oxidising agents on silicochloroform, 1909, A., ii, 481. silicon chlorides, 1909, A., ii, 663.

action of the electric discharge on chloroform and carbon tetrachloride in presence of hydrogen, and also on methyl chloride, 1910, A., i, 349.

action of the electric discharge on acetaldehyde in presence of hydrogen,

1910, A., i, 461.

a new chloride of phosphorus, 1910,

A., ii, 121.

reduction of the chlorides of arsenic and boron by hydrogen under the influence of the electrical discharge, 1910, A., ii, 406.

action of hydrogen on sulphur monochloride and thionyl chloride under the influence of the silent electric discharge, 1910, A., ii, 705.

reduction of phosphoryl chloride by hydrogen under the influence of the electrical discharge, 1911, A., ii,

. bromo- and hydrobromo-derivatives of silicon, 1911, A., ii, 38.

chlorobromides and chloroiodides of

silicon, 1911, A., ii, 280.

Besson, Adolphe, and Georges Rosset, phosphorus chloronitride, A., ii, 534.

action of nitrogen peroxide on ammonia and on some ammonium salts, 1906,

A., ii, 280.

action of ammonia on phosphorus chloronitride, 1908, A., ii, 583. ammoniacal arsenic trichloride, 1908,

A., ii, 686.

Besson, Albert. See August Michaelis. Besson, A. A., the anhydride of lactic

acid, 1911, A., ii, 160. analysis of lactic acid, 1911, A., ii,

1140; 1912, A., ii, 500.

Besson, E., dissymmetry of positive and negative ions relatively to the condensation of water vapour, 1911, A., ii, 839.

dissymmetry of positive and negative ions relatively to the condensation of water vapour in an atmosphere of carbon dioxide, 1912, A., ii, 1123.

Besson, Paul, radioactivity of the waters of Uriage-les-Bains (Isère), A., ii, 1005.

Best, Alfred. See Charles Edward Coates.

Best, Stanley Robert, and Jocelyn Field Thorpe, the formation and reaction of imino-compounds. Part VII. The formation of 1:3-naphthylenediamine from \$\beta\-imino-a-cyano-\gammaphenylpropane, 1908, P., 283; 1909, T., 8.

the formation and reactions of amino-compounds. PartVIII. The formation of methyl derivatives of 2-phenyl-1:3-naphthylenediamine from the three tolylacetonitriles,

1909, T., 261; P., 28.

the formation and reactions of imino-compounds. Part IX. The formation of derivatives of cyclopentane from ab-dicyano-derivatives of butane, 1909; T., 685; P., 92.

the formation and reactions of imino-compounds. Part X. The formation of imino-derivatives of pyrrole and of isopyrrole from amino-nitriles, 1909, T., 1506; P., 216.

Bestelmeyer, Adolf, boiling oxygen, 1904, A., ii, 477.

positive electrons, 1908, A., ii, 799.

Bestelmeyer, Adolf, and Siegfried Valentiner, density of nitrogen at the temperature of liquid air, and its relation to the pressure, 1904, A., ii, 395.

Besthorn, Emil, quinoline-2-carboxyl chloride, 1908, A., i, 681.

2-quinolyl phenyl ketone, 1908, A., i, 681.

quinaldyl chloride, 1909, A., i, 673.

derivatives of benzothiazole, 1910, A., i, 507.

Besthorn, Emil, and Josef Ibele, a new class of dyes obtained from quinoline-2-carboxylic acids, 1904, A., i, 527.

a new class of quinoline dyes.

1905, A., i, 612. quinaldinic [quinoline-2-carboxylic] acid, 1906, A., i, 605.

Bethe, Albrecht, action of acids and alkalis on the staining reactions of animal tissues, 1905, A., ii, 468.

the action of electrolytes on rhythmic movements of Medusæ. I. Action of the salts of sea-water, 1908, A., ii, 969.

Bethe, Albrecht, action of certain narcotics on nerve, 1908, A., ii, 1059. the influence of electrolytes on the rhythmical movements of Medusæ.

II., A., ii, 418.

Bettel, William, new colour test for molybdenum, 1908, A., ii, 230. "tellurium;" is it a mixture of two elements? 1908, A., ii, 372.

purification of mercury, 1908, A., ii,

382.

Bettels, Joseph. See Josef König. Bettendorff, Anton, separation of the earths of the yttrium group, 1907,

A., ii, 172. Bettges, Wilhelm. See Paul Jannasch. Betti, Mario, diazotisation of hydrazine, 1903, A., i, 78; 1904, A., i, 564.

general reaction of condensation between \(\beta\)-naphthol, aldehydes, and amines. IV. Structure of the compounds obtained with ammonia, 1903, A., i, 510.

ethyl bisdiazoacetoacetate, 1904, A., i,

condensation of \(\beta\)-naphthol with formaldehyde and ammonia, 1904, A., i, 581.

gas holder with constant outflow,

1905, A., ii, 310.

reaction between \(\beta\)-naphthol, formaldehyde, and hydroxylamine, 1906, A., i, 653.

resolution of aminobenzyl-B-naphthol into its optical antipodes, 1906,

A., i, 950.

spontaneous oxidation in presence of benzaldehyde, 1906, A., i, 985.

optical resolution by means of dextrose,

1907, A., i, 314.

spontaneous oxidation in presence of hydramides, 1907, A., i, 854.

chemical constitution and rotatory

power, 1907, A., ii, 661.

chemical constitution and rotatory power. II. Influence of the chemical functions of the substituent groups, 1907, A., ii, 726.

between distinction aldoses

ketoses, 1912, A., ii, 498.
Betti, Mario, and Giuseppe Del Rio, a-p-methoxyphenylethylamine anisylethylamine], 1912, A., i, 347.

Betti, Mario, and Jan van Giffen, the resolution of racemic cyanohydrins by means of an optically active base, 1912, A., i, 625.

Betti, Mario, and Virgilio Foà, Bnaphthoxazines and allied compounds containing mixed aldehydic ketonic radicles, 1903, A., i, 511.

Betti, Mario, and Mario Mayer, optical resolution of aminophenylacetic acid, 1908, A., i, 639.

Betti, Mario, and Curio Manio Mundici, B-hydroxynaphthaldehyde, 1905, A., i, 213; 1907, A., i, 322.

condensation reaction of the pyrazol-

ones, 1906, A., i, 543.

Betti, Mario, and Andrea Torricelli, functions of \$\beta\-naphtholaldaminic bases, 1903, A., i, 480.

Betting, M., Erythrina, 1909, A., ii, 924. Bettini, Riccardo, action of metals and other substances on silver bromide, 1904, A., ii, 31.

Bettink, Hendrik Wefers, detection of morphine in cases of poisoning,

1905, A., ii, 546.

Bettink, Hendrik Wefers, and Willem Pieter Hendrik van den Driessen Mareeuw, examination of parts of dead bodies for chloral hydrate. 1906, A., ii, 816.

Bettoni, Vincenzo. See Mario Giacomo

Levi.

Betts, Anson Gardner, and Ralph H. Sherry, manufacture of chlorates and hypochlorites with a view to high current efficiency, 1907, A., ii, 449.

Betzel, R. See Reginald Oliver Herzog. Beuel, Johannes, fluorescence of the platinum double salts, 1912, A., ii, 615.

Beulaygue, L., sodium monosulphide as an indicator in the estimation of dextrose with Fehling's solution, 1904, A., ii, 216.

estimation of vegetable proteins, 1904,

A., ii, 524.

evolution of the weight and the organic matters of leaves during necrobiosis in white light, 1905, A., ii, 51.

Beutel, Ernst, the action of hydrogen aurichloride on aqueous solutions of potassium ferrocyanide, 1910, A., i,

aqueous solutions action of potassium ferrocyanide on aurous cyanide and gold hydroxide, 1910, A., i, 723.

solubility of finely-divided gold in solutions of potassium ferrocyanide,

1910, A., i, 723.

the composition of potassium ferrocyanide gold-baths, 1912, A., i, 543.

Beutell, Albert, automatic rapid mercury pump for high vacua, 1911, A., ii, 105.

experiments with mispickel, 1911, A., ii, 485.

Beutell, Albert, experiments with glaucodote, 1911, A., ii, 728.

experiments with cobaltite, 1910,

A., ii, 1094.

isomorphous relations and constitution of the marcasite-mispickel-glaucodote group, 1912, A., ii, 652.

Beutin, Alfred. See Julius Tröger. Beutner, Reinhard, experiments with gas cells yielding current at high temperatures, 1911, A., ii, 249.

the distinction between colloidal and osmotic imbibition in muscular tissue, 1912, A., ii, 462.

Beutner, Reinhard. See also Georg Erlwein, Fritz Haber, and Jacques

Loeb.

Beuttel, Fritz. See Wilhelm Autenrieth. Beuttenmüller, H., and Felicitas Stoltzenberg, metabolism in Addison's disease, 1910, A., ii, 982.

Bevan, Edward John. See Charles

Frederick Cross.

Bevan, Penry Vaughan, combination of hydrogen and chlorine under the influence of light, 1904, A., ii,

physical properties of sodium vapour,

1905, A., ii, 819.

a method of following the course of certain chemical actions, and a period of induction in the action of excess of water on monochloroacetic acid, 1906, A., ii, 425.

anomalous dispersion by metallic vapours, 1909, A., ii, 773.

absorption spectrum of potassium vapour, 1910, A., ii, 87.

absorption spectra of vapours of the alkali metals, 1910, A., ii, 370. dispersion of light by potassium

vapour, 1910, A., ii, 914.

dispersion in vapours of the alkali

metals, 1911, A., ii, 349. the absorption spectra of lithium and cæsium, 1911, A., ii, 350.

spectroscopic observations; lithium and cæsium, 1912, A., ii, 403.

Beveridge, (Miss) Heather Henderson, hydrolysis of salts of amphoteric electrolytes, 1910, A., ii, 25.

Beveridge, (Miss) Heather Henderson.
See also James Walker.

Beveridge, Wilfred William Ogilvy, estimation of the amount of tin in tinplate used for canning preserved food, 1911, A., ii, 543.

Béville, Henri de, action of organomagnesium compounds on the alkylidene cyclic ketones, 1907, A., i, 628.

Bewad, Iwan I., action of magnesium or zinc alkyl iodides on esters of nitrous acid and on nitroparaffins, 1907, A., i, 671.

action of zinc ethyl on nitrosyl chloride, 1907, A., i, 752.

action of nitrous oxygen compounds with organo-zine and -magnesium

compounds, 1907, A., i, 906.

Bewad, Iwan I., and A. Pirinsky. symmetrical tertiary a-dinitroparaffins, 1906, A., i, 393.

Beyer, A. See H. Lee.

Beyer, Carl. See Heinrich Beckurts and August Morgen.

Beyer, F. \bar{B} . See Frank Gooch.

Beyer, Johannes. See Siegfried Hilpert. Beyer, Otto. See Franz Feist.

Beyerinck, Martinus Willem, bacteria which are able in absence of light to utilise carbon dioxide as source of carbon, 1904, A., ii, 362.

reduction produced by microbes, 1904,

A., ii, 503.

an exclusively anaërobic sarcina, 1906, A., ii, 696.

lactic acid fermentation in milk, 1907, A., ii, 642.

fixation of atmospheric nitrogen by pure cultures of azotobacter; distribution of the organism, 1908, A., ii, 975.

viscosaccharase, an enzyme which produces slime from cane-sugar, 1910, A., i, 450.

pigments as product of oxidation by bacterial action, 1911, A., ii, 518.

Beyerinck, Martinus Willem, and A. van Delden, assimilation of free nitrogen by bacteria, 1903, A., ii, 34. a colourless bacterium whose carbon

food comes from the atmosphere, 1903, A., ii, 229.

bacteria which are active in the maceration of flax, 1905, A., ii, 749.

Beyerinck, Martinus Willem, and D. C. J. Minkman, the formation and consumption of nitrous oxide by bacteria, 1909, A., ii, 1043.

emulsion lævulan, the product of the action of viscosaccharase on sucrose,

1910, A., ii, 643.

Beyne, Edgar, estimation of zinc in ferruginous minerals, 1912, A., ii,

Beyschlag, Heinrich. See R. Mitsugi, Richard Möhlau and Gustav Schultz.

Beythien, Adolf, a case of bacterial deposition of iron in a water supply, 1905, A., ii, 473.

Beythien, Adolf, [volumetric] estimation of boric acid, 1905, A., ii, 765.

Beythien, Adolf, and Paul Atenstädt, estimation of salicylic acid, menthol, and phenol in patent medicines, 1907, A., ii, 992.

Beythien, Adolf, and Paul Bohrisch, composition of lemon juice, 1905, A.,

ii. 413.

Beythien, Adolf, Paul Bohrisch, and Hans Hempel, composition of lemon juice, 1906, A., ii, 573.

Beythien, Adolf, and Adolf Friedrich, detection of sucrose in presence of

lactose, 1907, A., ii, 202.

Beythien, Adolf, Hans Hempel, and L. Kraft, occurrence of Urenothrice polyspora in well waters, 1904, A., ii,

Beythien, Adolf, Hans Hempel, P. Simmich, W. Schwerdt, and C. Wiesemann, estimation of glycerol in fats and soaps, 1911, A., ii, 774.

estimation of formaldehyde by the ammonia process, 1911, A., ii, 776.

Beythien, Adolf, and Rudolf Hennicke, refractometric analysis of organic mixtures, 1908, A., ii, 72.

Beythien, Adolf, and L. Waters, composition of preserved eggs and egg substitutes; 1906, A., ii, 408.

Beythien, Adolf. See also Heinrich Lührig.

Beythien, Rudolf, nitrosodimethyluracilnitriloxide, 1912, A., i, 587.

Bezdzik, A., and Paul Friedländer, indigoid dyes. II., 1908, A., i, 673.

indigoid dyes. IV. Indigoid and indolignoid dyes of the naphthalene series and their decomposition products(hydroxynaphthaldehydes), 1909, A., i, 415.

indigoid dyes. V. Indigoid dyes of the anthracene series, 1910, A., i,

189.

Bezdzik, A., Paul Friedländer, and P. Koeniger, derivatives of thionaphthen, 1908, A., i, 200.

Bezold. Ferdinand. See Alexander Naumann.

Bezold, Heinrich von. See Alfred Stock.

Bezzola, Carlo, Guido Izar, and Luigi Preti, uric acid formation. II. Regeneration of destroyed uric acid in the artificially-perfused liver, 1909, A., ii, 909.

Bhaduri, Kshitibhushan, the glucoside and oil of Caesalpina bonducella, 1912,

P., 53.

Bhaduri, Kshitibhusan, constituents of Vernonia anthelmintica. Part I., 1912, P., 53.

sodium copper thiosulphate and acetylene cuproacetylide, 1912, A., i, 597.

Biach, Otto, regularities in homologous

series, 1905, A., ii, 75. Biach, Otto. See also Jacobus Henricus

van't Hoff.

Bial, Manfred, conjugated glycuronic acids in bile, 1905, A., ii, 643.

colour reaction of pentoses, 1907, A., ii,

lysol and cresol poisoning, 1907, A., ii,

the elimination of conjugated glycuronic acid in the bile, 1908, A., ii,

Bialas, Joseph. See Frederick T. B. Dupré.

Bialobjeski, Tcheslas, the ionisation of liquid hydrocarbons, 1911, A., ii, 837; 1912, A., ii, 825.

Bialon, Konrad. See Emil Knoeven-

agel.

Bialosuknia, W. W., plant ferments, 1909, A., ii, 337.

Bianchi, Alberto, and Ettore di Nola, detection of "saccharin" (o-benzoicsulphinide) in fatty oils, 1908, A., ii, 440.

detection of "saccharin" (o-benzoicsulphinide) and other artificial sweetening materials in beverages and foods, 1908, A., ii, 1079.

detection of small quantities of nickel,

1910, A., ii, 1003.

Bianchi, G., new method for estimating halogens in organic substances, 1907, A., ii, 391.

titration of lead without indicators, 1907, A., ii, 653.

addition of ethylidenebisurethane to acetylacetone. II., 1912, A., i, 542.

Bianchi, G., and Robert Schiff, general additive reaction between alkylideneurethanes and B-dicarboxylic compounds, 1911, A., i, 977.

Bianchi, G. See also Nazareno Tarugi. Bianu, B., and Louis Wertenstein, an ionising radiation due to radioactive recoil, emitted by polonium, 1912, A., ii, 887.

Biberfeld, H., influence of tannin and morphine on the absorption of sodium chloride in the small intestine, 1904, A., ii, 189.

action of strychnine on the respiratory

centre, 1904, A., ii, 573.

See also Wilhelm Biberfeld. H. Filehne.

Biberfeld, Johannes, diuresis. X. The situation in the kidney where foreign substances are excreted, 1905, A., ii, 48.

diuresis. XII. Excretion of sodium chloride during phloridzin diuresis,

1906, A., ii, 564. uresis. XV. Excretion of sodium chloride in phloridzin diabetes,

1908, A., ii, 972.

Biberfeld, Johannes, and Julius Schmid, the absorption of purine substances, 1909, A., ii, 595.

Bibus, Bertrand, and Rudolf Scheuble, preparation of menthyl salicylate,

1906, A., i, 852.

Bichat, Ernest Adolphe, a phenomenon analogous to phosphorescence produced by n-rays, 1904, A., ii, 531.

emission of n- and n₁-rays by crystalline substances, 1904, A., ii, 532.

some facts relating to the observation of variations in the brightness of phosphorescent sulphides under the action of n-rays or analogous agents, 1904, A., ii, 641.

Bicher, constitution of sodium hydrogen carbonate, 1910, A., ii, 775.

Bickel, Adolf, the physiologico-pathological meaning of hyperacidity of the gastric juice, 1907, A., ii, 38.

mesothorium, thorium-X, and thorium emanation therapy, 1912, A., ii,

Bickel, Adolf, and Ludwig Pincussohn, the influence of morphine and opium on the secretion of the stomach and pancreas, 1907, A., ii, 280.

Bickern, W., Casimiroa edulis, 1903,

A., i, 649.

Biddle, Henry Chalmers, determination of molecular weights, 1903, A., ii,

derivatives of formhydroxamic acid and the possible existence of esters of fulminic acid, 1905, A., i, 180; 1906, A., i, 340.

conversion of formhydroxamic acid into fulminic acid, 1906, A., i, 6.

rearrangement of cinchonine and quinine into their poisonous isomerides cinchotoxine and quinotoxine, 1912, A., i, 296.

organic acids as catalysts, 1912, A.,

ii, 1048.

Biddle, Henry Chalmers, and Walter Pearson Kelley, tannic acid, ethyl gallate, and the supposed ester of tannic acid, 1912, A., i, 713.

Biddle, Henry Chalmers. See also Thorburn Brailsford Robertson.

Bidet, Félix, chemical equilibrium of the system; ammonia and primary isoamylamine hydrochloride, 1905, A., i, 686.

chemical equilibrium of the system ammonia gas and ethylenediamine hydrochloride, 1912, A., ii, 915.

See A. Richaud. Bidot.

Bidtel, E., valuation of fluorspar, 1912, A., ii, 997.

Bieber, Arthur. See Arthur Kötz.

Biechy, Theodor. See Alfred Heidus-

Biederbeck, Joseph. See Karl Bernhard Lehmann.

Biedl, Arthur, and Rudolf Kraus, action of peptone intravenously injected in the guinea pig, 1910, A., ii,

Biehler, A. von. See Zdenko Hanns Skraup.

Biehringer, [Friedrich August] Joachim, cetylphosphoric acid, 1906, A., i, 2.

Biehringer, Joachim, and Wilhelm Borsum, reversible reactions among derivatives of organic acids, A., i,

o-tolidine sulphates and titration of benzidine sulphate, 1906, A., ii,

Biehringer, Joachim, and Albert Busch, new decompositions of the diazocompounds, 1903, A., i, 296.

benzoylation of the hydrazo-compounds, 1903, A., i, 296.

simultaneous oxidation and reduction of hydrazo-compounds, 1903, A., i,

colour reaction for p-toluidine, 1903, A., ii, 192.

Biehringer, Joachim, Rachmil Glücksberg, and A. Tanzen, two new methods of formation of dyes of the pyronine group, 1912, A., i,

Biehringer, Joachim, and A. Tanzen, m-methylaminophenol, 1912, A., i,

Bielecki, Jean, mesitylenetrialdehyde (1:3:5-trimethylalbenzene), A., i, 424.

influence of salts on the dialysis of peroxydase, 1909, A., i, 862.

variability of the proteolytic power of the anthrax bacillus, 1910, A., ii, 642.

rôle of mineral substances in the formation of the anthrax protease, 1911, A., ii, 758.

Bielecki, Jean, and Victor Henri, quantitative investigation of the absorption of ultra-violet rays by aliphatic alcohols, acids, esters, aldehydes, and ketones, 1912, A., ii, 882.

Bielecki, Jean, and Alexandre Koleniew, influence of methyl groups on the tinctorial properties of the basic dyes derived from triphenylmethane, 1908, A., i, 697.

Bielecki, Jean, and René Wurmser, action of ultra-violet rays on starch,

1912, A., i, 538.

Biéler-Chatelan, estimation of assimilable potassium in soils, 1910, A., ii, 453. function of micas in arable soils, 1910, A., ii, 535.

Bien, Franz. See Josef Hanus.

Bienenfeld, Bianca, behaviour of human milk to rennet and acids, 1908, A.,

the lipoid content of placenta, 1912,

A., ii, 960.

Bierberg, Walter, the effect of animo-nium salts on the fermentation of wines, 1909, A., ii, 423, 823.

Bierema, Steven, assimilation of nitrogen as ammonia, nitrates, and amides by micro-organisms, 1909, A., ii, 692.

Bierling, E., K. Pape, and A. Viehöver, analysis of coca leaves, 1911, A., ii,

344.

Biernacki, Edmund, the relationship between the total nitrogenous metabolism and the uric acid excretion, 1910, A., ii, 423.

sodium and potassium chlorides, 1911,

A., ii, 633.

Biernacki, Edmund. See also Stefan Otolski.

Biernath, O., the detection of benzoic acid in foods, 1912, A., ii, 1006.

Bierry, Henri, nephrotoxins, 1903, A., ii, 443.

animal lactase, 1905, A., ii, 406.

action of the amylase of pancreatic juice and its activation by gastric juice, 1908, A., ii, 305.

animal invertins and lactases; their specific action, 1909, A., i, 346.

diastatic decomposition of a- and Bmethyl-d-glucosides, 1909, A., ii, 747.

digestion of inulin, 1910, A., ii, 224; 1912, A., ii, 1066.

digestive ferments for manninotriose and its derivatives, 1911, A., i, 263. digestive ferments for hexotrioses and

for stachyose, 1911, A., i, 354.

cleavage of carbohydrates by diastase, 1912, A., i, 672.

Bierry, Henri, the rôle of electrolytes in the action of certain animal ferments, 1912, A., ii, 656.

the ferments capable of hydrolysing

sucrose, 1912, A., ii, 1069.

the ferments capable of hydrolysing stachyose and manninotriose, 1912, A., ii, 1072.

the ferments capable of hydrolysing raffinose and gentianose, 1912, A., ii, 1072.

Bierry, Henri, and Albert Frouin, rôle of cellular elements in the digestion of carbohydrates by intestinal juice, 1906, A., ii, 559.

Bierry, Henri, and J. Giaja, amylase and maltase of pancreatic juice,

1906, A., ii, 780.

the scission by diastase of lactose, maltose, and their derivatives, 1908, A., i, 1031.

digestion of mannans and galactans, 1909, A., ii, 325.

the enzymes which attack mannans, galactans, and celluloses, 1912, A., ii, 657.

Bierry, Henri, and Gmo-Salazar, animal

lactase, 1904, A., i, 840.

Bierry, Henri, Victor Henri, and Albert Ranc, action of ultra-violet light on certain carbohydrates, 1910, A., i,

action of ultra-violet light on glycerol, 1911, A., i, 255.

action of ultra-violet light on sucrose, 1911, A., i, 524.

Bierry, Henri, and J. Larguier des Bancels, action of light of mercury lamp on solutions of chlorophyll, 1911, A., i, 735.

Bierry, Henri, and André Mayer, hepatotoxic action of the blood after intraperitoneal injection of the nucleoproteins of the liver, 1904, A., ii, 578.

Bierry, Henri, and Albert Ranc, diastatic scission of lactose derivatives, 1910, A., i, 465.

Bierry, Henri, and Emile F. Terroine, maltase of pancreatic juice, 1905, A., ii, 643.

Bierry, Henri. See also (Mme.) Z. Gatin-Gruzewska.

Biesalski, Ernst, and Otto Hauser. sodium pentacyanohydrazinoferrite [hydrazinoferropentacyanide], A., i, 341.

Biesalski, Ernst. See also Karl An-

dreas Hofmann.

Biesenbach, Theodor. See Richard Stoermer.

Biewend, R., detection of cadmium in zinc ores, 1903, A., ii, 105.

Bigart. See Léon Bernard.

Bigazzi, A. See Nazareno Tarugi. Bigelow, Harold Eugene. See Charles

Loring Jackson.

Bigelow, Samuel Lawrence, the passage of a direct current through an electrolytic cell, 1903, A., ii, 128.

influence of dissolved gases on conductivity for a direct current, 1903,

A., ii, 527.

permeabilities of collodion, gold-beaters' skin, parchment paper, and porcelain membranes, 1908, A., ii, 88.

Bigelow, Samuel Lawrence, and F. E. Bartell, size of the pores in porcelain and osmotic effects, 1909, A., ii, 979.

Bigelow, Samuel Lawrence, and Adclaide Gemberling, collodion membranes, 1907, A., ii, 933.
Bigelow, Samuel Lawrence, and F. W.

Hunter, function of the walls in capillary phenomena, 1911, A., ii, 471.

Bigelow, Willard Dell, and Frank C. Cook, separation of proteoses and peptones from the simpler aminocompounds, 1907, A., ii, 60.

Bigelow, Willard Dell, and Herbert C. Gore, ripening of peaches, 1905, A.,

ii, 756.

apple marc, 1906, A., ii, 300.

Bigelow, Willard Dell, Herbert C. Gore, and Burton J. Howard, growth and ripening of persimmons, 1906, A., ii, 573.

Biggs, John William Henry. See Frank

Clowes.

Biginelli, Pietro, true and false (pseudo-) commercial tannates of quinine, 1907, A., i, 955.

sources of error in the Kerner-Weller assay of commercial quinine sulphate, 1907, A., ii, 317.

tannic acid in toxicological investiga-

tions, 1908, A., i, 40.

true tannates of quinine. II., 1908,

A., i, 562.

direct application of Kerner's and of Liebig-Hesse's process to quinine disulphate, 1908, A., ii, 783.

composition and chemical constitution of artificial tannin, 1909, A., i, 801,

802.

Schiff's digallic acid or artificial tannin, 1910, A., i, 487.

Bigland, A. Douglas. See Benjamin Moore.

Bigler, Paul, and Stanislaus von Kosta-3':4'-dihydroxy-a-naphthaflavonol, 1907, A., i, 76.

Bignami, Cesare. See Efisio Mameli. Bihmann, Jam. See Carl Adam Bis-

Biilmann, Einar, preparation of thioacids and disulpho-acids, 1905, A., i, 625.

organic thio-acids. II. and III., 1906, A., i, 625, 626.

constitution of thioamides, 1908, A., i, 142.

organic mercury compounds, A., i, 17.

isomeric cinnamic acids I. and II., 1909, A., i, 155, 382.

isomerism and polymorphism, 1911, A., i, 367, 963.

Walden's inversion, 1912, A., i, 420.

Biilmann, Einar, and A. C. Anderson, platinum compounds, 1903, A., ii, 488.

Biilmann, Einar, and Niels Bjerrum, isomeric cinnamic acids. III., 1910, A., i, 346.

Billmann, Einar, Agnes Hoff, and Ulla Starcke, the coumarin group, 1912, A.,

Biilmann, Einar, and Johannes Witt, organic mercury compounds, 1909, A.,

Bijl, H. J. van der, behaviour of ionised liquid dielectrics on the passage of electric currents, 1912, A., ii, 890.

Bilinski, Josef, estimation of sugar in urine, 1905, A., ii, 289.

Billet. J. See Maurice Doyon.

Billeter, Otto C., action of silver cyanate on aryl chlorides, 1903, A., i, 484.

action of silver cyanate on acyl chlorides. I. Acetylcarbimide, 1903, A., i, 800.

action of silver cyanate on acyl chlorides. I. Benzoylcarbimide, 1903, A., i, 821.

action of silver cyanate on acyl chlorides. III., 1904, A., i, 397.

action of silver cyanate on acyl chlor-IV. Methanesulphonylcarbides. imide, 1905, A., i, 560.

formation of anhydrides of sulphonic acids by the action of sulphonic chlorides on silver evanate, 1905, A., i, 584.

autoxidation of ethyl dialkylthiocarb-

amates, 1910, A., i, 544.
Billeter, Otto C. Henri Rivier, and Al. Maret, persubstituted dithiobiurets, 1905, A., i, 49.

Billig, Gerhard. See Fritz Ullmann.

Billiter, Jean, theory of colloids and suspensions, 1904, A., ii, 18; 1905, A., ii, 305. colloidal metals, 1904, A., ii, 19.

Billiter, Jean, chemical valency, 1904, A., ii, 720.

theory of electrocapillary phenomena. III., 1905, A., ii, 225.

the conception of valency, 1905, A., ii,

stability of colloidal solutions, 1907, A., ii, 535.

absolute zero of potential, 1909, A., ii,

[potential measurements], 1909, A., ii, 718.

synthesis of ammonia from the elements, 1912, A., ii, 1165.

Billitz, Géza, the composition of Lombardy milk, 1905, A., ii, 361.

Billitzer. See Billiter.

Billmann, Adolf. See Paul Rabe and Max Weger.

Billon, Ch., detection of mineral acids in wines, 1906, A., ii, 400.

new method for the estimation of glycerol in wines, 1907, A., ii,

Billon, F., and Henri Stassano, organic phosphorus compounds and nutrition, 1903, A., ii, 439.

Billon, F. See also L. Launoy.

Billows, Edoardo, comparative crystallographic examination of cyanuric acid and the acid product of the synthesis of biuret by ethyl cyanoacetate, and of their salts, 1909, A., i, 462.

crystallography of some new organic compounds, 1912, A., i, 419.

crystalline form of some platinothiocyanates, 1912, A., i, 422.

crystallography of platinoselenocyanates, 1912, A., i, 422.

mixed crystals of sulphur and tellurium, 1912, A., ii, 550.

isomorphism of complex molybdates of the rare earths, 1912, A., ii, 560.

Billström, J. See Johan Erik Johansson. Billy, M., preparation of hyposulphites, 1905, A., ii, 318.

Billy, M. See also Victor Auger.

Billy, Maurice, continuous absorbing column, 1910, A., ii, 704.

simple method for the preparation of metallic oxides, 1912, A., ii, 1178.

Bilsen, Eduard. See Carl Adam Bis-

Biltz, Arthur, ureabromin, 1912, A., i, 244.

Biltz, Arthur. See also Hermann Thoms and Wilhelm Traube.

Biltz, [Johann] Heinrich, ethylene and ethylidene dichlorides, 1903, A., i, 1. molecular rise of boiling point for nitrobenzene, 1903, A., ii, 411.

Biltz, [Johann] Heinrich, oxidising chlorination of o- and p-hydroxybenzaldehydes, 1904, A., i, 1021; 1905, A., i, 66.

m-chloro-p-hydroxybenzaldehyde,

1904, A., i, 1022.

action of acetylene on solutions of mercuric chloride, 1905, A., i, 165. 9:10-diphenylphenanthrene, 1905, A.,

i, 188.

hydroxydiphenyltriazine and hydroxydiphenyldihydrotriazine, 1905, A., i, 491.

apparatus for generation of hydrogen sulphide, etc., 1905, A., ii, 651.

diphenylglyoxaline and \u03c4-chlorodiphenylglyoxaline, 1907, A., i, 646. bromination of diphenylglyoxalone,

1908, A., i, 575; 1909, A., i, 839. so-called crystalline boron, 1908, A.,

ii, 762. preparation of diacetyldioxime [dimethylglyoxime], 1909, A., i, 208.

degradation of tetramethyluric acid; allocaffeine, 1910, A., i, 522.

carbon-nitrogen linkings, 1910, A., i,

methylation and constitution of allantoin, 1910, A., i, 594.

pp-dibromobenzhydrol; a correction, 1910, A., i, 621.

crystalline boron. II., 1910, A., ii,

derivatives of isouric acid, 1911, A., i,

reductions in the glyoxaline series. I. Reduction of diphenylglyoxalone, 1912, A., i, 907.

reductions in the glyoxaline series. V. Influence of substituents on the

acidity of imino-groups, 1912, A., i, 910.

Biltz, Heinrich, and Ernst Alefeld, composition of acid chloropentamminecobalt sulphate, 1906, A., ii, 859.

Biltz, Heinrich, Thankmar Arnd, and Carl Stellbaum, action of semicarbazide on benzil, benzoin, and allied substances, 1905, A., i, 673.

Biltz, Heinrich, and Otto Behrens, action of hypochlorous acid and of sodium hypochlorite on hydantoin and acetylenediurcine, 1910, A., i, 589.

decomposition of certain cyclic imines by means of sodium hypochlorite,

1910, A., i, 594.

Biltz, Heinrich, and Wilhelm Biltz, formation of rubeanic acid in the analytical separation of cadmium and copper, 1910, A., ii, 456.

Biltz, Heinrich, H. Edlefsen, and Karl Seydel, pp-dibromobenzil, 1910, A., i,

Biltz, Heinrich, and Richard Gärtner, preparation of fused molybdenum,

1906, A., ii, 860.

Biltz, Heinrich, and Wilhelm Giese, tetrachlorophenol and pentachlorophenol, 1904, A., i, 1000.

Biltz, Heinrich, and Karl Ludwig Gonder, columbium sulphide. I., 1908, A., ii, 114.

Biltz, Heinrich, and Paul Herms, salts of hydrogen copper tetrasulphide, 1907,

A., ii, 262.

Biltz, Heinrich, and Myron Heyn, uric acid glycol, 1912, A., i, 589.

the reduction of the uric acid glycols to hydantoins; some salts of the uric acid glycols, 1912, A., i, 589.

Biltz, Heinrich, and Otto Hödtke, the precipitation of iron and copper with nitrosophenylhydroxylamine in quantitative analysis, 1910, A., ii, 550. Biltz, Heinrich, and Paul Horrmann,

glyoxalones (iminazolones), 1908,

A., i, 56.

diureines, 1908, A., i, 62.

experiments to obtain aliphatic substituted oxytriazines and oxydihydrotriazines, 1908, A., i, 516.
Biltz, Heinrich, Paul Horrmann, and

Chaim Rimpel, action of methylcarbamides on benzil, 1908, A., i, 218.

Biltz, Heinrich, and Carl Kircher, tantalum sulphide, 1910, A., ii, 619.

Biltz, Heinrich, Theodor Kosegarten, Paul Krebs, and Chaim Rimpel, glycols and glycol-ethers of glyoxalones and their isomerism, 1909, A., i, 740.

Biltz, Heinrich, and Poul Krebs, degradation of 7:9-dimethyluric acid,

1910, A., i, 521.

apocaffeine and the degradation of 1:3:7-trimethyluric acid and of caffeine, 1910, A., i, 523.

uric acid glycols, 1910, A., i, 526. hypocaffeine and its decomposition,

1911, A., i, 240.

reductions in the glyoxaline series. II. Reduction of thioldiphenylglyoxalone, 1912, A., i, 908.

reductions in the glyoxaline series. III. Reduction of diphenylglyox-

aline, 1912, A., i, 909.
Biltz, Heinrich, Paul Krebs, and Karl Seydel, new method for the preparation of thiohydantoins and the elimination of sulphur from them, 1909, A., i, 525.

Biltz, Heinrich, and Ernst Küppers. decomposition of ethylene and ethylidene dichlorides by heat, 1904, A., i, 641.

BIL

preparation of di-iodoacetylene, 1905,

A., i, 1.

Biltz, Heinrich, and Otto Mumm, action of acetylene on solutions of mercuric trichloromercuriacetaldechloride:

hyde, 1905, A., i, 2.

Biltz, Heinrich, and Chaim Rimpel, the constitution of the products obtained by the action of substituted carbamides on benzil, and new methods for the preparation of 5:5-diphenylhydantoins, 1908, A., i, 462.

bromination of diphenylglyoxalone. I.,

1908, A., i, 573.

methyl derivatives of diphenylacetylenediureine, 1909, A., i, 848.

Biltz, Heinrich, and Karl Seydel, a new preparation of diphenylmethylamine (benzhydrylamine), 1911, A., i, 281.

reductions in the glyoxaline series. IV. Reduction of thiodiphenylhy-

dantoin, 1912, A., i, 909.

Biltz, Heinrich, and Fritz Sieden, oxidation of aldehydephenylhydrazones to a-diketoneosazones, 1903, A.,

Biltz, Heinrich, and Carl Stellbaum, preparation of cuminoin and cuminil,

1905, A., i, 653.

Biltz, Heinrich, and Karl Stepf, chlorination of salicylaldehyde, 1904, A., i, 1022.

Biltz, Heinrich, and Ernst Topp, caffolide degradation of 3:7-dimethyluric acid and of theobromine, 1911, A., i. 692.

caffolide degradation of 7:9-diethyluric acid 4:5-diglycol, 1911, A., i, 693.
Biltz, Heinrich, and Rudolf Weiss,

action of acetic anhydride on osazones: formation of osotriazoles, 1903, A., i,

Biltz, Wilhelm, dissociation of ethyl benzylideneanilineacetoacetates, 1903, A., i, 172.

colloidal hydroxides, 1903, A., ii,

influence of inorganic salts on solubility, 1903, A., ii, 358.

quantitative separation of sulphides and haloids, 1903, A., ii, 451. rare earths, 1904, A., i, 714.

mutual relationships of colloids in solution, 1904, A., ii, 324.

absorption compound formed by iodine with basic lanthanum acetate, 1904, A., ii, 339.

Biltz, Wilhelm, theory of dyeing. Behaviour of inorganic colloids towards the fibre, 1904, A., ii, 392.

agglutination, 1904, A., ii, 650. hydrates in aqueous solution, 1904,

A., ii, 710.

action of arsenious acid on freshlyprecipitated iron hydroxide, 1904, A., ii, 740,

[theory of dyeing], 1905, A., i, 224. protective action of salt on solutions of proteins, 1905, A., i, 251.

hydrates in aqueous solutions, 1906,

A., ii, 737.

[hydrate theory], 1907, A., ii, 236. ultramicroscopic determination of solubility, 1907, A., ii, 236.

a new reaction for detecting traces of moisture, 1907, A., ii, 574.

colloids and their absorption com-

pounds, 1908, A., ii, 476. coagulation of colloidal solutions in galvanic cells, 1908, A., ii, 822.

liquefaction and sublimation of certain sulphides, 1908, A., ii, 845.

sulphides of the rare earths. Cerium sulphides and their limits of existence, 1908, A., ii, 1037.

dependence of the valency on the temperature in heterogeneous

systems, 1909, A., ii, 875.

the occurrence of ammonia and nitrates in potash deposits, 1909, A., ii, 900.

adsorption of arsenious acid by ferric hydroxide, 1910, A., ii, 106.

sulphides of the rare earths. Lanthanum and praseodymium sulphides, 1911, A., ii, 890.

the melting point and frequency of atomic vibration of germanium, 1911, A., ii, 1097.

cæsium nitrate and the law of mass

action, 1912, A., ii, 242.

Biltz, Wilhelm, and Paul Behre, theory of dyeing. III. State of affinity of some sulphur dyes, 1905, A., ii, 808.

Wilhelm, and Fritz Caspari, aluminium sulphide, 1911, A., ii, 804.

and John Aldous Biltz. Wilhelm, Clinch, metallic derivatives of acetyl-

acetone, 1904, A., i, 715.
Biltz, Wilhelm, and Willi Gahl, ultraobservations. microscopical Separation of sulphur from thiosulphuric acid and of selenium from selenious acid, 1905, A., ii, 24.

decomposition of ammonium nitrite in aqueous solution and analogous changes, 1905, A., ii, 585.

Biltz, Wilhelm, and Wilhelm Geibel, ultramicroscopic studies. II. Characterisation of inorganic colloids, 1906, A., ii, 824.

Biltz, Wilhelm, and Otto Kröhnke, organic colloids from town sewage,

1904, A., i, 540.

Biltz, Wilhelm, and E. Marcus, the occurrence of ammonia and nitrate in deposits of potash salts, 1905, A., ii, 571.

the occurrence of copper in the Stassfurt potash deposits, 1909, A., ii,

ammonium carnallite, 1911, A., ii, 799. the distribution of borates in potash

deposits, 1911, A., ii, 1101. the chemical composition of red salt clay, 1912, A., ii, 1180.

lüneburgite, 1912, A., ii, 1181.

the titration of phosphoric and boric

acids, 1912, A., ii, 1209.
Biltz, Wilhelm, and Werner Mecklenburg, qualitative detection of zirconium, 1912, A., ii, 1100.

Biltz, Wilhelm, Werner Mecklenburg, and W. Goldbeck, equilibrium diagrams of tin with sulphur, selenium, and tellurium, 1909, A., ii, 1022.

Biltz, Wilhelm, Hans Much, and Carl Siebert, adsorption theory of the neutralisation of toxins and related

phenomena, 1905, A., i, 495. Biltz, Wilhelm, and F. Pfenning, the dialytic capacity of the colouring

matters, 1911, A., ii, 375.

osmotic pressure of colloids. III. Dialysis and osmosis of solutions of dyes, 1911, A., ii, 702.

Biltz, Wilhelm, and Hans Steiner, the adsorption of proteins, 1910, A., i, 209.

anomalous adsorption, 1910, A., ii, 830.

Biltz, Wilhelm, and Kurt Utescher, theory of dyeing. II. Quantitative experiments on the formation of inorganic analogues of the substantive dyes, 1905, A., ii, 807.

theory of dyeing. IV. Lakes, 1906,

A., ii. 78.

Biltz, Wilhelm, and Arved von Vegesack, osmotic pressure of colloids. I. Function of electrolytes in the dialysis of colloids, 1910, A., ii, 22.

Biltz, Wilhelm, Arved von Vegesack, and Hans Steiner, osmotic pressure of colloids. II. Osmotic pressure of solutions of certain colouring matters, 1910, A., ii, 693.

Wilhelm, and Ernst Wilke-Dörfurt, sulphides of rubidium and cæsium, 1905, A., ii, 162; 1908, A., ii, 283, 611.

Biltz, Wilhelm, and Friedrich Zimmermann, action of silver nitrate and of mercuric nitrate on some inorganic hydroxides, 1908, A., ii, 104.

Biltz, Wilhelm. See also Heinrich Biltz, (Mme.) Z. Gatin-Gružewska, and E.

Bimar, Henri, oil from the seeds of Jatropha mahafalensis, 1912, A., i,

Bimbi, Ferruccio. See Arrigo Mazzucchelli.

Binaghi, Rinaldo, the electrical conductivity of mi.k, and the use of this constant for the detection of watering and addition of electrolytes, 1910, A., ii, 1123.

Binder, Karl. See Rudolf Friedrich

Weinland.

Binder, O., spontaneous combustion of manganese sulphide, 1908, A., ii,

automatic sampler and mixing apparatus, 1909, A., ii, 262.

the coking test, 1909, A., ii, 569. Bindschedler, Emil. See Alfred Werner.

Binet du Jassonneix, Armand, reduction of manganese oxides by amorphous boron; preparation of a new manganese boride, 1905, A., ii, 90.

reduction of thorium oxide by amorphous boron and preparation of two thorium borides, 1905, A., ii, 597.

magnetic properties of compounds of boron and manganese, 1906, A., ii,

reduction of molybdenum dioxide by boron and the combination of boron with molybdenum, 1906, A., ii,

reduction of chromium oxide by boron, 1907, A., ii, 30.

definite compounds formed by chromium and boron, 1907, A., ii, 95.

preparation and properties of a new variety of chromium, 1907, A., ii, 474.

preparation and properties of the manganese borides, MnB and MnBo, 1907, A., ii, 691.

preparation and properties of the borides of iron, Fe2B and FeB2, 1907, A., ii, 692.

compounds of nickel and cobalt with

boron, 1907, A., ii, 779. compounds of boron with certain metals, 1909, A., ii, 569.

Binet du Jassonneix, Armand. See also Henri Moissan.

Bing, H. J., and V. Ellermann, a phosphatide as activator for tuberculin, 1912, A., ii, 788.

Bingel, Adolf, glycine in normal blood,

1908, A., ii, 1048.

Bingham, Eugene C., viscosity and fluidity, 1906, A., ii, 218; 1908, A., ii, 1017; 1910, A., ii, 395.

relation of heat of vaporisation to boiling point, 1906, A., ii, 522.

vapour pressure and chemical composition, 1906, A., ii, 523.

solubility. I, and II., 1907, A., ii,

536, 669.

viscosity and fluidity of matter in the three states of aggregation and the molecular weight of solids, 1911, A., ii, 372.

fluidity and vapour pressure, 1912,

A., ii, 333.

Bingham, Eugene C., and T. C. Durham, viscosity and fluidity of suspensions · of finely-divided solids in liquids, 1911, A., ii, 968.

Bingham, Eugene C., and (Miss) J. Peachy Harrison, viscosity and fluidity, 1909,

A., ii, 382.

Bingham, Eugene C., and George Frederic White, the viscosity and fluidity of emulsions, crystalline liquids, and colloidal solutions. XI., 1911, A., ii, 858.

fluidity and the hydrate theory, 1912, A., ii, 1144.

Bingham, Eugene C. See also Harry

Clary Jones. Binghinotto, Maria. See Tullio Gnesotto.

Bini, Leda. See Guido Bargellini.

Binning, Stevenson, and Frederick Mollwo Perkin, electrolysis of aqueous, acetone, and pyridine solutions of thiocyanates, 1907, A., i, 114.

Binz, Arthur [Heinrich], action of methyl sulphate on sodium hyposulphite,

1904, A., i, 964.

sodium hyposulphite, 1905, A., ii, 318. action of sodium polysulphide on sodium hyposulphite, 1905, A., ii,

addition of alkali to indigotin, 1906,

A., i, 749.

[nitronitrosotetramethyldiaminophenylbenzylsulphone], 1909, A., i,

hyposulphites. VI., 1909, A., ii, 229. Binz, Arthur, and H. Bertram, evaluation of sodium hyposulphite, 1905, A., ii, 282.

Binz, Arthur, and Eduard Isaac, hyposulphites. V. Rongalitic acid, bases, and formaldehyde, 1908, A., i, 940.

Binz, Arthur, and August Kufferath, salts of indigotin, 1903, A., i, 173. improved method for estimating indigotin with sodium hyposulphite, 1904, A., ii, 102.

Binz, Arthur, and K. Mandowsky, theory of indigo dyeing, 1911, A., i,

Binz, Arthur, and Theodor Marx, hyposulphites. IV., 1907, A., i, 923.

brominated indigotins, 1909, A., ii, hyposulphites. VIII. Aldehydesulph-

oxylates and potassium cyanide, 1910, A., i, 711. hyposulphites. VII. Rongalite and

salts of amines, 1910, A., i, 728. Binz, Arthur, and Kurt Schädel, theory

of the indigo vat, 1912, A., i, 317. Binz, Arthur, and Georg Schroeter, [theory of] dyeing, 1903, A., i, 109, 870; 1904, A., i, 333.

Binz, Arthur, and Walther Sondag, sodium hyposulphite. III., 1906, A.,

Binz, Arthur. See also Hermann Pauly and Hermann Wendelstadt.

Biot, Marcel. See Alphonse Seyewetz. Biquard, Robert. See Charles Moureu.

Birch, William Colet, action of permanganate on ferrous salts in presence of hydrochloric acid, 1909, A., ii, 268.

copper as a reducing agent for ferric salts previous to their estimation volumetrically, 1909, A., ii, 621.

Birchard, F. J. See Phæbus A. Levene. Birckenbach, Lothar, bismuth iodide, 1907, A., ii, 360.

Birckenbach, Lothar. See also Alexander Gutbier.

Birckner, Victor, a new glucolytic ferment of yeast, 1912, A., i, 817.

Bird, Robert Montgomery, estimation of water in substances which afterwards are to be extracted with volatile solvents, 1904, A., ii, 772.

Bird, Robert Montgomery. See also Ira Remsen.

Birencweig, (Miss). See Paul Pfeiffer. Birkner, H. See Ferdinand Henrich.

Birkner, Karl. See Fritz Frank. Birnbräuer, Erich, method for the separation of the metals of the ammonium carbonate group (calcium, barium, and strontium), 1911, A., ii, 770.

Birnie, S., action of finely-divided iron on water, 1907, A., ii, 469.

Biron, Eugen von, stannichlorides of the types M2'SnCl6 and M"SnCl6. II., 1904, A., ii, 567; 1905, A., ii, 40. I. Cadmium concentration cells.

chloride cells, 1908, A., ii, 145. specific gravity of aqueous solutions of cadmium chloride, 1908, A., ii,

concentration cells. II., 1908, A., ii,

stannichlorides of the type M2'SnCl6,-M"SnCl6. III. Hydrolysis of stannic chloride, 1908, A., ii, 295.

stannichlorides of the type M2'SnCla. M''SnCla. IV. Dissociation of stannichlorides in aqueous solutions,

1908, A., ii, 296.

stannichlorides of the type M2'SnCl6,-M"SnCl6. V. Partition of stannic chloride between two metallic chlorides, 1908, A., ii, 297.

specific heat and osmotic pressure of solutions, 1908, A., ii, 459.

reciprocal action of substances in solution, 1909, A., ii, 797.

expansion of benzene, chlorobenzene, bromobenzene, and their solutions, 1910, A., ii, 393.

variation with temperature of the contraction occurring on formation of solutions of normal liquids, 1910, A., ii, 394.

contraction constant, 1910, A., ii, 394.

compressibility of certain liquids, 1912, A., ii, 331. theory of contraction on mixing normal

liquids, 1912, A., ii, 1139.

Biron, Eugen von, and B. P. Aphanassieff, alkali double salts of cadmium chloride, 1908, A., ii, 249.

cadmium chloride concentration cells,

1910, A., ii, 95.

Biron, Eugen von, and S. P. Malschevsky, alteration of the transition temperature of Glauber's salt by a third substance, 1909, A., ii, 213.

Birschel, Edmund. See Theodor Zincke. Birstein, Gustav, H. Denneler, and Alfred Heiduschka, the distillation of methyl alcohol, 1912, A., i, 67.

Birstein, Gustav. See also Fritz Haber and Theodor Paul.

Bisbee, Harold. See Theodore William Richards.

Biscaro, Giuseppe, and Ernesto Belloni, new constituent of milk. I., 1905, A., i, 671.

II., 1905, A., i, 672. orotic acid. Bischkopff, Eduard. See Alfred Ein-

Bischoff, Carl Adam, benzyl esters of carbonic and phthalic acids, 1903, A., i, 261.

Grignard's reaction with dihaloids,

1905, A., i, 589.

cyclic esters from ethylene glycol and from glycerol, 1907, A., i, 675.

formation of chains. LXX. Nitrophenoxymalonic esters, 1907, A., i, 773. formation of chains. LXXI. Bisnitrophenoxymalonic esters. nitrophenoxyethanetetracarboxylic esters, and an unexpected case of

isomerism with the former, 1907, A., i, 774.

Bischoff, Carl Adam, Salomon Ambardanoff, and Georg Schmähling, danoff, and Georg Schmähling, formation of chains. LXIX. Nitrophenyl esters of a-bromo-fatty acids,

1907, A., i, 35.

Bischoff, Carl Adam, Alexander von Leiba Fränkel, Andreas Berent. Jasinsky, Theodor Lanin, Wladimir Mironenko. Wassilij Peschudow. Israel Stein, Nasar Tobilewitsch, Saul Trozki, Eugen Winokurow, and Hellmuth Wulffius, formation of chains. LXIII and LXIV. Reactions of di-amonobromobutyryldiarylethvlenediamines and of di-a-monobromoisobutyryldiarylethylenediamines, 1905, A., i, 86.

Bischoff, Carl Adam, Jan Bihmann, Michael Gussew, Konstantin Smolnikoff, and Wolfgang Wachsmuth, formation of chains. LXVI. Reactions of phenyl and tolyl esters of a-bromo-fatty acids with sodium phenoxide and tolyloxide, 1907, A., i, 32.

Bischoff, Carl Adam, Eduard Bilsen, Simon von Meystowicz, Julius Päpke, Julius Radik, Dominik Rossi, Ludwig Schubetski, Johann Teletoff, and Hellmuth Wulffius, formation of chains. LXV. Reactions di-a-bromoisovaleryldiarylethylenedi-

amines, 1905, A., i, 157.

Bischoff, Carl Adam, Alfred Blumenthal, and Karol Kowerski, formation of chains. LXVII. Reactions of carvacryl and thymyl esters of abromo-fatty acids with sodium carvacryl and thymyl oxides, 1907, A., i.

Bischoff, Carl Adam, and Emil Fröhlich, decomposition of N:N'-diarylmethylenediamines, 1907, A., i, 28.

Bischoff, Carl Adam, Emil Fröhlich, and Hugo Hoffmann, preparation of cyclic esters and ethers of catechol, 1907, A., i, 696.

Bischoff, Carl Adam, Emil Fröhlich. Iwan Jakowlew, Wulf Kissin, Wladimir Mazaraki, Jan Milewski, and Lasar Pildon, formation of chains. LX. Reactions of the benzylanilide of a-bromopropionic acid and of dia-monobromopropionyldiphenylethylenediamine, 1905, A., i, 84.

Bischoff, Carl Adam, Emil Fröhlich, Paul Ulmann, and Reinhold Differt, resorcinol and quinol esters of halogenated fatty acids, 1907, A., i, 697.

Bischoff, Carl Adam, Michael Gussew. Jan Wielowieyski, and August Willums, formation of chains. LXVIII. Reactions of naphthyl and guaiacyl esters of a-bromo-fatty acids with sodium naphthyloxides and guaiacyl oxide, 1907, A., i, 34.

Bischoff, Carl Adam, and August von Hedenström, aromatic esters of carbonic and oxalic acids, 1903, A., i, 26. decomposition of phenyl oxalate, 1903,

A., i, 26.

aryl oxalates, 1903, A., i. 26.

oxalates of bivalent phenols; diphenyl and dibenzyl malonates, 1903, A.,

phenyl and benzyl succinates, 1903, A., i, 85.

arylesters of succinic acid, 1903, A., i,86. phenyl and benzyl esters of glutaric, fumaric, maleie, and phthalic acids, 1903, A., i, 86.

velocity of saponification of aryl and benzyl esters of dibasic acids, 1903,

A., i, 87.

Bischoff, Carl Adam, Benjamin Matz, and Gabriel von Wodzinsky, formation of chains. LXI. Reactions with di-a-propionylditolylethylenediamine, 1905, A., i, 85.

Bischoff, Carl Adam, and F. Reinfeld, formaldehyde derivatives of aliphatic bases, 1903, A., i, 233.

formaldehyde derivatives of aromatic bases, 1903, A., i, 247.

Bischoff, Carl Adam, Michael Schtschegolew, and Boris Soloweitschik. formation of chains. LXII. Reactions of di-a-bromopropionyldinaphthylethylenediamine, 1905, A., i, 85.

Bischoff, Felix, analysis of iron, 1903,

A., ii, 185.

Bischoff, M., estimation of free lime in basic slags, 1903, A., ii, 242.

Bishop, Edwin S., an absolute determination of the minimum ionising energy of an electron and the application of the theory of ionisation by collision to mixtures of gases, 1912, A., ii, 9. Bishop, F. L., periodic relation between the atomic weights and the index of refraction, 1906, A., ii, 137.

Bishop, Howard B., estimation of minute quantities of arsenic[in sulphuric acid],

1906, A., ii, 306.

Bishop, Harry E. See Harry Barnard.
Bissegger, W., and L. Stegmann, products formed by the decomposition of casein, 1909, A., i, 72.

Bissegger, W. See also Ernst Winter-

stein.

Bistrzycki, [Carl Anton] Augustin, and Martin Fellmann, carbon monoxide from aldehydes, 1910, A., i, 321.

an o-hydroxyaldehyde of triphenyl-

carbinol, 1911, A., i, 133.

Bistrzycki, Augustin, and Joseph Gyr, elimination of carbon monoxide from tertiary acids by means of concentrated sulphuric acid. (Preparation of diphenyl-p-tolylcarbinol), 1904, A., i, 315.

the parent carbinol of rosaniline and its isomerides, 1904, A., i, 497.

the triboluminescent parent hydro carbon of rosaniline, 1904, A., i, 989.

Bistrzycki, Augustin, and Carl Herbst, triphenylacetic acid from diphenylchloroacetic acid, 1903, A., i, 256.

diphenylquinomethane—the chromogen of oxytriphenylmethane dyes,

1903, A., i, 639.

4-hydroxy-8-methyltriphenylcarbinol [diphenyl-6-hydroxy-m-tolylcarbinol] and p-hydroxytriphenylcarbinol, 1904, A., i, 44.

Bistrzycki, Augustin, and August Landtwing, liberation of carbon monoxide by heating acyl chlorides, 1908,

A., i, 270.

results of heating the chlorides of the higher fatty acids, 1910, A., i, 87.

Bistrzycki, Augustin, and Louis Mauron, the liberation of carbon monoxide from the simplest tertiary acids, trimethylacetic [αα-dimethylpropionic] and phenyldimethylacetic [α-phenyl-α-methylpropionic] acids, 1907, A., i, 1039.

anomalies in the condensation of benzilic acid with homologues of benzene, 1907, A., i, 1045.

the liberation of carbon monoxide from the tertiary acids arising from the condensation of phenylpyruvic acid with aromatic hydrocarbons, 1910, A., i, 845. Bistrzycki, Augustin. J. Paulus, and R. Perrin, condensation of p- and o-methoxymandelonitriles with phenols and phenolic ethers, 1911, A., i, 868.

Bistrzycki, Augustin, and Eugen Reintke, elimination of carbon monoxide from tertiary acids with concentrated sulphuric acid. II., 1905, A., i. 285.

Bistrzycki, Augustin, and Boleslaw von Siemiradzki, liberation of carbon monoxide [from organic compounds], 1906, A., i, 135.

liberation of carbon monoxide from secondary and primary carboxylic

acids, 1908, A., i, 535.

Bistrzycki, Augustin, and Franz von Weber, condensation of diphenyleneglycollic acid with phenols and phenol ethers, 1910, A., i, 742.

Bistrzycki, Augustin, and B. Zurbriggen, 4-hydroxy-3-methyltriphenyl-carbinol [diphenyl-6-hydroxy-m-tolyarphinol] 1904 & 144

tolycarbinol], 1904, A., i, 44.
Bistrzycki, Augustin. See also Zofja

Zaleska-Mazurkiewicz.

Bitter, Ludwig, detection of free carbonic acid in water, 1909, A., ii, 831.

Bitter, Ludwig. See also Karl Bernhard Lehmann.

Bitté, Béla von, composition of the inner fruit shell of coffee, 1904, A., ii, 435.
Bitté, Béla von. See also Simon Zeisel.

Bizzell, James A. See T. Lyttleton Lyon.

Bjelouss, E., action of Grignard's reagents on methylethylacraldehyde and the preparation of certain

diolefines, 1910, A., i, 706.

action of the Grignard reagent on methylethylacraldehyde and the preparation of some diolefines, olefines, and saturated secondary alcohols, 1912, A., i, 229.

Bjenkoff, N. I. See Wassili W

Scharwin.

Bjerregaard, A. P., simple ventilating tube for fermentations, 1909, A, ii, 920.

Bjerrum. See Kirstine Meyer.

Bjerrum, (Frl.) J. See Niels Bjerrum.
Bjerrum, Niels, elimination of the diffusion potential between two dilute aqueous solutions by the insertion of a concentrated solution of potassium chloride, 1905, A., ii, 793.

chromium chlorosulphates, 1906, A.,

ii, 363; 1909, A., ii, 740.

chromic chloride. I. II. and III, 1907, A., ii, 554, 622; 1910, A., ii, 856. Bjerrum, Niels, dehydration products of dichlorochromium chloride, 1907, A., ii, 622.

dichlorochromium bromide and dibromochromium chloride, 1907, A., ii,

Planck's formula for diffusion potentials, 1911, A., ii, 182.

the electrolytic dissociation, theory, 1911, A., ii, 377.

specific heat of gases. II., 1912, A., ii, 232.

dissociation and specific heat of water vapour (I) and of carbon dioxide (II) at very high temperatures, determined by the explosion method, 1912, A., ii, 540.

ultra-red absorption spectra of gases,

1912, A., ii, 1114.

Bjerrum, Niels, and (Frl.) J. Bjerrum, elimination of liquid potentials in measurements of electrode potentials, 1911, A., ii, 692.

Bjerrum, Niels, and G. Hirschfeldt Hansen, halogenochromium salts containing aluminium, iron, and vanadium, 1909, A., ii, 739.

Bjerrum, Niels. See also Einar

Biilmann.

Björkstén, Richard. See Max Nyman. Björn-Andersen, H., and Marius Lauritzen, estimation of acidity and of ammonia in urine and its clinical application, 1910, A., ii, 450.

Blach, Leo. See Emil Knoevenagel. Blacher, Carl Johann, and J. Jacoby, estimation of the alkaline earths [in waters] by means of potassium stearate and phenolphthalein, 1908, A., ii, 897.

Blacher, Carl Johann, and U. Koerber, estimation of combined sulphuric acid [in waters], 1905, A., ii, 552.

Black, Adam, artificial pyrexia produced by tetrahydro-β-naphthylamine hydrochloride, 1911, A., ii, 636.

Black, Clarence L. See Frank Pell Underhill.

Black, John A. See William Ridgely Orndorff.

Black, John W. See Thomas Cockburn.
Black, Newton Henry. See Gregory
Paul Baxter.

Black, Otis Fisher, detection and estimation of β-hydroxybutyric acid in urine, 1908, A., ii, 992.

Black, Otis Fisher. See also Lawrence Joseph Henderson, Henry Harker Hill, and Charles Robert Sanger.

Black, Thomas Porteous. See Henry Julius Salomon Sand. Black, Siegmund. See Rudolf Wegscheider.

Blackadder, Thomas. See James Walker.

Blackler, Montague Bennett. See Arthur Hantzsch.

Blackman, Frederick Frost, and (Miss) Gabrielle L. C. Matthaei, vegetable assimilation and respiration. IV. Carbon dioxide assimilation and leaf temperature, 1905, A., ii, 750.

Blackman, Frederick Frost, and Albert Malins Smith, vegetable assimilation and respiration. VIII. New method for estimating the gaseous exchanges of submerged plants, 1911, A., ii, 423.

vegetable assimilation and respiration. IX. Assimilation in submerged water-plants and its relation to the concentration of carbon dioxide and other factors, 1911, A., ii, 423.

Blackman, Philip, new method of determining molecular weights, 1905, T., 1474; P., 228, 304.

molecular conductivity of water, 1905, P., 237.

improved apparatus for the determination of molecular weights, 1906, P., 175.

quantitative relation between the specific heats of a gas and its molecular constitution, 1906, A., ii, 331.

relative strengths of acids, 1906, A., ii, 529.

atomic conductivities of the ions, 1906, A., ii, 647.

ionic conductivities at 25°, 1906, A., ii, 722.

existence of ammonium hydroxide, 1907, A., ii, 346.

new method for determining vapour densities, 1907, A., ii, 931; 1908, P., 8; A., ii, 157, 564; 1909, A., ii, 21, 643; 1910, A., ii, 393; 1912, A., ii, 134.

tables of molecular conductivities, 1909, A., ii, 291.

simple method for determining vapour densities, 1909, A., ii, 298, 643, 867,

simple method for determining vapour densities and for analysing binary mixtures, 1909, A., ii, 643, 974.

fractional precipitation from solution, 1909, A., ii, 648.

electrionic theory, 1909, A., ii, 956. an improved funnel, 1911, A., ii, 796, 1081; 1912, A., ii, 150. Blackman, Philip, a funnel support, 1911, A., ii, 796, 1081.

simple method for vapour density determinations. XI. The dehydration of copper sulphate pentahydrate, 1912, A., ii, 134.

a new and simple method for comparing molecular weights. I., 1912,

A., ii, 149.

Blackstock, Gibbs, the phthalyl cyan-

ides, 1912, A., i, 773.

Blair, Andrew Alexander, bismuth method for the determination of manganese, 1904, A., ii, 683.

estimation of vanadium, molybdenum, chromium, and nickel in steel, 1908,

A., ii, 900.

estimation of carbon and phosphorus

in steel, 1909, A., ii, 519.

Blair, Herbert, a rapid method for the estimation of sulphur in coal gas, or of ammonium sulphate, 1911, A., ii, 534. Blaise, Edmond Emile, as-dimethyl-

glutarie acids, 1903, A., i, 315. migration of the methyl group under the influence of hydriodic acid, 1903,

A., i, 316.

methylation and condensation of ethyl glutaconate, 1903, A., i, 400, 548.

oil of Roman camomile; preparation of tiglic and angelic acids, 1903, A., i, 507.

synthesis of aa-dimethylglutaric acid,

1903, A., i, 604.

preparation of ethyl glutaconate, 1904, A., i, 10.

the alkyl allyl and propenyl ketones, 1904, A., i, 290, 370, 558.

a method of preparing aldehydes and systematically degrading acids, 1904, A., i, 369.

quadrivalent oxygen, 1905, A., i, 111,

migration of ethylenic linking in alkyl allyl ketones, 1905, A., i, 118.

[Grignard's reaction with dihaloids], 1906, A., i, 153.

anhydrides of dibasic acids, 1906, A., i, 796.

constitution of organo-magnesium derivatives, 1907, A., i, 834.

synthesis by means of mixed organometallic compounds of zinc; constitution of the \$-acetoxy-ketones, 1908, A., i, 78.

mixed organo-metallic derivatives of zinc and their use in organic syntheses, 1911, A., i, 415.

ketoglutaric acids and the acid-aldehydes of the succinic series, 1911, A., i, 708.

Blaise, Edmond Emile, syntheses by means of mixed organo-metallic derivatives; mixed cyclo-acetals, 1912, A., i, 236.

synthesis by means of mixed organometallic zinc derivatives; aldehydes,

1912, A., i, 410.

syntheses by means of mixed organometallic derivatives of zinc; ahalogenated ketones, 1912, A., i,

Blaise, Edmond Emile, and P. Bagard, stereoisomerism in the group of unsaturated aß-acyclic acids, 1906, A., i, 479.

Blaise, Edmond Emile, and Alfred Pierre Courtot, vinyldimethylacetic acid,

1904, A., i, 796.

direct fixation of organo-magnesium derivatives on the ethylenic linking of unsaturated esters, 1905, A., i, 257.

aldehydo-acids, 1905, A., i, 562.

molecular transpositions and migration of carboxyl group in the dehydration of certain hydroxy-acids, 1905, A., i, 853.

abnormal dehydration of hydroxyalkylpivalic esters, 1906, A., i, 553,

794.

lactonisation of aa-dimethyl-By-unsaturated acids, 1906, A., i, 793. γ-aldehydo-acids, 1906, A., i, 927.

Blaise, Edmond Emile, and Henri Gault, researches in the pyran [1:4-pentfurfuran] series, 1904, A., i, 762; 1906, A., i, 300.

the pyran series. V. ac-Diketopimelic acids, 1907, A., i, 280.
the pyran series. VI. 4-Pyran-2:6dicarboxylic acids, 1907, A., i,

ketonic dibasic acids, 1908, A., i, 713; 1911, A., i, 520, 664.

products of hydrolysis of ethyl dioxalylsuccinate; isopyromucic acid, 1909, A., i, 134. Blaise, Edmond Émile, and F. Gabriel

Guérin, undecaldehyde, 1904, A., i,

ethyl undecyl ketone, 1904, A., i, 143. action of phosphorus pentachloride on methyl undecyl ketoxime, 1904, A., i, 143.

Blaise, Edmond Émile, and I. Herman, syntheses by means of the mixed organo-metallic derivatives of zinc; ketone-alcohols, 1908, A., i, 248.

β-hydroxy-aa-dialkyl ketones; migration under the influence of alkalis,

1908, A., i, 318.

Blaise, Edmond Emile, and I. Herman, aa-dialkyl-B-keto-alcohols; transformation by dehydration, 1908, A., i. 596.

aa-dialkyl-B-keto-alcohols, 1909, A., i. 632; 1910, A., i, 534; 1911, A., i, 880.

Blaise, Edmond Emile, and L. Houillon, the relations between functional (reactive) groups in remote positions; cyclic imines, 1906, A., i, 692.

the relations between functional (reactive) groups in remote positions; decamethyleneimine, 1906, A., i, 764.

Blaise, Edmond Emile, and A. Kohler, syntheses by means of mixed organometallic compounds of zinc; preparation of ketonic acids and diketones, 1909, A., i, 204.

transformation of non-cyclic diketones into cyclic compounds, 1909, A., i,

287; 1910, A., i, 561.

ring formation in ketonic acids, 1909, A., i, 478; 1910, A., i, 626.

lactonisation of acid alcohols, 1909, A., i, 551.

syntheses by means of mixed organometallic derivatives of zinc. Preparation of aliphatic ketonic acids. I., 1910, A., i, 297.

reduction of aliphatic diketones, 1910,

A., i, 463.

Blaise, Edmond Emile, and Armand Luttringer, migration of the ethylenic linking in unsaturated openchain acids, 1905, A., i, 168.

characterisation of lactones by means of hydrazine, 1905, A., i, 329. a-alkylhydracrylic acids, 1905, A., i,

a-alkylaerylic acids, 1905, A., i, 626. Blaise, Edmond Emile, and M. Maire, B-chloroethyl ketones and alkyl vinyl ketones, 1906, A., i, 142.

B-chloroethyl ketones and alkyl vinyl ketones; method of synthesising 4-alkylquinolines, 1907, A., i, 241.

B-chloroethyl ketones and alkyl vinyl ketones; fixation of sodio-derivatives, 1907, A., i, 418.

syntheses by means of mixed organometallic derivatives of zinc; αβacyclic unsaturated ketones, 1907,

syntheses by means of B-chloroethyl and vinyl ketones, 1908, A., i, 390.

fixation of amines on the ethylenic linking of alkyl vinyl ketones, 1908, A., i, 398.

fixation of aromatic amines on vinyl ketones; 4-alkylquinolines, 1908, A., i, 565.

Blaise, Edmond Emile, and M. Maire, 4-alkylquinolines; mechanism of the reactions of Skraup and of Doebner and Miller, 1908, A., i, 566.

syntheses by means of mixed organometallic zinc derivatives, B-ketone alcohols, and aß-acyclic unsaturated

ketones, 1909, A., i, 85.

Blaise, Edmond Emile, and L. Marcilly, aa-dialkylhydracrylic acids, 1904, A., i, 218.

bromopivalic acid [\$-bromo-aa-dimethylpropionic acid] and its derivatives, 1904, A., i, 283.

B-aldehydo-esters, 1904, A., i, 285.

action of dehydrating agents on hydroxypivalic acid [\$\beta\$-hydroxy-aadimethylpropionic acid], 1904, A.,

aa-methylethylhydracrylic acid, 1904,

A., i, 367.

Blaise, Edmond Emile, and L. Picard, action of the chlorides of a-alkyloxy-acids on organo-metallic derivatives of zine, 1911, A., i, 175, 260; 1912, A., i, 232, 746.

mode of formation of ethyl chloroethoxyacetate; use of this ester in the synthesis of a-alkyloxy-acids,

1911, A., i, 349.

syntheses by means of mixed organic derivatives of zinc; a-alkyloxyalkylacetic acids, 1912, A., i, 535.

syntheses by means of mixed organometallic derivatives of zinc; aethoxydialkylacetic acids, 1912, A., i, 602.

Blaise, J., estimation of small quantities of sugar in urine, 1906, A., ii, 710.

Blake, Charles R., [constituents] Vebernum dentatum, 1909, A., ii, 1048.

Blake, George Stanfield, and George Frederic Herbert Smith, baddeleyite from Ceylon, 1907, A., ii, 702.

Blake, George Stanfield. See also Thomas Wyndham Crook and Rowland Dunstan.

Blake, John Charles, colours of allotropic silver, 1904, A., ii, 31.

colloidal gold; absorption phenomena and allotropy, 1904, A., ii, 43.

composition of Bredig's silver hydrosols, 1904, A., ii, 121.

behaviour of red colloidal gold solu-

tions towards the electric current and towards electrolytes, 1904, A., ii, 130.

Blake, John Charles. See also Frederick Bates, Frank Austin Gooch, and William Rodney Whitney.

Blake, Sue A. See David Wilbur Horn. Blake, William P., iodobromite in Ari-

zona, 1905, A., ii, 262.

Blakeley, Abraham G., and Edwin M. Chance, estimation of lead in alloys containing antimony and tin, 1911, A., ii, 659.

Blakey, W. See Barker North.

Blanc and Rameau, modification of Grimbert's process for the detection of urobilin in urines, 1909, A., ii,

detection of proteins in urine, 1909, A., ii, 840.

Blanc, A., ionised gases, 1908, A., ii, 753.

ionisation produced by phosphorus, 1911, A., ii, 455.

Blanc, Gian Alberto, radioactivity of mineral springs, 1905, A., ii. 221.

radioactive constituents of the deposits of Echaillon and Salins Moutiers, 1905, A., ii, 786.

new element presenting the radioactive characters of thorium, 1906, A., ii, 323.

disintegration constant of radiothor-

ium, 1907, A., ii, 324.
presence of thorium in the soil at

Rome, 1908, A., ii, 248.

relative quantities of ions produced in the atmosphere at Rome by the solid transformation products of radium and of thorium, and the quantity of thorium in the earth in that neighbourhood, 1908, A., ii, 452.

presence of thorium in rocks, 1909,

A., ii, 366.

thermal and ionising action of thorium in rocks, 1909, A., ii, 459.

Blanc, Gian Alberto, and Ottorino Angelucci, separation of radiothorium from salts of thorium, 1906, A., ii, 644.

Blanc, Gustave [Louis], synthesis of aadimethylglutaric acid and of aa-dimethyladipic acid, 1904, A., i, 369.

new synthesis of aa-dimethyladipic acid, 1904, A., i, 647. synthesis of BB-dimethyladipic acid,

1905, A., i, 15. the reduction of the anhydrides of dibasic acids, 1905, A., i, 115.

BB-dimethylbutyrolactone, 1905, A., i. 631.

synthesis of dibasic acids, 1905, A., i, 680, 681; 1908, A., i, 244, 245.

synthesis of dihydrocamphoric acid, 1906, A., i, 64.

a- and B-campholytic alcohols, 1906, A., i, 174.

Blanc, Gustave [Louis], synthesis of BBdimethyl- and BBE-trimethyl-pimelic acids, 1906, A., i, 399.

synthesis of camphor derivatives; isolaurolene and isolauronolic acid (8campholytic acid), 1906, A., i, 523.

synthesis of derivatives of cyclohexane: 3:3-dimethyl- and 3:3:6-trimethylcyclohexanones, 1907, A., i, 220.

conversion of substituted adipic and pimelic acids into cyclic ketones, 1907, A., i, 710.

action of some y- and 8-bromo-esters on ethyl cyanoacetate, malonate, and methylmalonate, 1907, A., i, 763.

syntheses in the camphor group: complete synthesis of campholene, 1907, A., i, 1058.

synthesis of \(\beta\)-campholenolactone; the lactone of 2:4-dimethylcyclopentane-2-olacetic acid, 1908, A., i, 20.

syntheses in the camphor series; complete synthesis of \(\beta\)-campholeno-

lactone, 1908, A., i, 171.

new cyclic ketones, 1908, A., i, 654. syntheses in the camphor group. I. isoLaurolene and isolauronolic acid (β-campholytic acid), 1909, A., i,

estimation of nitrites in waters, 1911,

A., ii, 930.

Blane, Gustave, and Marcel Desfontaines, migration of the methyl group in the molecule of camphor, 1903, A., i, 564.

some derivatives of racemic a-campholytic and a-campholenic acids,

1904, A., i, 366.

Blanc, Gustave, and Jocelyn Field Thorpe, Komppa's synthesis of camphoric acid, 1910, T., 836; P., 83; discussion, P., 84; 1911, T., 2010; P., 265.

Blanc, Gustave. See also Louis Bouveault and Albin Haller.

Blanc, Marius, tabular scheme for the detection of sugars and their derivatives in urine, 1912, A., ii, 698.

Blanchard, Arthur Alphonzo, decomposition of ammonium nitrite, 1903, A., ii, 18; 1905, A., ii, 237.

viscosity of solutions in relation to the constitution of the dissolved substance, 1904, A., ii, 805.

Blanchard, Arthur Alphonzo, and Harold B. Pushee, viscosity of solutions of the metal ammonia salts, 1912, A., ii, 236.

Blanchard, William Martin, chlorides of p-bromo-o-sulphobenzoic acid and some of their derivatives, 1904, A., i, 163.

Blanchard, William Martin, simple method of illustrating the relative conductivity of salts and acids in dilute solutions, 1912, A., ii, 446.

Blanchetière. See Alphonse Brissemoret. Blanck, Edwin, distilling apparatus for Kjeldahl's nitrogen process, 1904, A., ii, 444.

black soils of Legienen, Rössel, in East

Prussia, 1905, A., ii, 54.

assimilation and distribution of silica and potassium in tobacco plants, 1906, A., ii, 574.

calcium carbonate concretions, 1907,

A., ii, 295.

chemical and physical nature of red

soils, 1912, A., ii, 482.

composition of the clay obtained by the Schloesing-Grandeau method, 1912, A., ii, 483.

mica as source of potassium for plants, and its weathering, 1912, A., ii, 677.

Blanck, Edwin. See also Otto Lemmermann and Theodor Pfeiffer.

Blanck, Frederick Conrad. See Otto Folin and John Bishop Tingle.

Bland, Norman, William Henry Perkin, jun., and Robert Robinson, isooxyberberine, 1911, P., 59; 1912, T., 262.

Bland, Norman, and Jocelyn Field Thorpe, the chemistry of the glutaconic acids. Part III. Glutaconic acid and its B-alkyl derivatives, 1912, T., 856; P., 49.

the chemistry of the glutaconic acids. Part IV. The esters of the glutaconic acids, 1912, T., 871; P., 56, 70.

the chemistry of the aconitic acids. Part I. The labile modification of aconitic acid and the hydroxyanhydro-acid, 1912, T., 1490; P., 195.

the chemistry of the glutaconic acids. Part V. The preparation of esters of the labile acids, 1912, T., 1557; P.,

the chemistry of the glutaconic acids. VI. Conditions which confer stability on the trans-forms of the labile acids, 1912, T., 1739; P., 218.

the chemistry of the aconitic acids; preliminary note, 1912, P., 131.

Blangey Louis. See Eugen Bamberger and Victor Villiger.

Blank, Hugo, chlorination of fatty acids,

1905, A., i, 405.

Blank, Oskar, and Hermann Adr. Finkenbeiner, estimation of methyl alcohol in solutions of formaldehyde by means of chromic acid, 1906, A., ii, 399.

Blank, Paul. See Emil Fischer. Blankenberg, F. See Fritz Foerster. Blanksma, Jan Johannes, derivatives of 5-chloro-1:2-dinitrobenzene, A., i, 158.

influence of the CH3 group on substitution in the benzene nucleus, 1903,

A., i, 164.

bromination and nitration of certain derivatives of methylaniline and ethylaniline, 1903, A., i, 333.

1:2-dichloro-4:5-dinitrobenzene certain of its derivatives, 1903, A.,

bromination and nitration of certain derivatives of benzylaniline, 1903, A., i, 334.

constitution of van Heteren's chloronitroethoxybenzonitrile, 1903, A., i, 342.

nitration of s-dinitroanisole, 1903, A., i, 623.

intramolecular rearrangement of atoms in halogen acetanilides [acetylphenylchloroamines] and its velocity. II., 1903, A., ii, 137.

substitution in the benzene nucleus,

1904, A., i, 565.

haloid substitution in some nitro-halogenated substances, 1904, A., i, 566.

nitration of 1-methoxy-(ethoxy)-3chloro-(bromo)-6-nitrobenzene, 1904, A., i, 577.

trinitroveratrole, 1905, A., i. 277.

intramolecular oxidation of a thiol (SH) group joined to a benzene nucleus by a nitro-group in the orthoposition, 1905, A., i, 425.

nitration and reduction of s-dinitrophenetole, 1905, A., i, 431.

replacement of atoms or groups of atoms by hydrogen in aromatic compounds during reduction, 1905, A., i, 761.

nitration of s-nitro-m-xylene, 1906, A., i, 11.

introduction of halogen atoms into the benzene nucleus during the reduction of aromatic nitro-compounds, 1906, A., i, 345.

preparation of s-hexanitrodi-m-xylylamine, 1907, A., i, 123.

nitration of meta-substituted phenols, 1907, A., i, 126.

nitration of s-m-dichloro- and s-m-dibromo-nitrobenzene, 1908, A., i, 147.

2:3:4-trinitrophenetole and some of its derivatives, 1908, A., i, 157.

intramolecular rearrangement effected by fusion with potassium hydroxide; the action of fused potassium hydroxide on quinol and catechol, 1908, A., i, 262.

Blanksma, Jan Johannes, constitution of van Geuns' dinitromethoxybenzonitrile, 1908, A., i, 271.

reduction of aromatic nitro-compounds by sodium sulphide, 1908, A., i,

875.

preparation of 3-nitro-2-cyano-1-methoxybenzene, 3-nitro-2-cyano-1-ethoxybenzene, 4-nitro-2-cyano-1-ethoxybenzene, and 4-nitro-2-cyano-1-ethoxybenzene, 1908, A., i, 978.

nitration of 5-nitro-1:3-dimethoxy-

benzene, 1908, A., i, 979. derivatives of 2:3:4-trinitroanisole, 1909, A., i, 150.

2:5- and 4:5-dinitro-m-xylenes, 1909, A., i, 296.

bromination of the dinitroanilines, 1909, A., i, 297.

reversible substitution of alkyloxyl groups in the benzene ring, 1909, A., i, 378.

nitro-derivatives of 3:5-dibromotolu-

ene, 1909, A., i, 778.

acetylation with acetic anhydride and sulphuric acid, 1909, A., i, 779.

action of sodium disulphide on ringsubstituted p-nitrotoluenes, 1909, A., i, 936.

constitution of hydroxymethylfurfuraldehyde, 1910, A., i, 130.

dinitro-p-xylenes, 1910, A., i, 661. piperonylidene diacetate, 1910, A., i, 680.

the system phenylhydrazine-water, 1910, A., ii, 594.

some derivatives of 3:4:5-trinitro-2methoxytoluene, 1911, A., i, 39.

action of sodium disulphide on 4nitro-2-methoxytoluene, 1911, A., i, 62.

di-ω-hydroxy-2:5-dimethylfuran, 1911, A., i, 75.

action of sodium hydroxide on 5methylfurfuraldehyde, 1912, A., i, 291.

action of sodium methoxide on trinitroveratrole, 1912, A., i, 553.

preparation of halogen derivatives of benzaldehyde, 1912, A., i, 982.

Blanksma, Jan Johannes, and William Alberda van Ekenstein, sugars, 1908, A., i, 951.

Blanksma, Jan Johannes. See also William Alberda van Ekenstein and

Frans Maurits Jaeger.

Blanquies, (Mlle.) L., comparison of the a-rays produced by different radioactive substances, 1909, A., ii, 634. Blanquies, (Mile.) L., the constituents of the induced activity of actinium, 1910, A., ii, 768.

Blarez, Charles, and L. Chelle, volumetric estimation of sulphurous acid in wines [and food products], 1909, A., ii, 343.

Blasdale, Walter Charles, ceroptene, 1904, A., i, 81.

Californian minerals, 1904, A., ii, 420. essential oil of the Pacific Arbor vitæ, 1907, A., i, 630.

separation of calcium from magnesium, 1909, A., ii, 763.

an improved extraction apparatus, 1912, A., ii, 1090.

Blasdale, Walter Charles, and W. Cruess, conditions affecting the electrolytic estimation of copper, 1910, A., ii, 1112.

Blasdale, Walter Charles. See also Jacobus Henricus van't Hoff and George Davis Louderback.

Blasi, Armando. See Luigi Mascarelli. Blass, C., crystallographical and optical investigations of organic compounds, 1910, A., i, 614.

1910, A., i, 614.

Blattner, N. G., and J. Brasseur, estimation of arsenic in sulphuric and hydrochloric acids, 1904, A., ii, 291.

Blau, Albert. See Paul Cohn.

Blau, Edmund, p-hydroxymethyldeoxybenzoins, 1905, A., i, 905.

Blau, Georg. See Daniel Vorländer. Blau, H., surinamine, 1909, A., i, 51. Blau, H. See also Ernst Winterstein. Blau, J., tridecyl alcohol, 1905, A., i,

66.

Bleeck, Alfred William Gustav, jadeite in the Kachin Hills, Upper Burma, 1909, A., ii, 412.

Bleeker, Irving B., the effect of continued grinding on water of crystallisation, 1910, A., ii, 238.

Bleibtren, Max, new method of preparing glycocholic acid from ox-bile, 1903, A., i, 796.

micro-chemical detection of glycogen, 1909, A., ii, 355.

glycogen in the frog's ovary, 1910, A., ii, 628.

the behaviour of glycogen in the ovary of Rana fusca, 1911, A., ii, 811.

Bleier, Hugo. See Fritz Ullmann.
Bleisch, C., and P. Regensburger,

estimation of extract in malt, 1905, A., ii, 660.

valuation of barley, 1906, A., ii, 135. Bleyer, Benno, and K. Boshart, gravimetric estimation of glucinum, 1912, A., ii, 1211.

Bleyer, Benno, and A. Moormann, volumetric estimation of glucinum, 1912, A., ii, 491.

glueinum chromates, 1912, A., ii, 762. Bleyer, Benno, and Br. Müller, glucinum

arsenates, 1912, A., ii, 644.

Bleyer, Benno. See also Wilhelm Prandtl.

Blezinger, R. See Hermann Apitzsch. Blich, Albert. See Fritz Foerster.

Bliss, F. W. See Samuel Colville Lind. Bliss, H. J. W. See Samuel Auchmuty Tucker.

Blix, Martin, action of hydrogen sulphide on silicon tetrabromide in presence of aluminium bromide; formation of silicon thiourea from silicon thiobromide, 1904, A., ii, 119.

Blix, Martin, and Wilhelm Wirbelauer, silicon thiochloride, silicondi-imide, silicam, and silicon nitride, 1904, A.,

ii, 120.

Blix, Martin. See also Alfred Stock. Bloch, Armand, action of phenylcarbim-

ide on certain monohydric alcohols, 1904, A., i, 152, 236.

estimation of citral in lemon-grass oil, 1908, A., ii, 782.

Bloch, Armand. See also Timothée Klobb.

Bloch, Bruno, the source of uric acid in the blood in gout, 1907, A., ii, 563. Bloch, Bruno. See also Emil Abder-

halden. Bloch, Carl, and M. Hoffmann, soil

analysis, 1909, A., ii, 196. Bloch, Carl. See also Theodor Pfeiffer. Bloch, Ernst, the non-dependence of autolytic protein-cleavage on the pre-

sence of blood, 1909, A., ii, 1035. Bloch, Eugène, the emanation of phosphorus, 1903, A., ii, 206.

ionisation of phosphorus, 1904, A., ii, 117.

electric conductivity of phosphorus emanation and of freshly prepared gases, 1905, A., ii, 72.

influence of impurities on the photoelectric effect in liquids, 1909, A.,

ii, 282.

Bloch, Eugène. See also Léon Bloch.

Bloch, F. L. See Hermann Grossmann. Bloch, Ignaz, hydrogen persulphides. IV. Constitution of hydrogen disulphide and trisulphide, and the chemistry of sulphur compounds, 1908, A., ii, 580.

Bloch, Ignaz, and Fritz Höhn, hydrogen persulphides. I. Historical; crude hydrogen persulphide, 1908, A., ii,

579.

Bloch, Ignaz, and Fritz Höhn, hydrogen persulphides. II. Hydrogen trisulphide, 1908, A., ii, 579.

hydrogen persulphides. III. Hydrogen disulphide, 1908, A., ii, 579.

preparation of organic dithionic acids (carbithionic acids), 1910, A., i, 256.

Bloch, Ignaz, Fritz Höhn, and Günther Bugge, hydrogen persulphide. Aldehydes and hydrogen persulphide, 1911, A., i, 46.

Bloch, Ignaz. See also Günther Bugge and Fritz Höhn.

Bloch, Jacques. See Alphonse Seyewetz. Bloch, Léon, free path and number of electrons in metals, 1907, A., ii,

theory of absorption in gases, 1909, A., ii, 107.

and phosphorescence combustion flames of sulphur, 1909, A., ii, 395. ionisation by chemical means, 1909, A., ii, 781.

phosphorescent oxidation of arsenic, 1910, A., ii, 32.

chemical actions and ionisation by splashing, 1910, A., ii, 381; 1911, A., ii, 357, 456.

ionisation by the spraying (pulverisation) of liquids, 1910, A., ii, 480.

the ions and neutral particles present in certain gases when recently prepared, 1911, A., ii, 176.

Bloch, Léon, and Eugène Bloch, ionisation by phosphorus and phosphor-

escence, 1908, A., ii, 1032.

Bloch, Otto, the magnetisation of alloys of nickel and cobalt, 1912, A., ii,

Bloch, Otto. See also Pierre Weiss.

Bloch, Siegfried. See Heinrich Wieland. Bloch, Simon, secondary radiation in gases for high speed primary rays, 1912, A., ii, 718.

Block, Heinrich, change of volume accompanying the fusion of crystals; the thermal expansion of crystals and of their products of fusion, 1912, A., ii, 128.

Block, Walter, methods of determining the internal resistance of galvanic cells,

1907, A., ii, 222.

Blockey, John Reginald, and P. V. Mehd, estimation of sulphides in lime liquors, 1912, A., ii, 600

Blockey, John Reginald. See also Julius Berend Cohen and James

Gordon Parker.

Bloemendal, W. H., yellow colouring matter in Surinam greenheart, 1906, A., i, 873.

Bloemendal, W. H., argemone seeds from Curaçoa, 1906, A., ii, 482.

starch meal, 1907, A., ii, 288. estimation of fat in copra, 1907 A., ii, 723.

arsenic in the animal organism, 1909, A., ii, 76.

Blom, Axel, and Josef Tambor, 3methoxycoumaranoue, 1905, A., i, 916.

Blome, Walter H. See Julius Otto Schlotterbeck.

Blondeau, A., tables for converting percentages of alcohol by volume into percentages by weight, 1908, A., ii, 738.

gravimetric alcoholometry, 1908, A., ii,

990

Blondel, Maurice, platinum compounds, 1905, A., ii, 720.

Blondel, Maurice. See also Georges Urbain.

Blondlot, [Prosper] René, the property a large number of substances possess of projecting spontaneously and continuously a ponderable emanation, 1904, A., ii, 531.

action of magnetic or electric forces on the ponderable emanation: displacement of this emanation by air in motion, 1904, A., ii, 602.

improvements in the photographic method for recording the action of n-rays on a small electric spark, 1904, A., ii, 604.

a new method of observing n-rays and analogous agents, 1904, A., ii, 604.

Blood, Alice Frances, the erepsin of the cabbage (Brassica oleracea), 1910, A., i, 796.

Blood, Alice Frances. See also Lafayette Benedict Mendel.

Bloor, W. R., clay analysis; residue left
after volatilisation of the silica with
hydrofluoric and sulphuric acids,
1908, A., ii, 71.

carbohydrate esters of higher fatty acids, 1910, A., i. 538.

acids, 1910, A., i, 538. estimation of "saccharin" in urine, 1911, A., ii, 1011.

carbohydrate esters of the higher fatty acids. III. Mannitol esters of lauric acids, 1912, A., i, 532.

carbohydrate esters of the higher fatty acids. II. Mannitol esters of stearic acid, 1912, A., ii, 365.

studies on malic acid. I. Transformation of malic acid into sugar by the tissues of the maple (Acer saccharinum), 1912, A., ii, 478. fat absorption, 1912, A., ii, 576.

Blough, Earl. See Earnest Stanley Shepherd.

Blount, Bertram, analysis of Portland cement, 1904, A., ii, 681.

electric furnaces for laboratory use, 1905, A., ii, 238.

an instance of choke damp free from carbon dioxide, 1906, A., ii, 280.

Blount, Bertram, and Arthur Garfield Levy, use of quartz combustion tubes, especially for the direct estimation of carbon in steel, 1909, A., ii, 346.

Blount, Bertram. See also William

Harry Stanger.

Bloxam, William Popplewell, our present knowledge of the chemistry of indigo, 1904, P., 159; 1905, T., 974.

analysis of indigo, 1906, A., ii, 819.

Bloxam, William Popplewell, and

Arthur George Perkin, indirubin. Part I., 1910, T., 1460; P., 168. Bloxam, William Popplewell. See also Rufus Gaunt, Ian Quiller Orchardson, Arthur George Perkin, and Frederick

Thomas. Blümel, Waldemar. See Felix Benjamin

Ahrens. Blümmer, Erwin. See Wilhelm Stein-

Blum, L., alkaline reaction of strontium and calcium carbonates, 1905, A., ii,

detection of small quantities of barium and strontium, 1905, A., ii,

estimation of manganese as sulphide in ores containing barium, 1905, A., ii, 206.

detection of ferrous oxide in presence of ferric oxide, 1905, A., ii, 206.

detection of stannous tin, 1905, A., ii, 209.

Blum, Léon, the fate of cystine in the body, 1904, A., ii, 193.

antitoxin formation in autolysis, 1904, A., ii, 356.

the degradation of aromatic substances in the human organism, 1908, A., ii, 1052

the degradation of fatty acids in the organism and the mutual relations of the "acetone substances," 1910, A., ii, 520.

the behaviour of p-aminophenylalanine in alcaptonuria, 1910, A., ii, 733.

Blum, Léon, and Ernst Fuld, new method of estimating reunin and the behaviour of human gastric juice under normal and pathological conditions, 1906, A., ii, 207. Blum, Léon, and Max Koppel, formation of methyl propyl ketone from a-ethylbutyric acid in the animal organism, 1912, A., ii, 188. Blum, Léon. See also Julius Baer.

Blum, William, derivatives of complex inorganic acids: phosphovanadiomolybdates, 1909, A., ii, 54.

hydrolysis of sodium oxalate and its influence on the test for neutrality,

1912, A., ii, 294.

estimation of manganese as sulphate and by the sodium bismuthate method, 1912, A., ii, 1214.

William. See also William

Francis Hillebrand.

Blumann, Arnold, and Otto Zeitschel, oxidation of fenchyl alcohol, 1909, A., i, 658.

degradation of nerol and its constitu-

tion, 1911, A., i, 892.

Blumann, Arnold. See also Wallach.

Blumberg, Max, and Stanislaus von Kostanecki, 7:8-dihydroxy-2-methylchromone, 1903, A., i, 644.

See Emil Abder-Blumberg, Paul. halden and Otto Diels.

Blume, Ernst. See Max Busch.

Blume, Gustav, and Hermann Klöffler, simple preparation of pure ethylaniline, 1905, A., i, 875.

Blume, Gustav. See also Max Busch. Blume, Richard. See August Michaelis. Blumenfeld, E., 1907, A., i, 409. β-o-tolylethylamine,

Blumenreuter, Carl. See Franz Kunckell.

Blumenthal, Alfred. See Carl Adam Bischoff.

Blumenthal, Ferdinand, proteins of the body during inanition, 1904, A., ii,

lysol poisoning, 1906, A., ii, 879. constitution and toxicity of various substances of the atoxyl group,

1909, A., ii, 421.

the detection and the course of excretion of atoxyl in urine; observations on the paper by Lockemann and Paucke, 1909, A., ii, 421.

atoxyl. IV., 1910, A., ii, 982. physiological action of aromatic mercury compounds. I., 1911, A., ii,

biochemical investigation of aromatic mercury compounds, 1911, A., ii, 1017.

Blumenthal, Ferdinand, and Friedrich Herschmann, atoxyl and aniline poisoning, 1908, A., ii, 613.

Blumenthal, Ferdinand, and Friedrich Herschmann, biochemical investigation of p-iodophenylarsinic 1908, A., ii, 878.

Blumenthal, Ferdinand, Friedrich Herschmann, and Ernst Jacoby, the detection and method of formation of aromatic substances in the organism. Detection of indole and scatole, 1909, A., ii, 1059.

Blumenthal, Ferdinand, and Ernst Jacoby, cresol poisoning, 1908, A.,

ii, 55.

atoxyl. III., 1909, A., ii, 255.

the detection and formation of aromatic substances in the body. II. The behaviour of indole and scatole in rabbits, 1911, A., ii, 58.

Blumenthal, Ferdinand, and Emanuel Navassart, atoxyl. V., 1911, A., ii,

Blumenthal, Ferdinand, and Kurt Oppenheim, the influence of potassium iodide on the accumulation of mercury in the liver, 1911, A., ii, 1014.

aromatic mercury compounds.

1912, A., ii, 374.

Blumenthal, Ferdinand, and Hans Wolff, fermentation of milk, 1906, A., ii, 879.

Blumenthal, Ferdinand. See also Peter Bergell.

Blumenthal, Franz, assimilation limits of sugars, 1905, A., ii, 333.

Blumenthal, Herbert. See Emil Fischer and Alfred Stock.

Blumenthal, Philip Lee. See Philip Embury Browning.

Blumenthal, Richard. See Iwan Kop-

Blumer, A., the electrolytic preparation of persulphates, 1912, A., ii, 41.

Blunt, W. A., reaction for nitrites, 1904, A., ii, 84.

Blyth, Meredith Wynter, commercial carbolic acid and disinfecting powders, 1908, A., ii, 328.

Blyther, Donald Francis. See (Sir) William Augustus Tilden.

Blythswood, (Lord), and H. S. Allen, Dewar's method of producing high vacua, 1905, A., ii, 694.

Boas, Kurt, detection of adrenaline,

1909, A., ii, 628.

Bobertag, Otto, Karl Feist, and Hermann Waldemar Fischer, freezing of hydrosols, 1908, A., ii, 1024.

Bobertag, Otto. See also Hermann Waldemar Fischer and Ladenburg.

Bobiloff, Waldemar. See Karl Löffler.

Bobrzynski, J. See Carl Engler.

Bocchi, Ottorino, urochrome, 1908, A., i, 69.

Bocci, Balduino, simplification of enzymes by combined autolysis and dialysis, 1912, A., ii, 777.

Bock, A., separation of constituents of alloys, 1906, A., ii, 24.

Bock, Fr., the electrical reduction of aluminium, 1909, A., ii, 671. Bock, Johannes, the action of cobalt-

rhodium and chromium-ammonium compounds on the animal organism, 1905, A., ii, 49. excretion of the alkali metals in

purine diuresis, 1911, A., ii, 631.

Bock, Jules, estimation of caoutchouc, 1912, A., ii, 301.

Bock, Karl (Jena). See Paul Duden and Eduard Vongerichten.

Bock, Karl (Strassburg). See Rudolph

Fittig.
Bock, Paul (Braunschweig). See Richard Meyer.

Bock, Paul (Jena). See Ludwig Wolff.

Bockisch, F. See Adolf Grün.

Theodor Bockmühl, August. See Curtius.

Boddaert, R. J. See Arthur Fischer. Bode, A. See Stephan Engel.

Bode, Adolf. See Richard Willstätter.

Bode, Georg. See Martin Freund. Bode, Günther, behaviour of ice in the

ultra-red spectrum, 1909, A., ii, 844. Bode, Konrad. See Max Scholtz.

Bode, Kurt. See Friedrich Wilhelm Semmler.

Bodecker, M. von. See Daniel Vorländer.

Boden, H. See Wilhelm Windisch.

Bodenstein, [Ernst August] Max, catalysis and catalysers, 1903, A., ii, 66.

heterogeneous catalytic reactions. Catalysis of oxy-hydrogen gas by platinum, 1904, A., ii, 245.

catalytic decomposition of antimony hydride, 1904, A., ii, 413.

reaction velocity and free energy, 1904, A., ii, 717.

heterogeneous catalytic reactions. Autocatalysis in heterogeneous systems, 1904, A., ii, 719.

decomposition of hydrogen iodide in light, 1908, A., ii, 172.

Bodenstein, Max, and Georges Dunant, dissociation of carbonyl chloride, 1908, A., ii, 178.

Bodenstein, Max, and Colin Garfield Fink, heterogeneous catalytic IV. reactions. Kinetics of the sulphuric contact 1907, A., ii, 749.

heterogeneous catalytic reactions. General remarks, 1907, A., ii, 750.

Bodenstein, Max, and Arthur Geiger, dissociation of hydrogen bromide and hydrogen chloride, 1904, A., ii, 717. Bodenstein, Max, and Walther Karo,

slow combustion of sulphur, 1910, A.,

ii, 1051.

Bodenstein, Max, and Massao Katayama, the dissociation of sulphuric acid and

of nitrogen dioxide, 1909, A., ii, 468. Bodenstein, Max, and Franz Kranen-dieck, decomposition of sulphur trioxide in quartz tubes, 1912, A., ii, 747

velocity of decomposition of ammonia in quartz glass, 1912, A., ii, 1155. Bodenstein, Max, and Samuel Colville

Lind, velocity of formation of hydrogen bromide from its component elements, 1907, A., ii, 76.

Bodenstein, Max, and Friedrich Ohlmer, heterogeneous catalytic reactions. III. Catalytic influence of silica on the reaction $2CO + O_2 = 2CO_2$, 1905, A., ii, 692.

Bodenstein, Max, and Wilhelm Pohl, measurements of equilibrium in the contact process of preparing sulphur

trioxide, 1905, A., ii, 581.

Bodenstein, Max, and Tatsuji Suzuki, dissociation of ferric sulphate, 1910,

A., ii, 1042.

Bodenstein, Max, and Karl Wolgast, reaction velocity in gases which are in a state of motion, 1908, A., ii, 162.

Bodenstein, Max. See also Gunnar Starck and Alfred Stock.

Guido, theory Bodländer. of some technical processes of reduction and oxidation, 1903, A., ii, 59.

complex metallic compounds, 1904, A., ii, 122.

order of magnitude of the time of formation of complex molecules, equilibrium constants, and atomic dimensions, 1904, A., ii, 713.

Bodlander, Guido, and Wilhelm Eberlein, composition of silver compounds of methylamine and ethylamine existing in solution, 1904, A., i, 145. complex silver salts, 1904, A., ii, 401.

Bodländer, Guido, and Kasimir S. Idasbehaviour of zewski, electrolytic copper sulphide, 1905, A., ii, 390.

Bodländer, Guido, and Karl von Köppen, the rate of formation of sulphur trioxide in presence of platinum, 1903, A., ii, 639.

Bodländer, Guido, and Richard Lucas, causticising [of potassium carbonate],

1905, A., ii, 634

Bodmer, Ernst. See Eugène Grand-

mougin.

Bodmer-Beder, Arnold, stone implements and their rough material from Swiss lake dwellings, 1903, A., ii,

Bodong, Andreas, hirudin, 1905, A., ii,

Bodroux, Fernand, method of transforming monochloro- and monobromo-derivatives of hydrocarbons into monoiodo-derivatives, 1903, A.,

method of forming phenols, 1903, A.,

i, 249.

synthesis of anisic and of p-ethoxybenzoic acids, 1903, A., i, 344.

'derivatives of 2-hydroxy-anaphthoic acid, 1903, A., i, 420.

organic-metallic derivatives of nuclear dihaloid derivatives of aromatic hydrocarbons, 1903, A., i, 592.

synthesis of dihalogen derivatives of benzophenone, 1904, A., i, 64.

oxidation of mixed organo-magnesium compounds; synthesis of phenols, 1904, A., i, 156.

organo-magnesium derivatives of monobromophenolic ethers: action of carbon dioxide, 1904, A., i, 166.

synthesis of aromatic aldehydes, 1904,

A., i, 250.

some organo-magnesium derivatives of dihalogen substituted aromatic hydrocarbons; action of carbon dioxide, 1904, A., i, 276.

a general method of synthesing alde-

hydes, 1904, A., i, 421.

new method of preparing anilides, 1904, A., i, 662.

mode of formation of monosubstituted urethane derivatives, 1905, A., i, 427.

action of chloroacetates on magnesium haloid derivatives of aniline, 1905, A., i, 585.

action of ethyl chloroacetate on the magnesium halogen compound of o-toluidine, 1905, A., i, 643.

action of esters of certain dibasic acids on magnesium halogen derivatives of primary aromatic amines, 1906, A., i, 240.

rapid preparation of hydriodic acid solutions, 1906, A., ii, 156.

Bodroux, Fernand, action of esters of monobasic aliphatic acids on the sodium derivative of phenylacetonitrile, 1910, A., i, 623.

two aromatic acids of the series $C_nH_{2n-8}O_2$, 1910, A., i, 672.

action of ethereal salts on the monosodium derivative of phenylacetoni-

trile, 1911, A., i, 129.

action of acid chlorides and anhydrides and of ketones on the sodium derivative of phenylacetonitrile, 1911, A., i, 545.

action of anisaldehyde and piperonaldehyde on the sodium derivative of phenylacetonitrile, 1911, A., i,

Bodroux, Fernand, and Felix Taboury, transformation of the esters of abromo-fatty acids into esters of a-iodo-fatty acids, 1907, A., i, 583.

action of some esters of a-iodo-fatty acids on magnesium aniline and o-toluidine iodides, 1907, A., i, 754.

action of calcium carbide on some ketones, 1908, A., i, 854; 1909, A., i, 766.

action of some organo-magnesium compounds on a-methylpentan.δ-ones, 1909, A., i, 546.

synthesis of unsaturated aliphatic ketones, 1909, A., i, 698.

action of bromine on 8-methylnaphthalene in the presence of aluminium

bromide, 1909, A., i, 707. syntheses effected by phenylaceto-nitrile, 1910, A., i, 257.

synthesis of aromatic nitriles, 1910, A., i, 482.

new method of alkylation with phenylacetonitrile; alkylation of nitriles of the formula CHPhR CN, 1910. A., i, 557.

action of benzaldehyde on the monosodium derivative of phenylacetonitrile, 1910, A., i, 622.

bromination of some hydroaromatic

compounds, 1911, A., i, 533. bromination of cyclohexane, 1911, A., i, 622.

action of bromine in presence of aluminium bromide on cyclohexanol and cyclohexanone, 1911, A., i, 779.

action of bromine in presence of aluminium bromide on the methylcyclohexanols, 1912, A., i, 253.

bromination of some hydroaromatic compounds, 1912, A., i, 546.

bromination of cyclohexanone and cyclohexanol, 1912, A., i, 567.

Böck, Friedrich, the alkylation of anthragallol, 1903, A., i, 266.

colloidal metals and other inorganic colloids, 1903, A., ii, 416.

anthragallolamide [2-amino-1:3-dihydroxyanthraquinone], 1905, A., i,

Boeck, P. A., new form of extraction thimble, 1912, A., ii, 1090.

Böcker, Emil. See Roland Scholl.

Böcker, Erich, ethereal oils free from terpenes and sesquiterpenes, 1910, A., i, 273.

Böcker, Erich, and Alfred Hahn, new constituent of angelica root oil, 1911, A., i, 313.

essential oil of the dwarf pine, 1911,

A., i, 549.

Böcker, Erich. See also Walther Borsche and Otto Wallach.

Böcker, Rudolf. See Richard Anschütz and Otto Schmidt.

Böcker, Theodor. See Otto Wallach.

Böckh, Hugo, and Koloman Emszt, janosite, a new hydrated normal ferric sulphate, 1905, A., ii, 536.

Böcking, Alex. See Otto Diels.

Böddener, K. H., and Bernhard Tollens, arabonic acid, 1910, A., i, 460.

the carbohydrates of white pepper,

1911, A., ii, 64.

a modification of the furfuraldehyde method of estimating pentosans, 1911, A., ii, 75.

Boedecker, E. See Adolf Grün.

Boedecker, Friedrich. See Otto Wallach. Boedke, Paul, theory of the saturation phenomena of binary mixtures, 1904, A., ii, 542.

Bödtker, Eyvind, formation of chloroanilines, 1904, A., i, 570.

butylbenzenes, 1904, A., i, 801.

cystinuria, 1905, A., ii, 741.

adipanilide, 1906, A., i, 827; 1907, A., i, 27.

derivatives of tert.-butylbenzene, 1906, A., i, 942.

derivatives of menthone, 1907, A., i,

analysis of Norwegian pyrites, 1907, A., ii, 277.

new catalytic effect of aluminium chloride, 1908, A., i, 621.

Grignard's reagent and the Barbier-Grignard reaction, 1910, A., i, 214.

estimation of free acids in fats, 1911, A., ii, 666.

the melting point of oxalic acid, 1912, A., i, 160.

barium hippurate, 1912, A., i, 189.

Bödtker, Eyvind, oxidation products of sebacic acid, 1912, A., i, 237. derivatives of menthone, 1912, A., i,

Böes, W. E. See Alfred Werner.

Böeseken, Jacob, Friedel and Crafts' reaction, 1903, A., i, 617; 1904, A., i, 384; 1905, A., i, 268, 424; 1911, A., i, 531.

action of anhydrous ferric chloride in the Friedel and Crafts' synthesis,

1903, A., i, 626.

Friedel and Crafts' reaction. V. Formation of dichlorodiphenylmethane by the action of carbon tetrachloride on benzene, 1905, A., i, 423.

Friedel and Crafts' reaction. Action of sulphur or sulphur chlorides on benzene in presence of aluminium chloride, 1905, A., i,

2:4:2':4'-tetramethylbenzophenone,

1907, A., i, 855.

catalytic reactions connected with the transformation of yellow phosphorus into the red modification, 1907, A., ii, 343.

solidifying point and density of white phosphorus, 1907, A., ii, 760.

Friedel and Crafts' reaction. Successive substitution of the atoms of chlorine in carbon tetrachloride by aromatic groups, 1908, A., i, 189.

Friedel and Crafts' reaction. Condensation of the dihalogen derivatives of benzene with acetyl and benzoyl chlorides under the influence of aluminium chloride, 1908, A., i, 189.

catalytic phenomena, 1910, A., i, 152. modification of the phenylhydrazine

reaction, 1910, A., ii, 1118.

action of bromine on diphenyl sulphide, diphenyl sulphoxide, and diphenylsulphone, 1911, A., i, 41.

catalysis, 1911, A., ii, 384.

action of sulphur on aromatic sul-

phones, 1911, A., i, 533. catalytic action. V. Friedel and Crafts reaction, 1912, A., i, 65.

the configuration of benzene, mechanism of benzene substitution, and the contrast between the formation of para-, ortho-, and of metasubstitution products, 1912, A., i, 430.

a method for the exact determination of the position of the hydroxyl groups in polyhydroxy-compounds, 1912, A., i, 742.

Böeseken, Jacob, affinity and valency, 1912, A., ii, 443.

the configuration of ring systems. II. Annular tension, 1912, A., ii, 444.

Böeseken, Jacob, and M. C. Bastet, configuration of the dinitrosoacyls (diacylglyoxime peroxides), 1912, A.,

Böeseken, Jacob, and H. Couvert, products of the action of the primary amines on the dinitrosacyls [glyoxime-

peroxides], 1910, A., i, 643.

Böeseken, Jacob, and D. A. Wittop
Koning, Friedel and Crafts' reaction. XI. Action of sulphur monochloride on benzene, chlorobenzene, and toluene, 1911, A., i, 532.

Böeseken, Jacob, and (Mile.) J. Langezaal, catalytic action. IV. Comparison of the action of various catalytic agents. II. Acetylation of carbamide,

1911, A., i, 22.

Böeseken, Jacob, and D. P. Ross van Lennep, action of primary amines on the dinitrosoacyls (glyoxime peroxides or diacylfuroxans), III., 1912, A., i, 723.

Böeseken, Jacob, (Mlle.) Lichtenbelt, Milo, and van Marlen, action of hydrogen peroxide on a-diketones,

1911, A., i, 523.

Böeseken, Jacob, and H. J. Prins, synthesis of as-heptachloropropane from tetrachloroethylene and chloroform with the co-operation of aluminium chloride, 1911, A., i, 173.

Böeseken, Jacob, and A. van Rossem, configuration of ring systems, 1912,

A., ii, 147.

Böeseken, Jacob, and A. Schweizer, the velocity of the ring opening in connexion with the composition of the unsaturated ring systems, 1911, A., ii, 197.

Böeseken, Jacob, A. Schweizer, and G. F. van der Want, the velocity of hydration of some cyclic acid anhydrides, 1912, A., ii, 243.

the configuration of ring systems. III. The velocity of hydration of some cyclic acid anhydrides, 1912, A., ii, 444.

Böeseken, Jacob, and H. J. Waterman, a biochemical method of preparation of l-tartaric acid, 1912, A., i, 748.

the action of some benzene derivatives on the development of Penicillium glaucum, 1912, A., ii, 283.

a biochemical method for the determination of small quantities of salicylic acid in the presence of an excess of p-hydroxybenzoic acid, 1912, A., ii, 306.

Böeseken, Jacob, and H. J. Waterman, the action of some carbon derivatives on the development of Penicillium glaucum and their retarding action in connexion with solubility in water and in oil, 1912, A., ii, 477.

action of substances readily soluble in water, but not soluble in oil, on the growth of the Penicillium glaucum,

1912, A., ii, 591.

the protoplasmic membrane and the significance of surface tension in the action of water soluble substances on the organism, 1912, A., ii, 902.

poisonous properties of methyl alcohol,

1912, A., ii, 968.

Boegemann, Max. See Carl Dietrich Harries and Otto Stark.

Böggild, O. B., erikite and schizolite from Greenland, 1904, A., ii, 49. reverite from Greenland, 1908, A., ii,

See Richard Lorenz.

Böhm, C. Richard, testing of Cerium oxalicum medicinale, 1903, A., ii,

separation of the cerite elements by means of chromic acid, 1903, A., ii, 149.

separation of cerium by means of potassium permanganate, 1904, A., ii,

separation of praseodymium, 1904, A., ii, 175.

Böhm, Egon, fluorides of the heavy metals, 1905, A., ii, 249.

quantitative estimation of fluorine in fluorides, 1907, A., ii, 576.

Boehm, Karl. See Karl Windisch. Boehm, Paul. See Leon Asher.

Böhm, Rudolf [Albert Martin], methylene compounds of the phloroglucinol series, 1904, A., i, 403.

flavaspidic acid, 1904, A., i, 406.

aspidin, 1904, A., i, 407. phloraspin, 1904, A., i, 409.

reduction of formylisobutaldol and its oxime, 1907, A., i, 15.

action of curarine and allied substances. 1910, A., ii, 986.

preparation of curarine, 1911, A., i, 154. the chemistry of the contents of the intestine, 1911, A., ii, 749.

Boehm, Rudolf, and Konrad Kubler.

"Kawar" root, 1909, A., i, 41.
Boehme, Alfred. See Hugo Simonis.

Böhme, Arthur, action of camphor on the frog's heart poisoned with chloral hydrate, 1905, A., ii, 410.

Böhme, Arthur, nitrite poisoning after the internal administration of bismuth subnitrate, 1908, A., ii, 55.

Böhme, Erich, preservation and action of the nitrogen of urine, 1905, A., ii, 477.

Böhme, Richard, lichesterinic acid, 1903, A., i, 316.

estimation of petroleum, petrol distillates, and benzene in oil of turpentine, oil of pine, and turpentine substitutes, 1906, A., ii, 583.

Böhm-Wendt, Cacilia, ionisation of gases and vapours caused by polonium rays,

1904, A., ii, 694.

Boehncke, Karl Ernest, the relations between the sugar-content of nutrient media and nitrogen metabolism by bacteria, 1911, A., ii, 638. Boehner, Reginald. See Emil Fischer.

Boehringer & Söhne, C. F., electrolytic

reduction of oximes to amines, 1903, A., i, 550.

preparation of thioxanthine, 1903, A., i, 740.

preparation of xanthine, 1903, A., i,

868. electrolytic preparation of hydroxylamine, 1903, A., ii, 287.

preparation of chlorotheophylline, 1904, A., i, 188.

preparation of 8-mono-, di-, and trichloromethylxanthines, 1904, A, i,

[8-trichloromethyl-7-chloromethyl-1:3-dimethylxanthine], 1904, A., i,

preparation of xanthine derivatives, 1904, A., i, 686.

preparation of 3:8-dichlorocaffeine, 1904, A., i, 824.

preparation of 8-xanthinecarboxylic

acids, 1904, A., i, 949. preparation of 7':8-dichlorocaffeine, 1904, A., i, 950.

electrolytic preparation of azo-dyes, 1904, A., i, 953.

8-aminoparaxanthine and its derivatives, 1905, A., i, 230.

8-aminotheophylline and its alkyl and aryl derivatives, 1905, A., i,

preparation of aminoguanidine from nitroguanidine, 1906, A., i, 637.

electrolytic production of saturated acids and esters from the corresponding unsaturated compounds, 1908, A., i, 122.

.[preparation of barbituric acid and its 5-mono- and di-alkyl derivatives], 1908, A., i, 464.

Boehringer & Söhne, C. F., preparation of salicylosalicylic [o-salicyloxybenzoic] acid, 1909, A., i, 803; 1910, A., i, 386.

preparation of indolinones from β-acylm-tolylhydrazide, 1910, A., i, 428.

preparation of neutral phenolic esters of diglycollic acid, 1910, A., i, 732. preparation of narcotics [glyceryl ethers], 1911, A., i, 102.

preparation of glycol monosalicylate.

1911, A., i, 130. preparation of oxalates from alkali formates, 1911, A., i, 419.

preparation of diglycollic acid esters of phenols and phenolic derivatives, 1911, A., i, 947.

preparation of acyl derivatives of osalicyloxybenzoic acids, 1911, A., i,

986.

preparation of diglycollic esters of quinine, 1911, A., i, 1011.

preparation of mercury derivatives of indoles, 1912, A., i, 64.

preparation of arsinic acids of the indole series, 1912, A., i, 523.

Boehringer, Rudolf. See Fritz Fichter. Boeke, Hendrik Enno, mixed crystals of anhydrous sodium sulphate, tungstate, and molybdate, 1906, A., ii,

behaviour of barium and calcium carbonates at high temperatures, 1906, A., ii, 753.

abnormal depression of the transition temperature in the case of mixed crystals, 1906, A., ii, 830.

physico-chemical and mineralogical investigations of the occurrence of bromine and iodine in the potassium salt deposits, 1908, A., ii, 505.

rinneite, 1909, A., ii, 153.

artificial preparation of rinneite on the basis of its solubility diagram, 1908, A., ii, 582.

graphic representation of the results of van't Hoff's researches on "the formation of oceanic salt deposits," 1910, A., ii, 290.

iron-salts in the potash-salt deposits, 1911, A., ii, 293.

fusion and inversion of calcium carbon-

ate, 1912, A., ii, 760. Boeke, Hendrik Enno. See also Fritz

Rinne. Boekelman, W. A., and J. Ph. Staal, excretion of calcium in the urine, 1907, A., ii, 375.

Boekhout, Fritz Willem Jacob, a new mercury air-pump, 1904, A., ii. 477.

Böklen, Emil. See Wilhelm Wislicenus.

Bökman, G. See Julius Sand.

Böllert, Mathias. See Conrad Willgerodt.

Bömer, Alois, and Gustav Heimsoth, glycerides of fatty acids. II. Occurrence of the mixed glycerides of palmitic and stearic acids in mutton tallow, 1909, A., i, 284.

Bömer, Alois, and R. Limprich, glycerides of fatty acids. III. Heptadecoic acid and its triglyceride, 1912, A., i, 600

Bömer, Alois, A. Schemm, and Gustav Heimsoth, glycerides of fatty acids. I. Occurrence of tristearin in beef and mutton tallow, 1907, A., i, 820.

Boening, Carl, detection of albumin and mercury in urine, 1909, A., ii, 451.

Bönitsch, Gottlieb. See Fritz Reitzenstein.

Boennecke, A. See Karl Auwers.

Bönninger, Max, the substitution of bromine by chlorine in the animal body, 1908, A., ii, 208.

further investigations on the substitution of chlorine by bromine in the animal organism, with a contribution to the subject of the permeability of the blood-corpuscles, 1910, A., ii, 421.

Bönninger, Max, and Leo Mohr, metabolism in inanition. I. Acid formation,

1907, A., ii, 282.

Boericke, Felix, electromotive behaviour of bromine and the anodic potential in the electrolysis of neutral solutions of potassium bromide, 1905, A., ii, 992.

Boeris, Giovanni, crystallographic examination of some organic additive compounds, 1911, A., i, 290, 469.

Börnstein, Ernst [Gustav], catechol from coal-tar, 1903, A., i, 166.

observations on coal tars, 1906, A., i, 414.

rearrangement in the quinone group, 1910, A., i, 779.

Börsch, Ludwig, band spectrum of barium and the structure of the bands in the compound spectra of barium halogen compounds, 1909, A., ii, 775.

Boes, Johannes, sulphone of dicyclopentadiene, 1903, A., i, 20.

thionaphthen contained in brown-coal tar, 1903, A., i, 50.

tetrahydronaphthalene contained in coal-tar, 1903, A., i, 161.

identification of albumins, 1903, A., i, 214,

Boes, Johannes, trimethylcoumarone, 1907, A., i, 765.

preparation of pure indene, 1908, A., i, 410.

coumaroneglycol, 1908, A., i, 444.

1- and 2-methylcoumarone, 1909, A., i, 42.

Boesler, Walter. See Otto Fischer.

Boeters, Oskar. See Richard Wolffen-

Böttcher, Bruno, and Stefanie Horowitz, rearrangement of quinine by sulphuric seid, 1911, A., i, 1011; 1912, A., i, 717.

Böttcher, Bruno. See also Zdenko Hanns Skraup.

Böttcher, Karl, dialkylmalonamides, 1906, A., i, 340, 405.

new synthesis of adrenaline and allied compounds, 1909, A., i, 152.

Böttcher, Karl. See also Theodor Zincke.

Bötteher, Oskar, action of phosphoric acid in different phosphates, 1903, A., ii, 750.

estimation of citrate-soluble phosphoric acid in basic slags, 1904, A., ii, 148.

activity of the phosphoric acid in various phosphates, 1904, A., ii, 510.

can the availability of bone meal phosphoric acid be increased by application of ammonium sulphate? 1907, A., ii, 295.

Böttcher, Paula. See Josef Herzig.

Boettcher, Th., and Hans Vogt, the time relations in the course of protein decomposition with different diets, 1909, A., ii, 817.

Bötteher, Willy. See Alfred Stock. Böttger, Wilhelm, researches on the

Böttger, Wilhelm, researches on the solubility of sparingly soluble salts, 1904, A., ii, 241.

solubility of sparingly soluble substances. II. Solubility of silver chloride, bromide, and thiocyanate at 100°, 1906, A., ii, 656.

detection of chlorides in the presence of complex cyanides and other halogenides, 1905, A., ii, 612.

the mercury cathode, 1909, A., ii, 619.

criteria for the determination of the sensitiveness of precipitation reactions, 1910, A., ii, 195.

decomposition of carbonates by heating with sodium metaphosphate, 1910, A., ii, 753. Böttger, Wilhelm, and Walter Pollatz. estimation of lead as oxalate, 1909, A., ii, 268.

Bötticher, Hans, separation of the metals of the ammonium sulphide group, especially in presence of nickel and cobalt, 1904, A., ii, 293.

a new apparatus for the estimation of the volatile acids in wine, 1907, A.,

Boetzelen, Ernst. See Theodor Curtius. Bogajewsky, G. See W. Ustjanzeff.

Bogdan, Petru, influence of foreign substances on the solubility of phenylthiocarbamide and of boric acid in water, 1903, A., ii, 532.

the influence of non-electrolytes on the vapour tension of acetic acid in

solution, 1904, A., ii, 109.

dissociation of nitric acid, 1906, A.,

polymerisation of liquids, 1906, A.,

ii, 274. dissociation of nitric acid in mixtures of water and ether, 1906, A., ii, 649.

van der Waals' equation and the liquid state, 1907, A., ii, 153.

conductivity of hydrochloric nitric acids in aqueous solution, 1907, A., ii, 734.

liquids considered as molecular complexes, 1912, A., ii, 545.

Bogdan, Stefan, use of lead dioxide in analysis, 1903, A., ii, 576.

Bogdan, Stefan. See also Philippe Auguste Guye and Adrien Jaquerod. Bogdanoff, Elly A., production of fat

from proteins; estimation of fat, 1908, A., ii, 206.

Bogel, Hans. See Conrad Willgerodt. Bogen, Heinrich, psychical secretion of

the stomach, 1907, A., ii, 280. ogert, Marston Taylor, n n-heptyl thiocyanate and some new alkyl esters of dithiocarbamic acid, 1903, A., i, 404.

instability of alloxan, 1910, A., i, 466. preparation of 2:4-diaminoisophthalic acid and derivatives, 1911, A., i, 983.

Bogert, Marston Taylor, Carl Gustave Amend, and Victor John Chambers, quinazolines. XXV. Synthesis of 6and 7-amino-2-methyl-4-quinazolones from 4- and 5-acetylaminoacetylanthranils, 1910, A., i, 893.

Bogert, Marston Taylor, and George Denton Beal, dihydroquinazolines. XXIX. Further study of the stilbazoles, hydrazones, and Schiff bases of the 4-dihydroquinazolone group, 1912,

A., i, 393.

Bogert, Marston Taylor, George Denton Beal, and Carl Gustave Amend, quinazolines. XXVI. Synthesis of some stilbazoles, hydrazones, and Schiff bases in the 4-quinazolone group, 1911, A., i, 162.

Bogert, Marston Taylor, and Hal Truman Beans, m-aminobenzonitrile and some of its derivatives, 1904, A., i,

Bogert, Marston Taylor, and Leopold Boroschek, mononitro-o-phthalic acids,

1903, A., i, 761.

Bogert, Marston Taylor, H. Campbell Breneman, and William Flowers Hand, synthesis of alkylthioketodihydroquinazolines from anthraniloni-

trile, 1903, A., i, 527.

Bogert, Marston Taylor, and Victor John Chambers, synthesis of 5-nitro-4ketodihydroquinazolines from 6nitro-2-aminobenzoic acid, 6-nitro-2-acetylaminobenzoic acid, and from the corresponding nitroacetylanthranil, 1905. A., i, 612.

5-amino-4-ketodihydroquinazoline and 5-amino-4-keto-2-methyldihydroquinazoline, 1906, A., i, 388.

Bogert, Marston Taylor, and Ellen Parmelee Cook, quinazolines. XVI. Synthesis of 6-nitro-4-keto-2-methyldihydroquinazolines from 5-nitroacetylanthranil and primary amines, 1906, A., i, 988.

Bogert, Marston Taylor, and Arthur Wayland Dox, condensation of ethyl succinvlsuccinate with guanidine; derivative of 1:3:6:8-naphthatetrazine, a new heterocycloid, 1905, A., i, 841.

condensation of ethyl succinylsuccinate with acetamidine:4:9-dihydroxy-2:7-dimethyl-5:10-dihydro-1:3:6:8naphthatetrazine, 1905, A., i,

949.

Bogert, Marston Taylor, and George Augustus Geiger, dihydroquinazolines. XXX. Study of the bromination and nitration of 4-dihydroquinazolones, the corresponding aminoquinazolones, and certain other new 4-dihydroquinazolones, 1912, A., i, 395.

quinazolines. XXXI. Action of methyl and ethyl iodides on dihydro-4quinazolones, 1912, A., i, 510.

Bogert, Marston Taylor, and Ross Aiken Gortner, quinazolines. XXII. 3-Amino-2-methyl-4-quinazolone certain of its derivatives, 1909, A., i, 679.

Bogert, Marston Taylor, and Ross Aiken Gortner, quinazolines. XXIV. Oxalylanthranilic compounds and quinazolines derived therefrom, 1910, A., i, 283.

Bogert, Marston Taylor, Ross Aiken Gortner, and Carl Gustave Amend, quinazolines. XXVII. Syntheses of 3-aminoaryl-4-quinazolones from acylanthranils and aromatic diamines, 1911, A., i, 580.

Bogert, Marston Taylor, and William Flowers Hand, synthesis of alkylketodihydroquinazolines, 1903, A.,

3:5-dibromo-2-aminobenzoic acid and its nitrile; synthesis of quinazolines, 1904, A., i, 108.

5-bromo-2-aminobenzoic acid and certain derivatives, 1906, A., i, 176.

preparation of 6-bromo-4-ketodihydroquinazolines from 5-bromo-2-aminobenzoic acid and certain of its derivatives, 1906, A., i, 208.

Bogert, Marston Taylor, and Michael Heidelberger, quinazolines. XXVIII. 4-Quinazolone-2-phthalones and certain of their derivatives, 1912, A., i, 214.

Bogert, Marston Taylor, and Alfred Hoffman, some acyl derivatives of homoanthranilonitrile [3-amino-p-toluonitrile] and the 4-keto-7-methyldihydroquinazolines prepared therefrom, 1905, A., i, 891.

Bogert, Marston Taylor, and Farel Louis Jouard, 3-amino-o-phthalic acid and certain of its derivatives, 1909, A., i,

Bogert, Marston Taylor, and William Klaber, quinazolones. XX. Certain 7-nitro-2-methyl-4-quinazolones from 4-nitroacetanthranil, 1908, A., i, 466.

Bogert, Marston Taylor, and Lothair p-aminobenzonitrile, Kohnstamm,

1903, A., i, 559.

Bogert, Marston Taylor, and Alfred H. Kropff, some amino- and nitroamino-derivatives of benzoic, mtoluic, and isophthalic acids, 1909, A., i, 583.

XXIII. 7-Amino-6quinazolines. 7-nitroquinmethylquinazolones, acids, azolone-6-carboxylic 1:3:7:9 naphthatetrazines, 1909, A.,

i. 843.

Bogert, Marston Taylor, and Clarence Earl May, quinazolines. XXI. Certain quinazoline oxygen ethers of the type 'N:C(OR)' and the isomeric 'NR'CO' compounds, 1909, A., i, 329.

Bogert, Marston Taylor, and John Maurice Nelson, quinazolines. XIX. Synthesis of 1:3:6:8-naphthatetrazines from p-diaminoterephthalic acid and from certain of its derivatives, 1907. A., i, 660.

Bogert, Marston Taylor, and Roemer Rex Renshaw, methyl 4-aminophthalate and certain of its acvl derivatives, 1906, A., i, 510.

4-amino-o-phthalic acid and some of

its derivatives, 1908, A., i, 651.

Bogert, Marston Taylor, and Harrey Ambrose Seil, synthesis of 5-nitro-4-keto-2-methyldihydroquinazolines from 6-nitroacetylanthranil primary amines, 1905, A., i, 945. quinazolines. XV. A 3-aminoquin-

azoline and the corresponding 3:3'diquinazolyl from 6-nitroacetylanthranil and hydrazine hydrate,

1906, A., i, 712.

quinazolines. XVIII. 2:3-Dialkyl-4quinazolones [4-keto-2:3-dialkyldihydroquinazolines] and the products obtained by alkylating 2-alkyl-4quinazolones (4-hydroxy-2-alkylquinazolines), 1907, A., i, 560.

Bogert, Marston Taylor, and S. H. Steiner, synthesis of 7-nitro-4-keto-2-alkyldihydroquinazolines from 4nitroacetylanthranilic acid and from 4-nitroacetylanthranil, 1905, A., i, 945.

Bogert, Marston Taylor, John David Wiggin, and J. Edwin Sinclair. XVII. Synthesis of quinazolines. quinazolinecarboxylic acids 4-aminoisophthalic acid and aminoterephthalic acid, 1907, A., i, 351.

Taylor, and Louis Bogert, Marston Elsberg Wise, some derivatives of p-aminobenzonitrile, 1911, A., i, 46. p-aminobenzonitrile and certain of its derivatives. III., 1912, A., i, 450.

Bogert, Marston Taylor, and Ralph Garrigue Wright, nitro-derivatives of fluorescein, 1905, A., i, 896.

Boggs, Charles R. See Arthur Amos Noyes.

Bognar, Gustav, mechanism of the action of bromine on formic acid in aqueous solution, 1910, A., ii, 282.

Bogojawlenski, Alex. D., relation of the specific heats of crystalline substances to temperature, 1905, A., ii,

799.

Bogojawlenski, Alex. D., P. Bogoluboff, and N. Winogradoff, solubility of isomeric organic compounds, 1907, A., ii, 745.

Bogojawlenski, Alex. D., and Jvon Narbutt, esterification experiments, 1905, A., i, 854.

ethyl acetate, 1910, A., i, 355.

Bogojawlenski, Alex. D., and N. Sacharoff, velocity of crystallisation of isomorphous mixtures, 1907, A., ii, 751.

Bogojawlenski, Alex. D., and N. Winogradoff, melting-point curves of mixtures of p-azoxyanisole with benzene, nitrobenzene, and dibromoacetylene, 1907, A., ii, 752.

character of melting-point and clearing-point curves for fluid-crystalline substances and their mixtures, 1907, A., ii, 844; 1908, A., ii, 809.

specific heats and heats of fusion of isomorphous substances and their mixtures, 1908, A., ii, 806.

Bogojawlenski, Alex. D. See also W. Borodowsky.

Bogoluboff, P. See Alex D. Bogojawlenski and Henryk Wdowiszewski.

Bogomolny, A. See A. Ryss.

Bogorodsky, Alexis J., electrical conductivity of potassium and sodium nitrates and of fused mixtures of the two nitrates together and with other salts, 1905, A., ii, 669.

electrolysis of the fused nitrates of potassium, sodium, and lithium,

1905, A., ii, 705.
relation of lead iodide to water and oxygen, 1905, A., ii, 711.

use of Dewar's vessels in calorimetry, 1912, A., ii, 134.

heats of solution of mono- and dihydrated lithium chlorides, 1912, A., ii, 134.

Boguski, Jossif Juri von, solubility of sulphur in benzyl chloride and some properties of these solutions, 1905, A., ii, 312.

dibenzylnaphthalene, 1906, A., i, 825. Bohm, Verner. See Ivar Bang.

Bohmansson, Gösta, detection of sugar in urine, 1909, A., ii, 770.

Bohmansson, Gösta. See also Ivar Bang. Bohn, Georges, influence of radium on the growth of animal tissues, 1903, A., ii, 497.

Bohn, Rene, indanthrene, 1903, A., i, 530.

advances in vat dyes, 1910, A., i, 405.

Bohr, Christian, relation of oxygen and hæmoglobin, 1904, A., ii, 421.

absorption-coefficients of blood and blood-plasma for gases, 1905, A., ii, 729.

Bohr, Christian, solubility of gases in concentrated sulphuric acid and in mixtures of sulphuric acid and water, 1910, A., ii, 198.

Bohr, Christian, and Vilh. Maar, influence of ozone on the lungs, 1905,

A., ii, 329.

Bohrisch, Paul, and F. Kürschner, the estimation of arsenic in organic substances, especially organic arsenic compounds (salvarsan, etc.), 1912, A., ii, 203.

Bohrisch, Paul, and Rudolf Richter, assay of bee's wax, 1906, A., ii, 589.

Bohrisch, Paul. See also Adolf Beythien. Bohrmann, Ludwig. See Wilhelm Steinkopf.

Boi, Enrico. See Efisio Mameli.

Boidin, A., amylocoagulase, 1904, A., i, 276.

action of heat on alkali phosphates. 1904, A., ii, 816.

the liquefaction of starch powder and starch grains, 1906, A., i, 933.

Boie, Heinrich. See August Michaelis. Bois, Henri E. J. G. du. See Du Bois. Boisbaudran, Paul Émile (dit François)

Lecog de, the element Z8, 1905, A., ii, 89.

origin of the conception of solid solutions, 1906, A., ii, 152.

band spectra of barium and aluminium, 1910, A., ii, 3.

dehydration of salts, 1911, A., ii, 270. Boisbaudran, Paul Emile Lecog de, and (Comte) Arnaud de Gramont, the spectrum of glucinum and its bands in different luminous sources, 1911, A., ii, 832.

Boismenu, Etienne, hypobromous [acid and] amides, 1911, A., i, 957. hypoiodous amides, 1912, A., i, 15. hypochlorous [acid and] amides, 1912,

A., i, 97. Bois Reymond. See Du Bois Reymond. Boiteau, Georges. See André Brochet

and Hippolyte Copaux.

Boizard, G., conductivity of ammonium sulphate in mixtures of sulphuric acid and water, 1906, A., ii, 419.

electrical conductivity in mixtures of acid or base and water, 1908, A., ii, 251, 346.

Bokenham, Thomas Jessopp. See (Sir) Thomas Lauder Brunton.

Bokorny, Thomas, formation of substances with a strong taste by the action of yeast on proteins, 1903, A., ii, 230.

protoplasm and enzymes, 1903, A., ii,

Bokorny, Thomas, assimilation of carbon dioxide in green plants, 1903, A., ii, 505.

replacement of inorganic constituents of the organism by others, 1903, A.,

ii, 659.

action of alcohol and acids on enzymes,

1904, A., i, 129.

influence of concentrated sugar solutions on yeast invertase, 1904, A., i, 212.

fruit-ether formation in alcoholic fermentation, 1904, A., ii, 432.

action of vanadic acid on microorganisms, 1904, A., ii, 579.

reactions of living cells to dilute solutions of heavy metallic salts, 1905, A., ii, 752.

the reactions of living cells to very dilute solutions of various substances, 1905, A., ii, 476.

similarity in the action of salts of copper, mercury, and silver on the lower plants, 1906, A., ii, 42.

action of dilute solutions on living cells, 1906, A., ii, 104.

quantitative action of poisons, 1906, A., ii, 296.

the toxicity of aniline dyes, 1906, A., ii, 297.

amounts of poison necessary for killing a given weight of living substance, 1906, A., ii, 383.

toxicity of phenol compared with that of other substances, 1906, A., ii, 480.

the separation of the life and fermentaction of yeast, 1906, A., ii, 880. action of alkaline phosphates on cells

and ferments, 1907, A., ii, 121. contact action in biological chemistry: enzyme and plasma, 1907, A., ii,

184. assimilation of formaldehyde and of glycerol and sugar, 1909, A., ii, 70.

carbon dioxide assimilation and nutrition of plants with formaldehyde,

1909, A., ii, 695. direct detection of formaldehyde in leaves; formaldehyde reagents, 1909,

A., ii, 1057. assimilation of pentoses and pentitols by plants, 1910, A., ii, 334.

intravital caffeine reactions, 1911, A., ii, 142.

micro-chemical detection of albumin, 1911, A., ii, 236.

action of methyl and other alcohols on green plants and micro-organisms, 1911, A., ii, 522.

Bokorny, Thomas, the toxicity of the fatty acids and other decomposition products of the fats, 1911, A., ii, 756.

the nutrition of green plants with formaldehyde and formaldehydeyielding substances, 1911, A., ii, 1021.

the action of certain basic compounds on seedlings; comparison with their action on micro-organisms, 1912, A., ii, 482.

the physiological action of neutral salts of alkalis and alkaline earths

on green plants, 1912, A., ii, 975. injury of plants by tobacco smoke, 1912, A., ii, 980.

the action of metallic salts on yeasts and other fungi, 1912, A., ii,

Bokorny, Thomas. See also Oscar Loew. Bolaffio, Carlo, lipoids. Part I. Noottine, a triaminophosphatide, 1908, A., i, 377.

Boldyreff, A. K., crystals of 1-bromo-2:4-dinitrobenzene and mixed crystals of 1-bromo- and 1-chloro-2:4-dinitrobenzene, 1912, A., i, 958.

Boldyreff, Wasily, the lipase of intestinal

juice, 1907, A., ii, 185.

Bolin, Ivan. See Hans von Euler. Bolin, Pehr, Swedish manurial trials,

1908, A., ii, 422.

Bolis, Aldo, solubility of magnesiumammonium phosphate in ammonium citrate, 1904, A., ii, 84.

Boljarski, N. See Efim Semen London. Boll, Marcel, application of the electrometer to the study of chemical reactions in electrolytes, 1912, A., ii, 384.

Boll, Marcel, and Paul Job, photochemical kinetics of the hydrochloroplatinic acids in very dilute solution, 1912, A., ii, 407.

Boll, Marcel. See also Paul Job.

See Peter Bergell and Boll, Paul. Hermann Leuchs.

Bolland, A., guaiacum test for oxyhæmoglobin, 1907, A., ii, 660.

the aloin test for hæmoglobin, 1908, A., ii, 240.

microchemical studies, 1908, A., ii, 1080; 1911, A., ii, 551.

microchemical studies. IV. Refractive indices of crystalline chemically individual substances by the immersion method as an aid in practical analysis, 1910, A., ii, 748.

a new separating funnel, 1911, A., ii,

385.

Bolle, A., the lecithin content in the bone-marrow of man and domestic animals, 1910, A., ii, 429.

Bolle, Jules, and Philippe Auguste Guye, surface tensions of some organic liquids,

1905, A., ii, 233.

Bollemont. See Grégoire de Bollemont. Bollenbach, H., volumetric estimation of chromium with permanganate, 1907, A., ii, 820.

volumetric estimation of lead, 1908,

A., ii, 68.

application of sodium hyposulphite in volumetric analysis, 1908, A., ii, 229.

separation of the metals which are precipitated by hydrogen sulphide, 1908, A., ii, 985.

volumetric estimation of potassium ferrocyanide, 1908, A., ii, 996.

volumetric estimation of lead with potassium permanganate, 1909, A., ii, 1054.

Bollenbach, H., and Ernst Luchmann, estimation of manganese by means of potassium ferricyanide, 1908, A., ii, 1074.

volumetric estimation of chromium with potassium ferricyanide, 1909,

A., ii, 187.

Bollenbach, H. See also Max Dittrich. Bollenbach, Hermann F. See Theodor Curtius.

Bolm, Friedrich, a new drying apparatus,

1904, A., ii, 79.

Bolognesi, Giuseppe, chemical alterations of the blood-serum in infections with Pyogenes communis, 1907, A., ii, 901.

Bolser, Charles E., and J. W. E. Glattfeld, estimation of chlorine in presence of hydrochloric acid, 1911, A., ii, 435.

Bolsing, Fr. See Philippe Chuit.

Bolte, H., dissociation [tension] hydrated salts, 1912, A., ii, 833.

Bolton, Charles, gastrotoxic serum, 1906, A., ii, 688.

gastrotoxin and the healing of gastrotoxic ulcers, 1910, A., ii, 734.

Bolton, Elmer Keiser. See Charles

Loring Jackson.

Bolton, Werner von, direct combination of chlorine and carbon, 1903, A., ii, 365.

luminous effects at electrodes and a new spectroscopic method, 1904, A., ii, 2.

tantalum: its preparation and properties, 1905, A., ii, 258.

hardness of hammered tantalum, 1905, A., ii, 718.

Bolton, Werner von, columbium, its preparation and properties, 1907, A., ii, 478.

burseracin and its effects, 1908, A., i, 436. thorium, 1909, A., ii, 53.

biological action of thorium, 1911, A., ii, 1118.

the deposition of carbon in the form of diamond, 1912, A., ii, 45.

Boltwood, Bertram Borden, ratio of radium to uranium in some minerals, 1904, A., ii, 666.

origin of radium, 1905, A., ii, 295.

production of radium from uranium, 1905, A., ii, 663.

the ultimate disintegration products of the radioactive elements, 1905, A., ii, 788.

radioactivity of the salts of radium, 1906, A., ii, 413.

radioactivity of thorium minerals and salts, 1906, A., ii, 415.

production of radium by actinium, 1907, A., ii, 62.

ultimate disintegration products of the radioactive elements. Part II. The disintegration products of uranium, 1907, A., ii, 220.

radioactivity of thorium salts, 1907,

A., ii, 731.

new radioactive element, 1907, A., ii, 836.

radioactivity of uranium minerals, 1908, A., ii, 454.

ionium, a new radioactive element, 1908, A., ii, 455.

life of radium, 1908, A., ii, 551. separation of ionium and actinium from certain residues, and on the production of helium by ionium, 1911, A., ii, 359.

Boltwood, Bertram Borden, and Ernest Rutherford, production of helium by radium, 1911, A., ii, 953.

Boltwood, Bertram Borden. See also Ernest Rutherford. Boltz, G. E., washbottle for continuous

hot water supply, 1911, A., ii, 433. Boltzo, W. See Hermann Matthes.

Bon, A. See Amé Pictet.

Bonacini, Carlo, origin of the energy emitted by radioactive substances, 1904, A., ii, 530.

radioactivity, 1904, A., ii, 798.

Bonamartini, Giuseppe, action of neutral salts on the coagulation temperature of one of the muscular proteins, 1907, A., i, 883.

separation of salicylic acid and "saccharin" from food materials, 1907,

A., ii, 138.

Bonamartini, Giuseppe, and M. Lombardi, acid and neutral copper albumins, 1909, A., i, 72.

Bonamartini, Giuseppe. See also Alberto

Scala.

Bonanni, Attilio, the behaviour of calcium formate and acetate in the organism, 1908, A., ii, 213.

Bonavia, Aldo. See Giuseppe Plancher. Bond, Perry A. See William Jay

Karslake

Bondi, Erich. See Rudolf Wegscheider. Bondi, Samuel, action of iodine on acetoacetic acid and detection of this acid in urine, 1906, A., ii, 588.

synthesis of salicyluric acid, 1907, A.,

i, 766.

the chemistry of bile. II. Affinity constant of glycocholic acid, 1907,

A., i, 1014.

lipoproteins and their significance in fatty degeneration of cells. II. Lipopeptides, their significance, synthesis, and properties, 1909, A., i, 458.

Bondi, Samuel, and Franz Eissler, lipoproteins and the meaning of fatty degeneration in cells. V. Further syntheses of lipopeptides. VI. Further researches on the cleavage of lipopeptides, 1910, A., i, 157.

Bondi, Samuel, and Th. Frankl, lipoproteins and their significance in fatty degeneration of cells. III. Synthesis of palmitylglycine and palmitylalanine, 1909, A. i, 459.

lipoproteins and their significance in fatty degeneration of cells. IV. The behaviour of lipopeptides towards ferments, 1909, A., i, 459.

Bondi, Samuel, and Martin Jacoby, the distribution of salicylic acid in normal and infected animals, 1906, A., ii, 106.

Bondi, Samuel, and Ernst Müller, synthesis of glycocholic and taurocholic acids, 1906, A., i, 633.

Bondi, Samuel. See also Rudolf A. Allers.

Bondouy, Th., characteristic principles of Sclerostomum equinum; presence in this parasite of an intensely hæmolytic crystalline alkaloid, 1909, A., ii, 78.

Bondy, Richard. See Karl Auwers. Bondzyński, Stanislaus, the oxyproteic acids and their part in animal meta-

bolism, 1911, A., ii, 308.

Bondzyński, Stanislaus, St. Dombrowski, and Kazimir Panek, the group of organic acids containing nitrogen and sulphur which is present in normal human urine, 1906 A., i, 122. Bondzyński, Stanislaus, and Vincenty Humnicki, the behaviour of salol and distearyl salicylyl glyceride in the organism, 1909, A., ii, 332.

Bone, William Arthur, and George William Andrew, the combustion of acetylene, 1905, T., 1232; P.,

220.

the interaction of well-dried mixtures of hydrocarbons and oxygen, 1906,

T., 652; P., 78.

Bone, William Arthur, and Hubert Frank Coward, the thermal decomposition of hydrocarbons. Part I. [Methane, ethane, ethylene, and acetylene], 1908, T., 1197; P., 167; discussion, P., 168.

the direct union of carbon and hydrogen; synthesis of methane, 1908, T., 1975; P., 222; discussion, P., 222; 1910, T., 1219; P., 146.

Bone, William Arthur, and Julien Drugman, the action of ozone on ethane; preliminary note, 1904, P., 127.

the explosive combustion of hydrocarbons, 1906, T., 660; P., 78;

discussion, P., 79.

Bone, William Arthur, Julien Drugman, and George William Andrew, the explosive combustion of hydrocarbons, II., 1906, T., 1614; P., 272.

Bone, William Arthur, and Herbert Henstock, the elimination of hydrogen bromide from bromo-gem-dimethylsuccinic acid and from bromotrimethylsuccinic anhydride, 1903, T., 1380; P., 247.

Bone, William Arthur, and Henry Lllewellyn Smith, the thermal decomposition of formaldehyde and acetaldehyde, 1905, T., 910; P., 171.

Bone, William Arthur, and Charles Henry Graham Sprankling, dissociation constants of trimethyleneearboxylic acids, 1903, T., 1378; P., 247.

Bone, William Arthur, and William Ernest Stockings, the slow combustion of ethane, 1904, T., 693; P., 106.

Bone, William Arthur, John Joseph Sudborough, and Charles Henry Graham Sprankling, the acid esters of methyl substituted succinic acids, 1904, T., 534; P., 64. Bone, William Arthur, and Richard

Bone, William Arthur, and Richard Vernon Wheeler, the slow oxidation of methane at low temperatures. Part

II., 1903, T., 1074; P., 191.

Bone, William Arthur, and Richard Vernon Wheeler, the combustion of ethylene, 1904, T., 1637; P., 202.

combination of hydrogen and oxygen in contact with hot surfaces, 1906,

A., ii, 434.

an accurate form of gas analysis apparatus for commercial and other purposes, 1908, A., ii, 221.

Bone, William Arthur. See also Harold

Baily Dixon.

Bonfanti, Angelo. See Marcel Ascoli. Bongé, Waldemar von. See Berthold Rassow.

Bongert, André. See Louis Bouveault. Bongiovanni, Corrado, interpretation of the reaction between ferric chloride and potassium thiocyanate, 1907, A. i. 833.

oxidations effected by ferric saits,

1908, A., i, 770.

action of certain oxidising agents on thiocyanic acid, 1908, A., i, 859.

reaction between ferric compounds and thiocyanates, 1909, A., i, 637.

new methods of colouring vegetable phosphorus compounds, 1909, A., ii, 512.

microchemical method for phosphorus in plants, 1909, A., ii, 616.

colour of vanadium thiocyanate, 1910,

A., i, 721. action of some salts of tervalent metals

on thiocyanates, 1910, A., i, 825. the reactions of Van Deen and Adler,

1911, A., ii, 676.

electrical conductivity of the system ferric chloride-ammonium thiocyanate, 1911, A., ii, 1052.

rotatory power of electrolytes. I. and

II., 1912, A., ii, 314.

Bongrand, J. Charles, the elimination of arsenic after treatment with organic arsenic compounds, 1912, A., ii, 465.

Bongrand, J. Charles. See also Charles Moureu.

Bonifazi, E., Stanislaus von Kostanecki, and Josef Tambor, synthesis of 6:2':4'trihydroxyflavonol, 1906, A., i, 201.

Bonis, A., detection of hexamethylenetetramine in wine, 1910, A., ii, 466, 761.

Bonitsch, Gottlieb. See Fritz Reitzenstein.

Bonjean, Edmond, influence of "decantation" on the composition and bacterial state of mineral waters, 1903, A., ii, 319.

hydrogen peroxide in the nascent state; bactericidal action on microbes in water, 1905, A., ii, 190. Bonjean, Edmond, formation of oxygen compounds of nitrogen and of their metallic salts (iron and lead) in the production of ozone for the sterilisation of water, 1909, A., ii, 659.

Bonneaud, A., action of bromine in presence of aluminium bromide on phenyl ethers, 1910, A., i, 669.

Bonnema, A. A., importance of the determination of the freezing point in the examination of milk; abnormal milk, 1906, A., ii, 710.

milk, 1906, A., ii, 710.

Bonner, Walter D., binedal curves, plait points, and tie lines in fifty systems, each consisting of water and two organic liquids, 1911, A., ii, 26.

Bonner, Walter D. See also Frederick Jacob Alway and George Aug. Hulett. Bonnerot, S. See Georges Charpy.

Bonnet, Frederic, jun., colorimetric method for the detection and estimation of formaldehyde, 1905, A., ii, 488.

Bonnet, Frederic, jun. See also Theodore

William Richards.
Bonnet, Pierre. See Marcel Delépine.

Bono, Adolfo, the estimation of methyl alcohol in ethyl alcohol and in alcoholic beverages, 1912, A., ii, 1103.

Bonsdorff, [Ernst Jacob] Waldemar, metal-ammonia hydroxides, 1903,

A., ii, 598.

complex hydroxides of copper, nickel, cadium, zine, and silver with ammonia, 1904, A., ii, 733. products of the dry distillation of

calcium pinate, 1912, A., i, 34.

Bonsib, Roy S. See Frank Curry Mathers.

Bonu, Raimondo. See Efisio Mameli. Boodle, Leonard Alfred, n'hangellite from Portuguese East Africa, 1907, A., ii, 699.

Book, Gilbert, acetonylnitromeconine, 1903, A., i, 653.

constitution of cyanine dyes, 1906, A., i, 42.

Book, Gilbert. See also Adolf Miethe. Bookman, Samuel. See Albert A. Epstein.

Boon, Alfred Archibald, the action of methyl tert.-butyl ketone on ketols. Part I., 1910, T., 1256; P., 94.

Boon. Alfred a Archibold, Kenneth McKenzie, and John Fountain Read, oxonium compounds; preliminary note, 1910, P., 95.

Boon, Alfred Archibald, and Forsyth James Wilson, a study of some unsaturated compounds, containing the tert.-butyl group. Part I., 1910 T., 1751; P., 208. Boon, Alfred Archibald. See also Forsyth James Wilson.

Boord, Cecil. See William McPherson. Boorema, P. A., phosphates with organic linkings, 1911, A., ii, 427.

Boos, William Frederick, preparation and composition of myconucleic acids from yeast, 1906, A., i, 775.

reducing component of nucleic acid from yeast, 1909, A., i, 343.

Borar, David, some reducing actions of mercury, 1911, T., 1414; P., 128.

Borch, N. S., a new volumenometer for determinating the specific gravity of cement, 1911, A., ii, 539.

Borchardt, Leo, the sugar-forming ferment of the liver, 1904, A., ii, 188. sources of error in the estimation of acetone in urine, 1906, A., ii, 312.

assimilation of elastoses, 1907, A., ii, 513.

lævulose in diabetic urine, 1908, A., ii, 518.

the occurrence of proteose in blood and urine, 1908, A., ii, 957.

putrefaction of glutamic and aspartic acids, 1909, A., i, 210.

diabetic levulosuria and the detection of levulose in urine, 1909, A., ii, 688.

Borchardt, Leo, and F. Lange, the effect of amino-acids on the elimination of acetone derivatives, 1907, A., ii, 188.

Borchardt, Leo, and Heinrich Lippman, the resorption of the Bence-Jones protein, 1910, A., ii, 521.

Borchers, Erich. See Arthur Hantzsch. Borchers, Friedrich, the action of solutions of borax on zinc salts, 1910, A., ii, 1065.

Borchers, [Johannes Albert] Wilhelm, and Erich Beck, preparation of nitrides from metallic oxides or salts with the aid of atmospheric nitrogen, 1908, A., ii, 836.

Borchers, Wilhelm, and Lorenz Stockem, preparation of metallic calcium, 1903, A., ii, 19, 145, 211.

electrolytic separation of pure strontium, 1903, A., ii, 19.

Borck, Hermann, estimation of iron and aluminium, 1912, A., ii, 494.

Borck, Hermann. See also Alfred Byk and Ludwig Moeser.

Bordas, Fréd., synthesis of precious stones of the family of aluminides, 1907, A., ii, 956.

action of radium bromide on precious stones of the family of aluminides, 1908, A., ii, 8. Bordas, Fréd., action of Röntgen rays on corundum, 1908, A., ii, 9.

formation of certain precious stones of the family of the aluminides, 1908, A., ii, 191.

detection of small quantities of helium in minerals, 1908, A., ii, 430.

helium in minerals containing uran-

ium, 1908, A., ii, 505.
radioactivity of the soil, 1909, A., ii,

medico-legal aspect of the benzidine reaction in the examination of blood stains, 1910, A., ii, 364.

Bordas, Fréd., and Sig. de Raczkowski, diminution of the lecithins in milks subjected to heating, 1903, A., ii, 500.

Bordas, Fréd., and F. Touplain, rapid method for the analysis of milk, 1905, A., ii, 490.

method of estimating impurities in cocoas and chocolates, 1906, A., ii, 408.

rapidity of absorption of odours by milk, 1906, A., ii, 467.

estimation of protein and gelatinous matter by means of acetone, 1906, A., ii, 639.

analysis of the atmospheric gases nonliquefiable in liquid air, 1908, A., ii, 943.

the enzymes of milk, 1909, A., ii, 505.

anæroxydase and catalase in milk, 1910, A., ii, 57.

reactions of curdled milk due to the colloidal state, 1910, A., ii, 226.

estimation of phosphorus in milk ash, 1911, A., ii, 438.

estimation of phosphorus in milk, 1911, A., ii, 585.

original acidity of milk, 1911, A., ii, 631.

Bordas, Fréd. See also Arsène d'Arsonval.

Bordas, L., physiological function of the arborescent glands of the female generative apparatus in the cockroach, 1909, A., ii, 163.

Bordas, V., arsenic in nutriment, 1904, A., ii, 626.

Borde, F., composition and fractionation of samphire oil, 1909, A., i, 945.

Borden, J. Harvey, indoxyl sulphate in the urine of the insane, 1907, A., ii, 494.

Bordet, Jules, chemical theories of immunity, 1904, A., ii, 832.

Bordet, Jules, and Octave Gengou, blood coagulation. IV. The coagulating power of the serum, 1904, A., ii, 270.

Bordier, H., temperature of calefaction and its employment in alcoholometry, 1903, A., ii, 264.

demonstration of n-rays, 1905, A., ii, 6. Borel, Henri. See Felix Kaufler.

Borelli, Vincenzo, electrolytic estimation of mercury, 1907, A., ii, 816.

estimation of the cyanogen group in slightly dissociated salts, 1907, A., ii, 825.

constitution of certain mercuric compounds with complex cations, I., II., and III., 1908, A., i, 515; ii, 1039; 1909, A., i, 452.

estimation of thorium in monazite

sand, 1909, A., ii, 522.

Borghesani, Guido, pentosans of Soja hispida, 1909, A., ii, 258.

relation of methylpentosans to pentosans in some kinds of seeds, 1910, A., ii, 532.

Borghi, Mario. See Arrigo Mazzucchelli.

Borgmann, I. See Alexei E. Faworsky.
Borgo, Alessandro, and Mario Amadori,
the molecular magnitude of sulphur in
bromoform solution, 1909, A., ii, 309.

Borgo, Alessandro. See also Giuseppe Bruni and Girolamo Mazzara.

Borgström, Johan Henrik Leonard, [uvarovite and hackmanite] 1903, A., ii, 304.

meteorites of Hvittis and Marjalahti,

1905, A., ii, 537.

separation of iron from nickel and cobalt by aid of formic acid, 1905, A., ii, 557.

the Shelburne meteorite, 1905, A., ii, 726. chromite from the Marjalahti meteorite; analeite from Brödtorp, 1911, A., ii, 120.

Borgström, Johan Henrik Leonard. See also Wilhelm Ramsay.

Borinski, Paul. See Wilhelm Prandtl. Borisch, Paul, detection of acetone in urine, 1907, A., ii, 587.

Borisoff, Michael. See Alexis V. Saposhnikoff.

Borissoff, Peter, luminescence of certain organic compounds between + 100° and - 190°, 1906, A., ii, 317.

Bork, Iwan, action of potassium hydroxide on a mixture of phenylacetylene with methyl ethyl ketone; synthesis of phenylacetylenylmethylethylcarbinol, 1905, A., i, 774.

action of potassium hydroxide on a mixture of phenylacetylene and methyl isopropyl ketone sythesis; of phenylacetylenylmethylisopropylcarbinol, 1905, A., i, 774.

Borkel, Curt, pepsin-fibringeptone, 1903, A., i, 783.

Borlinetto, O. See E. Baroni.

Bormann, Karl, adjustable crucible support, 1909, A., ii, 724.

new gas-generating apparatus, 1912, A., ii, 931.

Bornann, Richard. See Fritz Straus. Bornemann, Ernst, balances with non-

metallic pans, 1908, A., ii, 171.

Bornemann, Ferd. See Otto Ruff.

Bornemann, J. See Franz Maria Litterscheid.

Bornemann, Karl, hydrogen peroxide, 1903, A., ii, 281; 1912, A., ii, 1050.

freezing point curve of the nickel sulphides, 1908, A., ii, 292.

the constitution of nickel matte, 1908, A., ii, 292.

the system: nickel-sulphur, 1910, A., ii, 1072.

some general properties of the binary equilibrium diagram, 1911, A., ii, 195.

potential of hydrogen peroxide, 1912, A., ii, 1127.

Bornemann, Karl, and Paul Müller, the electrical conductivity of liquid alloys, 1910, A., ii, 924.

Bornemann, Karl, and G. von Rauschenplat, the electrical conductivity of metallic alloys in the liquid state, 1912, A., ii, 1034.

Bornemann, Karl, and H. Schirmeister, the solution and precipitation of titanic acid, 1910, A., ii, 1073.

the separation of titanium from the heavy metals, 1911, A., ii, 231.

Bornemann, Karl, and F. Schreyer, the system Cu₂S-FeS, 1909, A., ii, 1012. Bornhardt, C. See Wilhelm Schlenk.

Bornstein, Adele, the influence of compressed air on blood-formation, 1911, A., ii, 301.

Bornstein, Karl, sulphur and phosphorus metabolism on an abundant protein diet, 1905, A., ii, 99.

Bornwater, Johan Theodorus, simplified method for the estimation of nitric acid in nitrates, 1906, A, ii, 578.

mercuric heptoate, 1908, A., i, 74. derivatives of undecenoic acid, 1908, A., i, 74.

action of oxalyl chloride on amines and amides, 1911, A., i, 616.

Bornwater, Johan Theodorus, and Arnold Frederik Holleman, chlorination of benzoic acid, 1911, A., i, 698.

Bornwater, Johan Theodorus. See also Frans Antoon Hubert Schreinemakers.

Borodowsky, W. A., relation to temperature of the rate of crystallisation in the case of substances which have only a low rate of crystallisation, 1903, A., ii, 357.

synthesis of the sulphur compounds of arsenic; melting point and transformation curves of these compounds,

1906, A., ii, 665.

energy of radium, 1908, A., ii, 448.

absorption of B-rays from radium by solutions and liquids, 1910, A., ii, 375.

Borodowsky, W. A., and Alex. D. Bogojawlenski, equilibrium curves in the system, p-bromotoluene-p-dibromobenzene, 1904, A., ii, 550.

Boroschek, Leopold. See Marston Taylor

Bogert.

Borrien, V., occurrence of hæmatoporphyrin in the meconium, 1911, A., ii,

Borrowman, George, assay of telluride ores, 1908, A., ii, 777. Borsche, Walther [Georg Rudolf], con-

stitution of coumarinic acid, 1904,

A., i, 246. [relations between quinonehydrazones and p-hydroxyazo-compounds], 1905,

A., i, 161. new reaction of semicarbazones. III. Preparation of the hydrazides of aromatic substituted carbamic acids from semicarbazide, 1905, A., i, 305.

conversion of aldoximes into nitriles,

1906, A., i, 664.

a-diketones from a-ketoaldoximes; a new synthesis with diazo-compounds, 1907, A., i, 326.

6-hydroxy-4-methylcoumarin and Bquinoylerotonic acid, 1907, A., i, 622.

the relation between quinonehydrazones and p-hydroxyazo- compounds. IV. Condensation of nitro-derivatives of phenylhydrazine with quinones and quinoneoximes of the benzene series, 1908, A., i, 66.

synthesis of a substituted cinchonic acids by Doebner's method, 1909,

A., i, 52.

ethyl a-dinitrophenylacetoacetate and related compounds. I. and II., 1909,

A., i, 232, 385.

reactivity of the methylene groups in ethyl p- and o-nitrophenylacetates, 1909, A., i, 925.

new cinchonic acid syntheses, 1909,

A., i, 955.

addition of ethyl phenylacetate to unsaturated compounds, 1910, A., i, 35.

Borsche, Walther [Georg Rudolf], nitrosation of the simplest cyclic ketones. 1910, A., i, 178.

cinchonic acid syntheses, 1910, A., i,

distribution of affinity in unsaturated organic compounds, 1910, A., i, 680.

δ-phenylbutyl ketones and δ-phenylvaleric acid, 1911, A., i, 880.

tetrahydropiperine and tetrahydropiperic acid, 1911, A., i, 1018.

reactivity of side-chains in nuclear nitrated homologues of benzene, 1912, A., i, 180.

the reduction of poly-unsaturated ketones with crossed double linkings by Paal's method, 1912, A., i, 194.

reduction of acids with several double bonds by Paal's method, 1912, A., i,

Borsche, Walther, and Albert Dirk Berkhout, action of formaldehyde on p-nitrophenols, 1904, A., i, 415.

Borsche, Walther, and Erich Böcker, constitution of aromatic purpuric acids. IV. Synthesis of 3:5-dinitro-4-cyano-2-hydroxytoluene, 1904, A., i, 166.

constitution of aromatic purpuric acids. V. The purpurate reaction with 2:4-dinitrophenols, 1904, A., i, 574.

constitution of aromatic purpuric acids. VI. The purpurate reaction with 2:6-dinitrophenols, 1905, A., i, 51.

Walther, Borsche, and W. Bothe. derivatives of diphenylene oxide, 1908, A., i, 528.

Borsche, Walther, and Martin Feise. new carbazoles, 1907, A., i, 242.

Borsche, Walther, and Albert Fels, formation of unsaturated lactones from aB-diacylcarboxylic esters, 1906, A., i, 508.

synthetical experiments with ethyl benzoylacetonylacetate, 1906, A., i,

formation of pyrrole from 1:4-diketones; action of ammonia on ethyl aβ-diacylcarboxylic acids, 1907, A.,

Borsche, Walther, and Anna Fiedler, 2-chloro-3:5-dinitrotoluene, 1912, A.,

i, 175.

Borsche, Walther, and Georg Gahrtz, constitution of the aromatic purpuric acids. VII. Ethyl 3:5-dinitrosalicylate and potassium cyanide, 1905, A., i, 894.

Borsche, Walther, and Georg Gahrtz, constitution of the aromatic purpuric acids. IX. Behaviour on oxidation with potassium hypobromite, 1906, A., i, 957.

Borsche, Walther, and Arno Geyer, oxonium compounds. I. Tricyclic benzopyrylium compounds, 1912, A.,

i, 891.

Borsche, Walther, and Arnold Heyde, constitution of aromatic purpuric acids. VIII. Picramic acid and potassium cyanide, 1906, A., i, 15. methylpicramic acid, 1907, A., i, 31.

Borsche, Walther, and Gustav Adolf Kienitz, quinoline and indole derivatives from p-diaminodiphenylmethane,

1910, A., i, 781.

Borsche, Walther, and Heinrich Kühl, the relation between quinonehydrazones and p-hydroxyazo-compounds. III. Quinoneoximehydrazones, 1906, A., i, 319.

Borsche, Walther, and Werner Lange, cyclohexanesulphonic acid, 1905,

A., i, 765.

hexahydrothiophenol (cyclohexyl mer-

captan), 1906, A., i, 165.

thioborneol and other derivatives of camphane containing sulphur, 1906, A., i, 679, 868.

alicyclic compounds containing sul-

phur, 1907, A., i, 599.
Borsche, Walther, W. Menz, and Albert Fels, the phenylcyclopentane group, 1908, A., i, 147.

Borsche, Walther, and Conrad Merkwitz, a new reaction of the semicarbazones. II., 1904, A., i, 945.

Borsche, Walther, and Klaas Anne Ockinga, relation between quinonehydrazones and p-hydroxyazo-compounds. II. New class of hydroxyazo-compounds, 1905, A., i, 719.

Borsche, Walter, and Paul Oppenheimer, benzisooxazoles, 1912, A., i, 652.

Borsche, Walther, and D. Rantscheff, reactions of 1-chloro-2:6-dinitrobenzene, 1911, A., i, 329.

Borsche, Walther, and August Reclaire, aromatic-aliphatic p-aminoazo-com-

pounds, 1907, A., i, 987. Borsche, Walther, and R. Schmidt, Δ1-tetrahydrobenzaldehyde from cyclohexanone, 1911, A., i, 59.

Borsche, Walther, R. Schmidt, Hans Tiedtke, and Werner Rottsieper, tricyclic quinolines, 1910, A., i, 880.

Borsche, Walther, and Max Spannagel, ethyl aß-diacylpropionates and primary hydrazines, 1904, A., i, 778.

Borsche, Walther, and Fritz Streitberger, a-phenyl-o-hydroxycinnamonitrile and a-phenylcoumarin, 1904, A., i, 893.

influence of unsaturated side-chains on the tendency of phenols to couple, and the colour of the resulting oxyazo-compounds, 1904, A., i,

1064.

Borsche, Walther, Hans Tiedtke, and Werner Rottsieper, tetrahydroacridine and a new synthesis of acridine, 1908, A., i, 682.

Borsche, Walther, and Jan Camper Titsingh, synthesis of pyrrole and piperazine derivatives from the three nitroanilines, 1908, A., i, 103.

condensation of a-diketones with aldehydes and primary arylamines, 1910.

A., i, 65.

Borsche, Walther, Adolf Witte, and W. Bothe, derivatives of tetra- and hexahydrocarbazoles and a new synthesis of carbazole, 1908, A., i, 365.

Borsche, Walther, and J. Wollemann, ak-diphenyldecane and the preparation of ww'-diarylated fatty hydrocarbons,

1912, A., i, 23.

Borsche, Walther, and Traugott Zeller, relation between quinonehydrazones and p-hydroxyazo-compounds. I. Constitution of the so-called quinone. monosemicarbazones, 1904, A., i, 1056.

Borschim, S., the influence of lecithin on absorption by the skin, 1911, A., ii, 1007.

Borstelmann, Percy. See Fittig.

Borsum, Wilhelm. See Joachim Biehringer.

Bort. See Teisserenc de Bort.

Heinrich, Boruttau. behaviour "bromoglidin" in the organism, 1909, A., ii, 170.

diminution of the toxic action of poisons by proteins, 1912, A., ii, 969.

Bosart, Louis W., jun., a useful oil-bath, 1909, A., ii, 563.

Bosch, Eberhard. See Gustav Schultz. Bose, Emil [Hermann], chemical action of the cathode rays, 1904, A., ii,

behaviour of unattackable anodes in the electrolysis of hydrochloric acid, 1904, A., ii, 697.

heats of mixture of acids, 1905, A., ii,

801.

kinetics of extreme states of aggregation, 1906, A., ii, 7.

Bose, Emil [Hermann], a thermochemical relationship enunciated by Julius Thomson, 1906, A., ii, 727.

calorimetric studies. III., 1907, A.,

ii, 333.

determination of the partial vapour pressures of binary mixtures from measurements of the total pressures and of one partial pressure from measurements of the other, 1907, A., ii, 435.

physical properties of emulsions and their relationship with crystalline liquids, 1907, A., ii, 443.

equilibrium Ag + Ag = Ag 2

1907, A., ii, 735.

new vapour pressure interpolation formula, 1908, A., ii, 84.

the equilibrium 2Au (metal) + Au… = 3Au, 1908, A., ii, 264.

equilibrium between metals and solutions of metallic salts, 1908, A., ii, 569. condition of steam, 1908, A., ii, 577.

anomalies in the viscosity of emulsions and of anisotropic liquids, 1908, A., ii, 1017.

the so-called asymmetry product, 1909,

A., ii, 2.

[oxide theory of the oxygen electrode], 1909, A., ii, 115.

thermodynamics of binary liquids, 1909, A., ii, 214.

anomalies in the viscosity of anisotropic liquids in a condition of hydraulic flow, 1909, A., ii, 215.

theory of anisotropic liquids. 1909, A., ii, 383.

vapour-pressure curves of binary mixtures; remarks on Zawidzki's paper, 1910, A., ii, 266.

experiments relating to the "swarm" theory of anisotropic liquids, 1911, A., ii, 184.

Bose, Emil, and Margrete Bose, calorimetric studies. II. Heat toning of mixtures of alcohols and water, and of mixtures of two alcohols, 1907, A., ii, 333.

influence of mass distribution in the molecule on the magnitude of the molecular forces, 1909, A., ii, 989.

the turbulence viscosity of different liquids, 1911, A., ii, 257.

Bose, Emil, and (Miss) B. May Clarke, thermodynamics of non-homogeneous mixtures. II., 1908, A., ii, 84.

Bose, Emil, and F. Conrat, a silver microvoltameter, 1908, A., ii, 250.

anomalous viscosity at the clearing point of so-called crystalline liquids, 1908, A., ii, 258.

Bose, Emil, and A. Müller, calorimetric studies. I. Determination of specific heats of pure alcohols, of mixtures of water and alcohols, and of mixtures of alcohols alone, 1907, A., ii, 332.

Bose, Emil, and Dietrich Rauert, hydraulic viscosity of liquids, 1909, A., ii,

Bose, Emil, and Fr. A. Willers, the socalled asymmetry product. II., 1909,

A., ii, 361.

Bose, Margrete, anodic decomposition during the electrolysis of certain thallium, bismuth, and silver salts, 1905, A., ii, 299.

so-called electrolytic peroxide of silver,

1910, A., ii, 34.

Bose, Margrete. See also Emil Bose.

Boselli, J., speed of reaction in heterogeneous systems, 1911, A., ii, 196.

velocities of reactions in gas-liquid systems, 1911, A., ii, 265.
the inulinase of Aspergillus niger, 1911, A., ii, 1022.

Boshart, K. See Benno Bleyer.

Boshowsky, W. See Alexei E. Faworsky. Bosinelli, Gaetano. See Luigi Mascarelli and Ciro Ravenna.

Bosler, J., number of corpuscles in the atom, 1908, A., ii, 367.

Bosmans, L. See Albert Jacques Joseph

Vandevelde. Bošnjakovic, S., new pyknometer, 1904, A., ii, 384.

new gas-evolution apparatus, 1905, A.,

Bossche, Fernand Vanden, electrical conductivity of flames, 1904, A., ii, 9.

Bosse, Julius von. See Ernst Beckmann. Bosshard, Emil, and K. Zwicky, comparative experiments on certain methods of preparing perborates, 1912, A., ii, 551.

the constitution of the perborates,

1912, A., ii, 640. Bosshard, R. See Alfred Werner.

Bossuet, Robert. See Louis Hackspill and Paul Lebeau.

Bostock, Clifford. See Robert Llewellyn Taylor.

Bostock, Gertrude D., deamidisation. 1911, A., ii, 1112.

Boswell, Maitland Crease, course of the oxidation of B-naphthaquinone to phthalic acid, 1907, A., i, 407

detection and estimation of a-naphthaquinone, \(\beta\)-naphthaquinone, phthalonic acid, and phthalic acid, 1907, A., ii, 411.

Boswell, Maitland Crease. See also Charles Loring Jackson.

145

Bosworth, Alfred W., and Wilhelm Eissing, a burette, and normal solutions for Kjeldahl's nitrogen estimation, 1904, A., ii, 206.

Bosworth, Alfred W., and M. J. Prucha, the fermentation of citric acid in milk,

1911, A., ii, 318.

Bosworth, Alfred W. See also Burt Laws Hartwell.

Bosworth, Rowland Sherwood, iodometric estimation of silver based upon the reducing action of arsenite, 1909, A., ii, 938.

Bosworth, Rowland Sherwood. potassium

See also Frank Austin Gooch and Ralph Gibbs

van Name.

Bosz, J. E. Quintus, and Nardus Henri Cohen, so-called chicle gum, 1912, A., i, 125.

Bothe, W. See Walther Borsche. Bots, Hermann. See Robert Gnehm.

Botta, W., mixed crystals of sodium chloride and silver chloride (huantajayite), 1911, A., ii, 293.

Bottazzi, Filippo, fats and glycogen in the liver of Selachians, 1907, A., ii, 979.

chemico-physical investigations Visanimal fluids. Ia. and Ib. cosity of blood-serum of different marine and terrestrial animals, 1908, A., ii, 869.

chemico-physical investigations on animal liquids. II. Content of protein nitrogen in the blood-sera of various animals, 1908, A., ii, 869.

electric transport of glycogen and starch, 1909, A., i, 700.

electric transport and electrolytic decomposition of chloroform, 1909, A., i. 753.

technique of electric transport and dialysis experiments with organic colloids, 1909, A., ii, 720.

a more exact definition of colloidal systems and the classification of colloids, 1912, A., ii, 337.

surface tension of protein solutions, 1912, A., ii, 1042.

surface tension of solutions and suspensions of soaps, 1912, A., ii, 1142. chemical and physico-chemical properties of liquids expressed from striated and plain muscle, 1912, A., ii. 1192

Bottazzi, Filippo, and Giuseppe Buglia, dilatometric researches; new form of dilatometer for mixtures of liquids, 1912, A., ii, 135.

dilatometric researches. II. Preliminary results regarding non-colloidal solutions, 1912, A., ii, 135.

Bottazzi, Filippo, Giuseppe Buglia, and A. Jappelli, chemico-physical investigations on animal liquids. III. Variations of electrical conductivity, viscosity, and surface-tension of bloodserum during dialysis, 1908, A., ii,

Bottazzi, Filippo, and Gennaro d' Errico, physico-chemical investigations on

glycogen, 1907, A., i, 113.

Bottazzi, Filippo, and Noè Scalinci, chemico-physical investigations on the crystalline lens, 1908, A., ii, 966, 1054; 1909, A., ii, 162, 417; 1910, A., ii, 143, 975.

chemico-physical investigations on the crystalline lens. III. Imbibition of the crystalline lens in water and in water vapour, 1909, A., ii, 71.

chemico-physical investigations on the crystalline lens. VI. Imbibition of the lens in sodium chloride solutions of various concentrations, 1909, A., ii, 502.

chemico-physical investigations on the crystalline lens. XI. Imbibition of the lens in water at different temperatures and in acids and alkalis, 1910, A., ii, 56.

Bottazzi, Filippo, and C. Victoroff, colloidal properties of soluble soaps,

1910, A., i, 537.

colloidal properties of starch, especially its electrical transport, 1910, A., i,

Bottler, Max, the chemical properties of

the copals, 1906, A., i, 300.

Bottomley, James Frank, the molecular formulæ of some fused salts as determined by their molecular surface energy, 1903, T., 1421; P., 272.

Bottomley, William Beecroft, assimilation of nitrogen by certain nitrogenfixing bacteria in the soil, 1910, A.,

ii, 988.

some conditions influencing nitrogen fixation by aerobic organisms, 1912, A., ii, 972.

Bottu, H., clinical detection of dextrose in urine by o-nitrophenylpropiolic acid,

1909, A., ii, 1056.
Boubnoff, N., and Philippe Auguste Guye, formation of nitrosyl chloride at low temperatures by Gay Lussac's action; liquidus curve of the system: nitrosyl chloride-chlorine, 1911, A., ii, 599.

Bouchard, Charles, Pierre Curie, and V. Balthazard, physiological action of radium emanations, 1904, A., ii, 502.

Bouchard, Georges, the colouring matters and nitrogenous substances in fats, 1912, A., i, 532.

Boucher, Charles, decomposition of galena and chalcopyrite for analysis,

1903, A., ii, 758.

Boucher, Charles, and F. de Bounge, detection of "saccharin" in wines, beers, etc., 1903, A., ii, 517.

Bouchetal de la Roche, mixed carbamides of piperidine and aromatic amines, 1903, A., i, 574.

phenolic urethanes of piperidine, 1903,

A., i, 776.

action of secondary bases on the carbonates of phenols, 1904, A., i, 152.

the piperidylcarbamides, 1904, A., i, 189.

Bouchonnet, A., azelaic acid derivatives,

1905, A., i, 566. rubidium arsenites and arsenates, 1907,

A., ii, 345.

action of heat on ochres, 1911, A., ii, 495.

action of heat on ochres; allotropic modifications, 1912, A., ii, 165.

adsorption of dyes by ochres, 1912, A., ii, 540.

Bouchonnet, A. See also Camille Chabrié.

Boudet, estimation of tannin, 1906, A., ii, 911.

Boudouard, Octave, alloys of copper and magnesium, 1903, A., ii, 78, 480.

new method of determining the critical points of iron and steel, 1904, A., ii, 127.

allotropic transformations of nickel

steels, 1904, A., ii, 262.

zinc-magnesium alloys, 1904, A., ii, 732.

influence of water vapour on the reduction of the oxides of iron by mixtures of carbon monoxide and carbon dioxide, 1905, A., ii, 91.

influence of water vapour on the reduction of carbon dioxide by carbon, 1905, A., ii, 633.

silicones, 1906, A., i, 563.

aluminium calcium silicates, 1907, A., ii, 551.

extraction of gases contained in metals, 1908, A., ii, 109.

humic substances of coals, 1909, A., i,

action of air and oxidising agents on coals, 1909, A., ii, 234.

electrical resistance of special steels, 1912, A., ii, 119. Boudouard, Octave, and Henri Le Chatelier, limit of inflammability of mixtures of ether vapour and air, 1907, A., i, 460.

Bouffard, G., injection of benzidine dyes into normal animals, 1906, A., ii,

694.

Bougault, J., solubility of pieric acid in ether, 1903, A., i, 755.

reaction of cacodylic acid and the cacodylates, 1903, A., ii, 339. Kermes mineral, 1904, A., ii, 42.

action of iodine and yellow oxide of mercury on acids containing an ethylenic linking; separation of isomerides, 1905, A., i, 9.

detection of sodium salts [by means of potassium pyroantimoniate], 1905,

A., ii, 421.

antimony tartrate, 1906, A., i, 336. antimony tartrate and its ethyl ester,

1906, A., i, 558. cinnamenylparaconic acid, 1906, A.,

i, 670.

action of nascent hypoiodous acid on acids containing an ethylenic linking; iodo-lactones, 1906, A., i, 848.

reactions and estimation of arrhenal (disodium methylarsinate) and atoxyl (sodium anilinoarsinate), 1907, A., ii, 828.

estimation of methylarsine di-iodide and oxide, 1907, A., ii, 916.

action of nascent hypoiodous acid (iodine and sodium carbonate) on some acids of the general formula CHR:CH·CH₂·CO₂H (R being phenyl more or less substituted), 1908, A., i, 179, 269.

comparative study of the dehydration of atrolactic and p-methoxyatrolactic acids; p-methoxyatropic and di-p-methoxyatropic acids, 1908,

A., i, 340.

fixation of hydrogen cyanide by benzoylacrylic acid, 1908, A., i, 422.

action of nascent hypoiodous acid on unsaturated acids; iodo-lactones, 1908, A., i, 537.

new method of preparing mixed organic acid anhydrides, 1908, A., i, 791.

fixation of acetophenone by benzoylacrylic acid, 1908, A., i, 796.

action of nascent hypoiodous acid on unsaturated acids, 1908, A., i, 983.

Messinger and Vortmann's method of estimating phenols; separation of salicylic acid, 1908, A., ii, 738. Bougault, J., benzoylacrylic acid, 1909, A., i, 102.

benzoylacrylic acid; condensation of glyoxylic acid with certain ketones, 1909, A., i, 487.

catalytic oxidation of hypophosphorous

acid by copper, 1909, A., ii, 310. action of nascent hypoiodous acid on unsaturated acids; a-cyclogeranic acid, 1910, A., i, 254.

a-cyclogeranic acid, 1910, A., i, 254. etholides from Coniferæ; juniperic and sabinic acids, 1910, A., i, 297.

transformation of δ-phenyl-Δa-pentenoic acid into the Δy-isomeride, 1911, A., i, 202.

waxes of the Coniferae, 1911, A., ii, 223.

benzylpyruvic acid, 1912, A., i, 770.

Bougault, J., and G. Allard, presence of volemitol in some Primulacea, 1903, A., i, 62.

Bougault, J., and Léon Bourdier, the waxes of the Coniferæ; a new group of natural principles, 1909, A., i, 82.

Bougault, J., and Charles Charaux, lactarinic acid and ketostearic acid isolated from fungi of the genus Lactarius, 1911, A., i, 835. lactarinic acid, 1911, A., i, 949.

lactarinic, lactaric, and stearic acids in fungi, 1912, A., ii, 289.

Bouge, H., detection of chlorine in iodine, 1912, A., ii, 988.

Boughton, Willis A. See Charles R.

Bouilhac, Raoul, influence of formaldehyde on the growth of some freshwater Algæ, 1903, A., ii, 232.

Bouilhac, Raoul, and Ercole Giustiniani, influence of formaldehyde on the vegetation of white mustard, 1903, A., ii, 505.

buckwheat in presence of a mixture of Algæ and bacteria, 1904, A., ii, 198.

Bouin, Paul, and Paul Ancel, lipoid nature of an active substance secreted by the Corpus luteum of mammals, 1911, A., ii, 129. Bouisson, J. See A. Astruc.

Boulez, Victor, esterification of tert .terpenic alcohols, especially linalool, and estimation of this alcohol in volatile oils, 1907, A., ii, 306.

new method of analysis for citronella

oil, 1912, A., ii, 1105.

Boullanger, Eugène, action of flowers of sulphur on vegetation, 1912, A., ii, 381.

Boullanger, Eugène, and M. Dugardin, mechanism of the fertilising action of sulphur, 1912, A., ii, 971.

Boullanger, Eugène, and Léon Massol. nitrifying organisms, 1903, A., ii, 679; 1904, A., ii, 361.

action of ammonium salts on the nitrification of sodium nitrite by the nitric ferment, 1905, A., ii, 547.

Boulouch, R., mixtures of iodine and sulphur, 1903, A., ii, 538.

production of phosphorus sulphides in the cold, 1904, A., ii, 253.

phosphorus subiodide and the rôle of this substance in the allotropic transformation of phosphorus, 1905, A., ii, 633.

existence of phosphorus sulphides: mixtures of phosphorus and phosphorus sesquisulphide, 1906, A., ii,

non-existence of phosphorus trisulphide, 1906, A., ii, 535.

demonstration of the phase rule, 1909, A., ii, 802; 1910, A., ii, 110. phase rule, 1910, A., ii, 701.

Boulud, Raymond. See Raphael L6-

pine. Bouma, Jacob, estimation of indican in urine, 1904, A., ii, 102.

action of codeine, 1904, A., 275.

Bounge, F. de. See Charles Boucher. Bounoure, L., comparative study of four digestive diastases from certain species of coleoptera, 1911, A., ii, 214.

Bouquet, E. See F. Dienert. Bourbon, A. See Émile Vigouroux.

Bourcet, Paul, detection of antipyrine in dimethylaminoantipyrine famidopyrine], 1905, A., ii, 561.

Bourdet, L., assay of chloral, 1911, A., ii, 943.

Bourdier, Léon, presence of aucubin in different species of Plantago, 1907, A., ii, 864.

verbenalin, a new glucoside from Verbena officinalis, 1908, A., i, 197.

Bourdier, Léon. See also J. Bougault and Henri Hérissey.

Bourgeois, Edouard, and A. Abraham, influence of sulphur and sulphur-containing groups on the order of substitution of hydrogen atoms in benzene by bromine, 1912, A., i, 108.

Bourgeois, Edouard, and A. Fouassin, reactivity of aromatic bromo-com-pounds. II. Formation of aromatic disulphides of the types R.S.R'S.R and R·S·R'·S·R", 1911, A., i, 963.

Bourgeois, Edouard, and P. Huber, reactivity of aromatic bromo-compounds. III. Action of bromonitrobenzenes on phenylmercaptides, 1911, A., i, 964.

new derivatives of phenyl sulphide,

1912, A., i, 347.

Bourgeois, Edouard, and Karl Petermann, influence of sulphur and of sulphur-containing groups on the order of substitution of hydrogen atoms in cyclic nuclei; sulphur derivatives of phenyl sulphide, 1904, A., i, 28.

Bourguignon, A., hydrogenation of furan,

1908, A., i, 280.

Bourion, François, action of chlorine and sulphur chloride on some oxides, 1907, A., ii, 690.

a general method of preparing anhydrous metallic bromides from the

oxides, 1907, A., ii, 773. estimation of tungstic acid and its separation from other substances by means of a mixture of chlorine and sulphur chloride, 1908, A., ii, 737.

action of sulphur chloride, S2Cl2, on metallic oxides, 1909, A., ii, 229.

separation of iron and titanium, 1912, A., ii, 691.

Bourion, François. See also Georges Darzens, Camille Matignon, and Georges

Bournat, V., adsorption of ions, 1910, A., ii, 103.

Bourquelot, Émile [Élie], hydrolysis of carbohydrates of high molecular weight by soluble ferments, 1903, A., i, 378.

general characters of the soluble ferments which effect the hydrolysis of the polysaccharides, 1903, A., i,

452.

sucrose in plants, 1903, A., ii, 747. detection of glucosides in plants by means of emulsin, 1906, A., ii, 386.

detection of sucrose in plants with the aid of invertase, 1907, A., ii, 510.

general process of oxidation by oxidising ferments, 1909, A., i, 862.

occurrence of a cyanogenetic glucoside in Linaria striata, 1910, A., ii, 63.

Bourquelot, Emile, and Marc Bridel, analysis of the tubercule of Dioscorca macabiha from Madagascar, 1909, A., ii, 86.

detection of raffinose in plants; its presence in two leguminous seeds,

1909, A., ii, 836.

a new sugar, verbascose, from the root of mullein, 1910, A., i, 817.

Bourquelot, Emile, and Marc Bridel. presence of gentiopicrin in Chlora perfoliata, 1910, A., ii, 234.

influence of the method of drying on the composition of gentian root. Preparation of gentiopicrin from the dry root, 1910, A., ii, 337.

occurrence of gentiopicrin in roots and stems of Gentiana pneumonanthe,

1910, A., ii, 887.

action of invertase on polysaccharides derived from lævulose, 1911, A., i.

action of emulsin on gentiopicrin in alcohol, 1911, A., i, 1053.

action of emulsin on salicin in alcoholic

solution, 1912, A., i, 522. a synthetic action of emulsin, 1912,

A., i, 592.

action of emulsin on gentiopicrin in solution in neutral organic liquids, 1912, A., i, 593.

synthesising and hydrolysing actions of emulsin in alcoholic solu-

tion, 1912, A., i, 672.

syntheses of alkylglucosides by means of emulsin; B-methylglucoside, Bethylglucoside, and B-propylglucoside, 1912, A., i, 738.

synthesis of alkylglucosides by the action of emulsin; B-butylglucoside, B-isobutylglucoside, B-allylglucoside,

1912, A., i, 790.

new synthesis of an alkylglucoside by means of emulsin; B-benzylglucos-

ide, 1912, A., i, 790.

the reversibility of ferment actions; influence of the dilution of ethyl alcohol on the synthesising action of emulsin in this medium, 1912, A., i, 928.

synthesis of alkylglucosides by the action of emulsin; B-isopropylglucoside and β-isoamylglucoside, 1912,

A., i, 946.

Bourquelot, Emile, and Émile Danjou, sambunigrin, a new cyanogenetic glucoside obtained from the leaves of Sambucus nigra, 1905, A., i, 912; ii, 605.

Bourquelot, Emile, and (Mlle.) A. Fichtenholz, characters, distinction, and detection in plants of arbutin and methylarbutin, 1910. A., i, 273.

presence of a glucoside in the leaves of the pear tree and its extraction,

1910, A., ii, 742.

the glucoside of leaves of the pear tree, its presence in the leaves of different varieties, its detection in the trunk and root, 1911, A., i, 803.

Bourquelot, Émile, and (Mlle.) A. Fichtenholz, the glucoside of pear leaves [arbutin], and its function in producing autumn tints, 1911, A., ii, 143.

application of the biological method to Kalmia latifolia, and preparation of a glucoside, 1912, A., ii,

196.

identification of the glucoside from the leaves of Kalmia latifolia with asebotin, 1912, A., ii, 380.

presence of arbutin in the leaves of Grevillea robusta (Proteacea), 1912,

A., ii, 594.

presence of quebrachite in the leaves of Grevillea robusta, 1912, A., ii, 1085.

Bourquelot, Émile, and Henri Hérissey, presence of small quantities of trypsin in commercial pepsins, 1903, A., i, 376.

antiferments, 1903, A., i, 544.

emulsin, as obtained from almonds, is a mixture of several ferments, 1903, A., i, 544.

successive action of acids and soluble ferments on complex polysaccharides, 1903, A., i, 551.

lactase, 1903, A., i, 784.

· mechanism of the saccharification of mannans of Phytelephas macrocarpa by the seminase of lucerne, 1903, A., ii, 567.

aucubin, the glucoside of Aucuba japonica, 1904, A., i, 606; 1905,

A., i, 364.

presence of trehalase in fungi, 1905, A., ii, 113.

source and composition of the essential oil of Herb Bennett root; a new glucoside and enzyme, 1905, A., ii,

glucoside hydrolysed by emulsin; bakankosin from the seeds of a Madagascar Strychnos, 1907, A., i,

isomerism of the hydrogen cyanide glucosides, sambunigrin, and pru-

laurasin, 1907, A., i, 784. arbutin and some of its derivatives considered with regard to their rotatory power and their hydrolysis by emulsin, 1908, A., i, 356.

bakankosin, 1908, A., i, 1001.

synthesis of alkylgalactosides by means of emulsin; B-ethylgalactoside, 1912, A., i, 946.

choice of yeasts in the bio-chemical detection of sugars and glucosides, 1912, A., ii, 1104.

Bourquelot, Emile, and L. Marchadier. the reaction induced by an indirectly oxidising ferment (peroxydase), 1904, A., ii, 552.

Bourquelot, Emile, and J. Vintilesco, oleoeuropein; a new glucoside obtained from the olive, Olea europa,

1908, A., i, 904.

variations in the proportions of oleoeuropein in the olive from its appearance to maturity, 1910, A., ii, 442.

Bourry, Henri. See Emilio Noelting. Bousfield, William Eric. See William

Robert Bousfield.

Bousfield, William Robert, the purification of water by continuous fractional distillation, 1904, P., 49; 1905, T., 740.

ionic sizes in relation to the conductivity of electrolytes, 1905, A., ii,

369.

ionic size in relation to the physical properties of aqueous solutions, 1906, A., ii, 428.

a new form of pyknometer, 1908,

T., 679; P., 69. the continuous fractional distillation of water, 1912, T., 1443; 186.

two thermo-regulators, 1912, A., ii,

Bousfield, William Robert, and William Eric Bousfield, the specific heat of

water, 1911, A., ii, 580.

Bousfield, William Robert, and Thomas Martin Lowry, influence of temperature on the conductivity of electrolytic solutions, 1903, A., ii, 52.

electrical conductivity and other properties of sodium hydroxide in aqueous solution as elucidating the mechanism of conduction, 1905, A., ii, 135, 298.

thermochemistry of electrolytes in relation to the hydrate theory of ionisation, 1907, A., ii, 930.

liquid water a ternary mixture; solution volumes in aqueous solutions, 1910, A., ii, 842.

the purification and properties of acetic acid, 1911, T., 1432; P., 187.

the density of acetic acid; a correction, 1912, P., 72.

Boutaric, A., cryoscopy in fused sodium

thiosulphate, 1911, A., ii, 1060.

Boutario, A., and Ch. Leenhardt, cryoscopy in decahydrated sodium sulphate, 1912, A., ii, 1136.

Boutaric, A. See also Ch. Leenhardt.

Bouty, Edmond [Marie Léopold], dielectric cohesion of argon and its mixtures, 1904, A., ii, 309.

dielectric cohesion of saturated mercury vapour and its mixtures,

1904, A., ii, 604.

dielectric cohesion of neon, 1910,

A., ii, 178.

dielectric cohesion of neon and its mixtures; quantitative analysis based on measurement of dielectric cohesion, 1910, A., ii, 571.

dielectric cohesion of argon, 1910,

A., ii, 680.

dielectric cohesion of the rare monatomic gases, 1911, A., ii, 458. Bouveault, Louis, preparation of adipic

acid, 1904, A., i, 8. by-products of the electrolytic preparation of adipicacid, 1904, A., i, 9. new method of preparation of alde-

hydes, 1904, A., i, 13.

rhodinamine, 1904, A., i, 17.

action of oxygen on magnesium organo-haloid compounds, 1904, A., i, 40.

hexahydrobenzaldehyde, hexahydroacetophenone, and the corresponding secondary alcohol, 1904, A., i, 61. purifying and characterising alcohols,

1904, A., i, 465.

application of the Grignard reaction to the halogen ethers of tertiary alcohols, 1904, A., i, 546.

modes of formation and preparation of aliphatic aldehydes and a general synthetical method for the preparation of aldehydes, 1905, A., i, 116.

preparation of ethylenic hydrocarbons; transformation of primary alcohols into aldehydes and hydrogen, 1908,

A., i, 117.

preparation and purification of tetrachlorobenzoquinone (chloroanil) and tetrachloroquinol (hydrochloroanil), 1908, A., i, 190.

[1-acetyl-A1-cyclopentene as an oxidation product of Δ^1 -cyclohexeneacetic

acid], 1909, A., i, 372.

a-cyclogeranic derivatives. I., 1910,

A., i, 380.

a-cyclogeraniol. II., 1910, A., i, 380. apparatus to facilitate distillation with a fractionating column under reduced pressure and with a fixed flame, 1910, A., ii, 485.

Bouveault, Louis, and Gustave Blanc, preparation of primary alcohols by means of the corresponding acids, 1903, A., i, 597, 673; 1904, A., i, 642.

Bouveault, Louis, and Gustave Blanc, two hydrocarbons isomeric with campholene and camphene, 1903, A., i, 613.

reduction of complex esters, 1903,

A., i, 730.

preparation of primary alcohols from the corresponding amides, 1904, A., i, 213.

hydrogenation of esters of unsaturated

acids, 1905, A., i, 11.

hydrogenation of esters of acids with an acetal function, 1905, A., i, 12. reduction of esters of hydroxy- and

ketonic acids, 1905, A., i, 13. camphene, camphenylone, isoborneol,

and camphor, 1905, A., i, 222. new derivatives of camphenilone; its

constitution, 1908, A., i, 134.

syntheses of derivatives of camphenilone, 1909, A., i, 108.

Bouveault, Louis, and André Bongert, action of aliphatic acid chlorides on the sodium derivatives of acetoacetic esters, 1903, A., i, 63.

C-acyl derivatives of acetoacetic esters,

1903, A., i, 63.

O-acyl derivatives of acetoacetic esters, 1903, A., i, 64.

synthesis of ketones and acylacetones from C-acylacetic esters, 1903, A.,

synthesis of acylacetic esters from Cacylacetoacetic esters, 1903, A., i, 142.

reactions and decompositions of Cacylacetoacetates, 1903, A., i, 144.

action of acid chlorides on the sodium derivatives of substituted acetoacetic esters, 1903, A., i, 144.

mutual isomeric transformations of acetylacetoacetic esters, 1903, A., i,

Bouveault, Louis, and F. Chereau, 2chlorocyclohexanone and its derivatives, 1906, A., i, 513.

Bouveault, Louis, and Gourmand, complete synthesis of rhodinol, the characteristic alcohol of essence of roses, 1904, A., i, 756.

Bouveault, Louis, and Ferdinand Levallois, establishment of the constitutional formula of fenchone, 1908, A., i, 193.

synthesis of derivatives of racemic fenchone, 1909, A., i, 497, 595.

constitution of fenchone, 1910, A., i, 572, 627, 686, 863.

synthesis of BC-dimethylheptan-B&Ctriol and of βyε-trimethylhexan-βyεtriol. II., 1911, A., i, 3.

Bouveault, Louis, and René Locquin, preparation of substituted acylacetic

esters, 1904, A., i, 551.

action of nitrous acid and its derivatives on a-substituted \(\beta\)-ketonic esters. Part I. General. Part II. Preparation of a-oximino-esters and acids, 1904, A., i, 847.

theory of the transformation of asubstituted β-ketonic esters into αoximino-esters, 1904, A., i, 848.

preparation of a-ketonic acids and esters from a-oximino-esters. V., 1905, A., i, 10.

preparation of α-substituted β-ketonic acids and of ketones of the aliphatic series, 1905, A., i, 18.

preparation of a-diketone mono-oximes of the type R·CO·CR':N·OH, 1905, A., i, 19.

general method for the preparation of a-diketones, 1905, A., i, 20.

reduction of a-oximino-esters; synthesis of homologues of glycine and their esters, 1905, A., i, 32.

new synthesis of racemic leucine, 1905,

A., i, 33.

preparation, use, and recovery of semicarbazide, 1905, A., i, 178.

action of sodium on aliphatic esters, 1905, A., i, 560.

derivatives of butyroin and hexonoin, 1905, A., i, 572.

synthesis of a new leucine, 1905, A., i, 636.

action of sodium on esters of fatty acids; preparation of acyloins of the type R'CO'CH(OH)'R; mechanism of the reaction, 1906, A., i, 782.

acyloins of the fatty series. III, and

IV., 1906, A., i, 782.

hydrogenation of fatty acyloins; preparation of s-disecondary glycols, alcohols of the type OH CHR CH2R, and the corresponding ketones, 1906, A., i, 783.

"steric hindrance" in derivatives of pivaloin, 1906, A., i, 784.

oxidation of acyloins of the fatty series; some a-diketones and their derivatives, 1906, A., i, 803.

reduction of oximino-esters; synthesis of a new leucine, 1906, A., i, 938.

condensation of sodium derivatives of the acyloins (hydroxy-ketones) with esters of the acetic series, 1907, A., i, 479.

synthesis of racemic dihydrocamphoric acid, 1908, A., i, 172.

syntheses by means of methyl and ethyl adipates, 1908, A., i, 172.

Bouveault, Louis, and René Locquin. preparation of adipic acid and of ethyl cyclopentanonecarboxylate, 1908, A., i, 393.

preparation and description of condensation products of sodium derivatives of the acyloins (hydroxy-ketones) with esters of the acetic series, 1910,

A., i, 92.

action of magnesium amalgam on acetone; βγε-trimethylhexan-βγεtriol and some of its derivatives, 1911, A., i, 2.

Bouveault, Louis, and André Wahl ethyl dinitroacetate, 1903, A., i,

nitroisobutylene, 1903, A., i, 596. preparation of nitrous and nitric esters. 1903, A., i, 599.

reduction of ω-nitrostyrolene (β-nitrostyrene), 1903, A., i, 616.

preparation and reduction of homologues of nitrostyrolene (8-nitrostyrene), 1903, A., i, 616.

isonitrosomalonic esters and their transformation into mesoxalic esters,

1903, A., i, 677.

isonitrosoacetic esters, 1904, A., i, 546. action of nitrogen trioxide and peroxide on isonitrosoacetic esters, 1904, A., i, 547.

preparation of aß-diketonic esters, 1904, A., i, 556.

reactions of aß-diketobutyric esters. I. Action of phenylhydrazine, 1904, A., i, 789.

preparation of nitroacetic esters, 1904,

A., i, 795.

the non-existence of two stereoisomerides of ethyl as-dioximinobutyrate, 1905, A., i, 257.

preparation of aB-diketobutyric esters, 1905, A., i, 409.

reactions of diketobutyric esters, 1905, A., i, 410.

preparation of ethyl nitrosoacetoacetate, 1905, A., i, 506. isonitrosomethyliso-oxazolone, 1905,

A., i, 612.

Bouyssy, Marius. See H. Henriet. Bouzat, Albert, anhydrous cuprammonium sulphates, 1903, A., ii, 21.

dissociation curves, 1903, A., ii, 529. sublimation curves, 1903, A., ii, 588. copper ammonia compounds, 1903, A.,

ii, 597.

pressure curves of univariant systems which contain a gas phase, 1903, A., ii, 637.

ammonio-cuprous sulphate, 1908, A., ii, 187.

Bovell, J. R. See R. Radclyffe Hall.

Bovini, F. See Maurizio Padoa.

Bowack, Douglas Anderson, and Arthur Lapworth, derivatives of menthyl cyanoacetate, 1903, P., 22; 1904, T., 42.

hydrizino-haloids derived from oxalic acid, 1905, T., 1854; P., 257.

Bowden, Richard Charles, studies of the constitution of soap in solution: the electrical conductivity of sodium stearate solutions, 1911, T., 191; P., 5.

Bowden, Richard Charles. See also

James William McBain.

Bowen, N. L., composition of nephelite, 1912, A., ii, 176.

the binary system Na2Al2Si2O8 (nephelite, carnegieite)—CaAl2Si2O8 (anorthite), 1912, A., ii, 774.

Bowen, Wilbur Pardon, See George

Oswin Higley.

Bower, Joshua. See Harold Baily Dixon.

Bowles, O., pyromorphite from British Columbia, 1909, A., ii, 900.

Bowles, Percy Ewart. See Robert Stollé. Bowman, Fred C., reaction between bromic, hydriodic, and arsenious acids, and the "induction" by hydrogen bromide of the reaction between bromic and arsenious acids, 1907, A., ii, 456.

Bowman, Herbert Lister, refractive indices of pyromorphite, mimetite, and vanadinite, 1904, A., ii, 133.

hamlinite from the Binnenthal, Switzerland, 1907, A., ii, 703.

the identity of poonahlite with meso-

lite, 1909, A., ii, 677.

Bowman, Herbert Lister, and Herbert Edmund Clarke, structure and composition of the Chandakapur meteoric stone, 1910, A., ii, 783.

Bowman, Herbert Lister. See also Her-

bert Edmund Clarke.

Bowman, Richard Sisson, an improved apparatus for the continuous extraction of liquids with ether, 1906, P.,

Bowser, Leon T., simple fat extraction apparatus, 1909, A., ii, 770.

speedy detection of potassium in small amounts, 1910, A., ii, 346.

estimation of potassium by the cobaltinitrite method, 1910, A., ii, 999.

titrimetric estimation of phosphorus in small amounts, 1911, A., ii, 437, 1135.

potassium: its detection as the cobaltinitrite, 1911, A., ii, 1031.

Bowser, Leon T., estimation of very small amounts of calcium by means of potassium permanganate, 1911, A., ii, 1031.

carbon dioxide: its volumetric estimation, 1912, A., ii, 995.

estimation of carbon dioxide in soils,

1912, A., ii, 1095. Boycott, Arthur Edwin, gaseous metabolism of rabbits' small intestine, 1905, A., ii, 540.

typhoid and paratyphoid bacteria and

sera, 1906, A., ii, 110.

peritoneal blood transfusion, 1910, A., ii, 725.

the rate of regeneration of hæmoglobin after hæmorrhage, 1911, A., ii, 1108.

infective methæmoglobinæmia, 1912, A., ii, 186.

the size and growth of the blood in rabbits, 1912, A., ii, 572.

Boycott, Arthur Edwin, and Robert Alexander Chisolm, a method for determining the alkalinity of the blood, 1910, A., ii, 317.

the influence of underfeeding on the

blood, 1911, A., ii, 1107.

Boycott, Arthur Edwin, and G. C. C. Damant, gases produced in the alimentary canal of goats, 1908, A., ii, 122.

Boycott, Arthur Edwin, and Claude Gordon Douglas, oxygen capacity, 1909, A., ii, 249.

transfusion, 1910, A., ii, 317.

Boycott, Arthur Edwin, and John Scott Haldane, effects of high external temperature on the body-temperature, respiration, and circulation in man, 1905, A., ii, 729.

effects of low pressures on respiration,

1909, A., ii, 66.

Boycott, Arthur Edwin. See also John Fawcett.

Boyd, David Runciman, action of phosphorus trichloride on the aromatic ethers of glycerol. Part II., 1903, T., 1135; P., 202.

the action of ammonia on the glycide aryl ethers. Part II. Phenoxypropanolamines, 1910, T., 1791; P., 209.

Boyd, David Runciman, and Herbert Stanley Knowlton, the action of ammonia on the glycide aryl ethers. Part I. o-Tolyloxypropanolamines, 1909, T., 1802; P., 235.

Boyd, David Runciman, and Ernest Robert Marle, the condensation of epichlorohydrin with phenols, 1908, T., 838; P., 92.

Boyd, David Runciman, and Ernest Robert Marle, the action of potassium hydroxide on epichlorohydrin in presence of monohydric phenols, 1909, T., 1807; P., 235.

a new method for the preparation of aryl ethers of glycerol a-monochlorohydrin, 1910, T., 1788; P., 208.

Boyd, David Runciman, and John Edmund Pitman, note on the Zeisel reaction in the case of diortho-substituted phenolic ethers, 1905, T., 1255; P., 221.

Boyd, Robert. See George Gerald Henderson.

Boyden, Charles I., separation of maltose and lactose, 1903, A., ii, 112.

Boyer, Carl, and Edgar T. Wherry, radioactive minerals in the collection of the Wagner free institute of science, 1910, A., ii, 569.

Boyle, James J., estimation of manganese in steel, 1912, A., ii, 999.

Boyle, (Miss) Mary, the iodobenzenemonosulphonic acids. Part I., 1909, T., 1683; P., 35.

iodobenzenemonosulphonic acids. Part II. Esters and salts of di- and triiodobenzenesulphonic acids, 1910, T., 211; P., 4.

iodobenzenemonosulphonic acids. Part
III. 2:3-Di-iodo- and 2:3:4:5-tetraiodobenzenesulphonic acids, 1911,
T., 325; P., 9.

Boyle, R. W., absorption of the radioactive emanations by charcoal, 1908, A., ii, 1005.

the solubility of the radioactive emanations in liquids, 1910, A., ii, 677.

the volatilisation of radium emanation at low temperatures, 1911, A., ii, 6.

the behaviour of radium emanation at low temperatures, 1911, A., ii, 569.

solubility of the radium emanation; application of Henry's law at low partial pressures, 1912, A., ii, 10.

Boylston, Arthur Clarence. See Gregory Paul Baxter.

Boynton, Clarence Norman. See Frank Austin Gooch.

Boysen-Jensen, P., synthetic processes in plants. I. Sucrose synthesis, 1912, A., ii, 672.

Bozenhardt, Carl. See Carl Bülow.

Braak, C. See Heike Kamerlingh Onnes. Braasch, Fritz. See Paul Rabe.

Brach, Hugo, the chemical degradation of chitin, 1912, A., i, 203.

apparatus for working with ozone and for its quantitative estimation, 1912, A. ii, 1164.

Brach, Hugo. See also Emil Lenk.

Brachin, A., reserve carbohydrates of nutmeg and mace, 1903, A., ii, 588. researches on lactase, 1904, A., i, 1069.

Brachin, Maurice, action of organomagnesium haloids on acetylenic aldehydes and ketones; acetylenic alcohols, 1907, A., i, 128.

Brachin, Maurice. See also Charles
Moureu.

Brachmann, Curt. See Richard Stoermer.

Braconnier, and G. Chatelain, a new refrigerator, 1903, A., ii, 643.

Bradbury, Robert Hart, colloidal solution, 1907, A., ii, 939.

Bradley, Charles E., chemical study of some Oregon Beaverdam salts, 1906, A., ii, 249.

occurrence of coumarin in Achlys triphylla, 1907, A., ii, 499.

Bradley, C. H. Burton, leucoprotease and anti-leucoprotease, 1910, A., i, 795.

Bradley, Harold Cornelius, a delicate colour reaction for copper, and a micro-chemical test for zine, 1906, A., ii, 805.

manganese a normal element in the tissues of the fresh-water clams, Unio and Anodonta, 1907, A., ii, 567.

digestive gland of the crawfish, 1908, A., ii, 405.

human pancreatic juice, 1909, A., ii,

lipase reactions, 1910, A., i, 800.

lipase, 1910, A., ii, 727.

manganese in fresh-water mussels, 1910, A., ii, 731.

manganese of the tissues of the lower animals, 1910, A., ii, 979. synthetic action of enzymes, 1912,

A., ii, 368.

Bradley, Harold Cornelius, and H. S. Gasser, intestinal absorption, 1912, A., ii, 365.

Bradley, Harold Cornelius. See also Lafayette Benedict Mendel.

Bradley, Walter Minor, composition of warwickite, 1909, A., ii, 247. analysis of neptunite from San Benito

Co., California, 1909, A., ii, 815.

Bradley, Walter Minor. See also
Harry Ward Foote, William Ebenezer
Ford. and Samuel Lewis Penfield.

Bradley, Walter Parke, and W. B.
Alexander, action of ammonia on ammonium thiocyanate, 1912, A., i, 170.

Bradley, Walter Parke, and Arthur Wesley Browne, resistance of glass tubing to bursting pressure, 1904,

A., ii, 239.

Bradley, Walter Parke, Arthur Wesley Browne, and Clarence Frederic Hale, effect of mechanical vibration on carbon dioxide near the critical temperature, 1905, A., ii, 75; 1909, A., ii, 788.

liquid above the critical temperature,

1909, A., ii, 789.

Bradley, Walter Parke, and Clarence Frederic Hale, pure carbon dioxide, 1908, A., ii, 688.

Bradshaw, Hamilton, certain derivatives of phenylglycine-o-sulphonic acid, 1906, A., i, 348.

o-sulphaminebenzoic acid and related compounds, 1906, A., i, 359.

relative rates of oxidation of ortho-, meta-, and para-compounds, 1906, A., i, 360.

Bradshaw, Henry A. See Charles H.

LaWall.

Bradshaw, Lawrence, the firing of gaseous mixtures by compression, 1907, A., ii, 450.

Bradshaw, Laurence. See also Harold Baily Dixon and Joseph William

Mellor.

Brady, Oscar Lisle, compounds of copper benzoate with pyridine and quinoline, 1911, P., 94.

the constitution of aconitine; preliminary note, 1912, P., 289.

Brady, Oscar Lisle, and Samuel Smiles, intramolecular rearrangement of diphenylamine ortho-sulphoxides. Part III. The tri- and tetra-chlorosulphoxides, 1910, T., 1559; P., 199.

Brady, Oscar Liste. See also John

Cannell Cain.

Braehmer, Fritz. See Franz Fischer. Bräuer, Egon. See Felix Kaufler.

Bräuer, P., calorimetric determination of heat development at electrodes, 1909, A., ii, 15.

Bräuer, Robert. See Heinrich Goldschmidt.

Braeuning, Hermann, action of chemical stimuli, 1904, A., ii, 359.

velocity of fermentation reactions on the addition of chemically indifferent substances, 1904, A., ii, 676.

Bräunlich, Fritz. See Eduard Donath

and Alfred Werner.

Bräutigam, E. F. See Richard Stoermer. Walter. estimation Bräutigam, formaldehyde, 1910, A., ii, 1006.

Bragg, William Henry, absorption of a-rays and the classification of the a-rays from radium, 1905, A., ii, 4.

a-particles of radium, 1905, A., ii, 791.

a-particles of uranium and thorium, 1906, A., ii, 416.

ionisation of various gases by the aparticles of radium, 1906, A., ii,

322; 1907, A., ii, 219. influence of the velocity of the aparticle on the stopping power of the substance through which it passes, 1907, A., ii, 324.

the consequences of the corpuscular hypothesis of the y- and X-rays, and the range of B-rays, 1910,

A., ii, 919.

the direct or indirect nature of the ionisation by X-rays, 1912, A., ii,

Bragg, William Henry, and William Ternent Cooke, the ionisation curve of

methane, 1907, A., ii, 733.

Bragg, William Henry, and Richard Daniel Kleeman, ionisation curves of radium, 1905, A., ii, 5.

Bragg, William Henry, and John Percival Vissing Madsen, experimental investigation of the nature of y-rays, 1908, A., ii, 556; 1909, A., ii, 112.

quality of the secondary ionisation due to β-rays, 1908, A., ii, 921.

Bragg, William Henry, and Harry Leonard Porter, energy transforma-tion of X-rays, 1911, A., ii, 683.

Brahm, Carl. See Emil Abderhalden. Brahmachari, U. N., the law regulating hæmolysis of erythrocytes in hyposmotic saline solution or distilled water, 1911, A., ii, 213.

Brahn, Benno. See Otto Dimroth and Carl Neuberg.

Brame, John Samuel Strafford, the action of acetylene on aqueous and hydrochloric acid solutions of mercuric chloride, 1905, T., 427; P., 119.

constant temperature heating apparatus for explosives and experiments on the decomposition of nitrocelluloses, 1912, A., ii, 394.

Bramley, Arthur. See Gilbert Thomas

Morgan.

Bramsch, Walther, condensation of ypicoline, 2:6-lutidine, and y-collidine [2:4:6-trimethylpyridine] with piperonaldehyde and salicylaldehyde, 1909, A., i, 414.

Branch, Gerald Eyre Kirkwood, and Arthur Walsh Titherley, 2-phenyl-1:4:5:6-terahydropyrimidine and benzoyl-αγ-diaminopropane, 1912, T., 2342; P., 293.

Brand, Hermann, the ternary system cadmium chloride-potassium chloride-sodium chloride, 1912, A., ii,

255.

the binary systems cadmium iodidepotassium iodide and cadmium iodide-sodium iodide, 1912, A., ii, 256.

Brand, Joseph, rapid method for the detection of traces of zinc in worts, beer, wine, etc., 1905, A., ii, 653. detection of arsenic in sulphur, 1908,

A., ii, 532.

Brand, Kurt, action of alkalis and alcohols on o-chloronitrobenzene,

1903, A., i, 371, 743.

preparation of β-arylhydroxylamines by the electrochemical reduction of aromatic nitro-compounds, 1905, A., i, 770.

partial reduction of aromatic dinitroand polynitro-derivatives by electrolytic methods, 1906, A., i, 80.

ammonium and sodium sulphides as partial reducing agents for aromatic dinitro- and polynitro-compounds, 1907, A., i, 119.

derivatives of m-aminobenzene-mazodiphenylamine, 1907, A., i, 800. electrolytic reduction of the condensation products of aldehydes and amines, 1909, A., i, 784.

thiophenols. I. o-Azothioanisole and o-thiodianisidine, 1909, A., i, 855.

two new forms of 2-nitro-6-hydroxylaminotoluene, 1911, A., i, 713.

coloured hydrocarbons of the diphensuccindene series. I., 1912, A., i, 960.

Brand, Kurt, and John Edwin Ramsbottom, electrolytic conversion of manganates into permanganates, 1910, A., ii, 958.

Brand, Kurt, and A. Höing, electrochemical reduction of condensation products of aldehydes with amines,

1912, A., ii, 895.

Brand, Kurt, and Edward Stohr, electrochemical reduction of o-nitro-acetanilide, 1907, A., i, 100, 206. electrochemical reduction of p-nitro-

acetanilide, 1909, A., i, 564.

Brand, Kurt, and Adolf Wirsing, thiophenols. II. pp'-Azophenyl methyl sulphide and its derivatives, 1912, A., i, 666. Brand, Kurt, and Heinrich Zöller, partial reduction of 2:6- and 2:4-dinitrotoluenes by electrolytic methods, 1907, A., i, 755.

Brand, Kurt. See also Karl Elbs. Brand, Max. See Fritz Ephraim.

Brandenburg, Kurt, diffusible alkali and alkali-tension of the blood in disease, 1904, A., ii, 496.

Brandenburg, Robert, a means of holding the weighed tube used in the determination of vapour density by the displacement method, 1909, A., ii, 298.

estimation of free calcium oxide in cements, 1909, A., ii, 832.

Brandis, R., [indirect] iodometric estimation of phosphoric acid and of magnesium in the triple phosphate, 1910, A., ii, 345.

Brandis, R. See also Paul Artmann. Brandl, Josef, sapotoxin and sapogenin

from Agrostemma githago. II., 1908, A., i, 818.

Brandl, Josef, Ernst Mayr, and A. Vierling, sapotoxin and sapogenin from Agrostemma githago, 1906, A., i, 526.

Brandl, Josef, and Georg Schärtel, fagopyrum-rutin, 1912, A., i, 885.

Brandt, Alexander, relation between Trouton's formula and van der Waals' equation, 1903, A., ii, 635.

relation between Stefan's formulæ for the internal pressure of liquids and van der Waals' equation, 1903, A., ii, 641.

Brandt, Hermann. See Max Busch.

Brandt, Leopold, diphenylcarbohydrazide [diphenylcarbazide] as indicator in the titration of iron with dichromate, 1906, A., ii, 309.

pure ferrie oxide as a standard substance for the estimation of iron in hydrochloric acid solution, 1908,

A., ii, 899.

irregularities in the titration of arsenic after previous distillation, 1909, A., ii, 1051.

Brandt, Louis. See Conrad Willgerodt. Brandt, Paul. See Johannes Scheiber.

Brandt, Wilhelm. See Wilhelm Manchot.

Brann, Bertrand F. See Charles W. Easley and Arthur Amos Noyes.
Branner, John Casper, zinc ores of North

Arkansas, 1904, A., ii, 416.

a hydrocarbon from the diamondwashings of Bahia, Brazil, 1912, A., ii, 171. Brannon, W. A. See Elmer Verner McCollum.

Oscar Ellis. Bransky, See Joseph Elliott Gilpin.

Brasart. See Léon Lindet.

Brasch, Ludwig. See Fritz Fichter.

Brasch, Walther, behaviour of nonfermentable carbohydrates in the animal organism, 1907, A., ii, 975.

bacterial degradation of primary scission products of pro-teins, 1909, A., ii, 692. the degradation by bacteria of the

ultimate hydrolysis products of proteins, 1910, A., ii, 60.

Brasch, Walther, and Ernst Friedmann, a new synthesis of isoleucine, 1908,

A., i, 607.

Brasch, Walther, and Carl Neuberg, the biochemical conversion of glutamic into n-butyric acid, 1908, A., i, 860.

Brass, Kurt, oxidation of anilinoquinones to benzidine derivatives, 1912, A., i, 874.

Brass, Kurt. See also Władysław Fenerstein and Rudolf Pummerer.

Brassert, Walter. See Josef Houben and Robert Kremann.

Brasseur, J. See N. G. Blattner.

Brat, Heinrich, [physiological] action of barium chloride and of barutine, 1905, A., ii, 846.

Brau and Denier, preparation of cholera

toxin, 1905, A., ii, 747.

Braude, B., and Anton Julius Carlson, action of lymphagogues on the concentration of agglutinins in serum and lymph, 1908, A., ii, 310.

Brauer, Ludolph, the liver, 1904, A., ii,

Braumann, Max. See Wilhelm Traube. Braun, Alfred. See Emil Erlenmeyer,

Braun, Arsène, and Joseph Tscherniac, products of the action of acetic anhydride on phthalamide, 1907, A., i,

Braun, Berta, and Hans Kittel, the pinacolin from the pinacone of methyl ethyl ketone, 1907, A., i, 16.

Braun, George. See Hartwig Franzen. Braun, Hans Julius. See Arthur Rosen-

Braun, Julius von, behaviour of tertiary nitrogen derivatives with a negative grouping towards cyanogen bromide, 1903, A., i, 610.

thiouram disulphides and isothiouram disulphides, 1903, A., i, 619.

action of cyanogen bromide on benzyl cyanide, 1903, A., i, 697.

Braun, Julius von, a new class of coloured dithiourethanes, 1904, A., i, 90.

quadrivalent oxygen, 1904, A., i, 382. formation of trialkylated amidines, 1904, A., i, 688.

elimination of alkyl groups from secondary amines, 1904, A., i, 731.

benzenesulphoneyanamides of primary bases, 1904, A., i, 733.

ac-dibromopentane, 1904, A., i, 841.

convenient new method of preparing normal pimelic acid, 1904, A., i, 970.

conversion of piperidine into pentamethylenediamine (cadaverine), 1904, A., i, 1019.

a new method for breaking down cyclic amines, 1904, A., i, 918.

a-naphthoyltetrahydroquinoline, 1905, A., i, 236.

separation of conium alkaloids, 1905, A., i, 811.

ξ-bromoheptoic acid, 1907, A., i, 110. synthesis of amino-acids from cyclic imines, 1907, A., i, 524.

piperazine and ac-dihalogen-pentanes,

1907, A., i, 728. synthesis of ketones by aid of dibromopentane, 1907, A., i, 893.

cvanogen bromide as a means of testing the stability of groups attached to nitrogen, 1907, A., i, 899.

rupture of cyclic bases by cyanogen bromide, 1907, A., i, 960; 1909,

A., i, 507.

dimagnesium compounds of ac-dibromopentane, 1907, A., i, 997.

betainecarboxylic acids and betainecarboxyamides, 1908, A., i, 607.

action of cyanogen bromide and of bromine on aromatic derivatives of aminoacetonitrile, 1908, A., i, 625.

double dissociation of quaternary ammonium compounds and a convenient synthesis of iodoacetonitrile, 1908, A., i, 627.

new method of preparing bromoacetonitrile and its addition to tertiary

bases, 1908, A., i, 675.

characterisation of primary, secondary, and tertiary bases by the aid of acdibromo-n-pentane, 1908, A., i, 677. action of formaldehyde on secondary

aromatic amines, 1908, A., i, 684. synthesis of s-diphenylcadaverine

[s-diphenylpentamethylenediamine], 1908, A., i, 685.

dihydrazines. I. 4:4'-Bismethylhydrazinodiphenylmethane, a reagent for the characterisation of aldehydes, 1908, A., i, 700.

Braun, Julius von, dihydrazines. II. Diphenylmethanedimethylhydrazine and cyclic ketones, 1908, A., i, 737.

synthesis of inactive lysine from pi-

peridine, 1909, A., i, 229.

decomposition of camphidine by means of phosphorus pentachloride, and new derivatives of e-chlorobenzovlamylamine, 1909, A., i, 398.

relative stabilities of the piperidine and tetrahydroquinoline rings, 1909, A.,

i, 604.

rupture of cyclic bases by Hofmann's

method, 1909, A., i, 604.

stability relationships of the anhydrides and thioanhydrides of organic acids, 1909, A., i, 630. dithiourethanes. II. Preparation of

thioglycols from bisdithiourethanes,

1910, A., i, 13.

elimination of alkyl radicles and fission of organic bases by means of cyanogen bromide and phosphorus haloids, 1910, A., i, 189.

simple formation of benzyl ethers,

1910, A., i, 479, 732.

dihydroisoindole bases, 1910, A., i, 506.

dihydrazines. III., 1910, A., i, 524. some derivatives of pentamethylenediamine and a new convenient synthesis of 2-methylpyrrolidine from piperidine, 1910, A., i, 819.

cyclic imines. IV. Constitution of hexamethyleneimine and the action of a \(\cdot \)-di-iodohexane on bases, 1910,

A., i, 821.

synthesis of compounds of the normal phenylpropane, phenylbutane, and phenylpentane series, 1910, A., i, 843.

conversion of hydrogenised carbazoles into derivatives of 2-aminodiphenyl,

1910, A., i, 880.

action of cyanogen bromide on tertiary bases containing the phenylethyl and phenylpropyl groups, 1911, A.,

cyclic sulphides, 1911, A., i, 75.

the relative stability of the pyrrolidine

ring, 1911, A., i, 563.

decomposition of quaternary ammonium hydroxides. I. and II., 1911, A., i, 610; 1912, A., i, 165. syntheses in the fatty aromatic series.

IV. Mercaptans, 1912, A., i, 551.

Braun, Julius von, and Erich Beschke, the phosphorus haloid method of decomposing pyrrolidine, 1907, A., i, 79.

Braun, Julius von, and Erich Beschke, preparation of aromatic thiocarbamides by the hydrogen peroxide method, 1907, A., i, 123.

synthesis of ad-halogen ethers and of αδ-dihalogen derivatives of butane,

1907, A., i, 127.

Braun, Julius von, and E. Danziger, synthesis of compounds of the nonaand undeca-methylene series, 1912, A., i, 597.

Braun, Julius von, and Hans Deutsch, α -iodo- $\Delta\delta$ -hexene, 1911, A., i, 938.

new halogen compounds of the normal butane series, 1912, A., i, 106.

the action of aluminium chloride on the homologues of benzyl chloride, 1912, A., i, 435.

pentamethylenecarbimide, 1912, A., i,

686.

syntheses in the fatty aromatic series, V. ωω'-Diarylparaffins, 1912, A., i. 687.

syntheses in the fatty aromatic series. VI. Preparation of fatty aromatic thiocarbimides by the thiuramdisulphide method, 1912, A., 693.

syntheses in the fatty aromatic series. VIII. Phenol bases, 1912, A., i,

845.

Braun, Julius von, Hans Deutsch, and Otto Kruber, syntheses in the fatty aromatic series. II., 1911, A., i, 968.

Braun, Julius von, Hans Deutsch, and A. Schmatloch, new applications of the Grignard reaction, 1912, A., i,

Braun, Julius von, and Wladimir Gawrilow, cyclic imines. V. Dihydrop-indole and p-indole, 1912, A., i,

Braun, Julius von, and Ernst Kayser, basic diphenylmethane and triphenylmethane dyes. II. Some derivatives of p-diaminodiphenylmethane, 1904, A., i, 687.

Braun, Julius von, and G. Kirschbaum, disruption of the scatole ring by means of phosphorus pentachloride,

1912, A., i, 499.

Braun, Julius von, and Otto Kruber, syntheses in the fatty aromatic series. III. [Amino-acids, nitrocompounds, aldehydes], 1912, A., i, 265.

syntheses in the fatty-aromatic series. VIII. Tertiary derivatives of oand p-aminobenzoyl alcohol, 1912, A., i, 968.

Braun, Julius von, and Carl Müller, new method for the conversion of primary diamines into chlorinated amines and into dichlorides, 1905, A., i,

synthesis of hexamethylenediamine and heptamethylenediamine from piperidine, 1905, A., i, 636.

imide bromides and their decomposi-

tion, 1906, A., i, 576. cyclic imines. II. Attempts to synthesise heptamethyleneimine, 1907, A., i, 28.

Braun, Julius von, Carl Müller, and Erich Beschke, cyclic imines. III.,

1907, A., i, 151.

Braun, Julius von, and Eugen Röver, action of cyanogen bromide on methylene bases, 1903, A., i, 464. basic diphenylmethane and triphenylmethane dyes, 1904, A., i, 344.

Braun, Julius von, and Karl Rumpf,

dithiourethanes, 1903, A., i, 13. Braun, Julius von, and Ernst Schmitz, conversion of coniine into dichloro- and dibromo-octanes, 1907, A., i, 105.

Braun, Julius von, and Rudolf Schwarz, carbamide oximes, 1904, A., i, 38.

Braun, Julius von, and Wladislaus Sobecki, synthesis of compounds of the normal amyl series from piperidine, 1911, A., i, 128.

aliphatic halogen compounds from a-pipecoline, 1911, A., i, 413.

preparation of chloro- and bromocompounds from organic bases, 1911, A., i, 597.

the Grignard reaction in its application to dihalogen compounds, 1911, A., i, 701.

preparation and fission of dihydroindole, 1911, A., i, 747.

primary aliphatic dinitro-, nitro-nitrite, and dialdoxime compounds, 1911, A., i, 830.

Braun, Julius von, and Fritz Stechele. thiouram sulphides and the action of cyanides on disulphides, 1903, A., i, 618.

Braun, Julius von, and Adolf Steindorff, 2-methyldihydroindole, 1905, A., i, 81.

conversion of tetrahydroquinoline into 2-methyldihydroindole, 1905, A., i,

e-halogen derivatives of amylamine, 1905, A., i, 206.

synthesis of chroman, 1905, A., i, 294.

derivatives of the pentamethylene series, 1905, A., i, 341.

Braun, Julius von, and Adolf Steindorff, preparation of the decomposition products (containing halogens) from piperidine, 1905, A., i, 596.

y-coniceine. I., 1905, A., i, 812. synthesis of hexamethyleneimine-the cyclic homologue of piperidine, 1905, A., i, 826.

Braun, Julius von, and A. Trümpler, synthesis of octa-, deca-, and dodecamethylene compounds of the aliphatic series, 1910, A., i, 25.

tetrahydrothiophen and cyclopentamethylene sulphide, 1910, A., i,

Braun, Karl, fermentative fat-hydrolysis, 1903, A., ii, 748.

a substance which inhibits the fatsplitting action of the seed of Abrus precatorius, 1905, A.; ii, 113.

estimation of moisture and free alkali in soaps, 1905, A., ii, 427.

estimation of glycerol in lyes, 1905,

A., ii, 616. Braun, Karl, and Emil C. Behrendt.

fermentative fat-hydrolysis, 1903, A., ii, 446. fermentive decomposition of fats, oils,

and esters. II., 1903, A., ii, 565. Braun, Ludwig, action of potassium salts

on the heart and vessels of mammals, 1904, A., ii, 631.

Braune, Hermann. See Georg Bredig and Fritz Koref.

Braune, Hjalmar, rapid estimation of nitrogen in steel or iron, 1905, A., ii, 60.

influence of nitrogen on iron and steel, 1905, A., ii, 638.

Brauner, Bohuslav, revision of the atomic weight of cerium. II., 1903, A., ii,

salts of the complex cerisulphuric acid with the elements of the rare earths, 1904, A., ii, 485:

Brauner, Bohuslav, and Alexander Batěk, revision of the atomic weight of cerium, 1903, A., ii, 295.

Brauner, Bohuslav, and Bohumil Kuzma, separation of tellurium from the heavy metals and the formation of cupric acid, 1907, A., ii, 716.

Brauner, Bohuslav, and Jan Picek, acid sulphates of the rare earths, 1904, A.,

Braungard, K., rapid method for the estimation of albumin in urine, 1909, A., ii, 840.

Brauns, Dirk Hendrik, caper-rutin, 1904, A., i, 1039. sophorin, 1904, A., i, 1039.

Brauns, Dirk Hendrik, quercitrin, 1905, A., i, 74.

a crystallised lævulose tetra-acetate,

1908, A., i, 320. estimation of furfuroids in presence of pentosans, 1909, A., ii, 443.

Brauns, Dirk Hendrik. See also Ernst Schmidt.

Brauns, Reinhard Anton, picrite and its alteration products, 1904, A., ii, 350.

Vesuvian ash from the Baltic; gypsum in Vesuvian ash, 1906, A., ii, 556.

pyromorphite from Rhenish Prussia, 1909, A., ii, 492.

sanidine from the Leilenkopf, Lake Laach, 1909, A., ii, 590.

influence of radium rays on the coloration of sanidin, zircon, and quartz; crystalline form of the zircon in sanidinite from the Laacher See, 1910, A., ii, 9.

Braunstein, A., and Leon Kepinoff, the nature of the antitrypsin formation in the organism, 1910, A., ii, 786.

Brautlecht, Charles Andrew, hydantoins. IV. 2-Thio-1-phenylhydantoins from some a-amino-acids, 1911, A., i, 922.

Brautlecht, Charles Andrew. See also Treat Baldwin Johnson, Thomas Burr Osborne, and Henry Lord Wheeler.

Bravo, José J., vanadium [sulphide] from Minasragra, 1908, A., ii, 703.

Bray, William Crowell, rate of reaction in solutions containing potassium iodide, potassium chlorate, and hydrochloric acid, 1903, A., ii, 275.

use of the differential equation in calculating the results of kinetic measurements; the reaction between arsenic acid and potassium iodide near the equilibrium, 1905, A., ii,

oxyhalogen compounds. I. and II., 1906, A., ii, 221.

oxyhalogen compounds. III. Chlorine peroxide, 1906, A., ii, 222.

reactions of chlorine dioxide and chlorous acid, 1906, A., ii, 223.

oxyhalogen compounds. IV. Reaction between chlorine peroxide iodides, 1906, A., ii, 278.

a system of qualitative analysis for the common elements. [IV.] Analysis of the alkaline earths and alkali groups, 1909, A., ii, 431.

hydrolysis of iodine and of bromine, 1910, A., ii, 819.

error in permanganate titrations, 1910, A., ii, 1001.

Bray, William Crowell, effect of salts on the solubility of other salts. IV. Quantitative discussion of the solubility of uni-univalent salts in the presence of other salts, 1911, A., ii, 1075.

fused salts as solvents; the ionisation of dissolved salts, 1912, A., ii, 744. [fused salts as solvents], 1912, A., ii,

836. Bray, William Crowell, and E. L. Connolly, the hydrolysis of iodine and of bromine; a correction, 1911, A., ii,

Bray, William Crowell, and Franklin L. Hunt, conductivity of aqueous solutions of sodium chloride, hydrochloric acid, and their mixtures, 1911, A., ii, 688.

Bray, William Crowell, and George Moir Johnstone MacKay, conductivity and ionsation of potassium tri-iodide, and the equilibrium between iodine, iodide, and polyiodides in aqueous solution, 1910, A., ii, 820.

equilibrium between solid cuprous iodide and aqueous solutions containing cupric salt and iodine, 1910,

A., ii, 943.

volumetric method of estimating iodide in presence of chloride, bromide, or free iodine, 1910, A., ii,

Bray, William Crowell, and W. J. Winninghoff, effect of salts on the solubility of other salts. III. Solubility of thallous chloride in solutions potassium nitrate, potassium sulphate, and thallous sulphate at 25°, 1911, A., ii, 1075.

Bray, William Crowell. See also George Alonzo Abbott and Arthur Amos

Noyes.

Brazier, Sidney Albert, and Hamilton McCombie, the chlorination of iodophenols. Part I. The chlorination of p-iodophenol, 1912, T., 968; P., 127.

the condensation of a-keto-\(\beta\)-anilinoαβ-diphenylethane and its homologues with phenylcarbimide and with phenylthiocarbimide, T., 2352; P., 287.

Brdlik, Vladimir, quantitative control in chlorophyll research, 1909, A., i, 41. Brdlik, Vladimir. See also Julius Stok-

Bréal, Émile, potatoes, 1903, A., ii,

treatment of seeds with copper solutions, 1906, A., ii, 387.

Bréaudat, L., a new microbe which produces acetone, 1906, A., ii, 568. the protective action of the bran of

padi in a diet of white rice, 1912,

A., ii, 64.

Breazeale, James Frank, relation of sodium to potassium in soil and solution cultures, 1906, A., ii, 891.

Breazeale, James Frank. See Frank Kenneth Cameron.

Breccia, Gioacchino, the reaction of

blood to silver hydrosol, 1910, A., ii, 726.

Bredemann, G., alkaloids of the rhizome of Veratrum album and estimation, 1906, A., ii, 506.

acillus amylobacter A. Bredemann, 1909, A., ii, 601.

Bredemann, G. See also Emil Haselhoff.

Bredig, Georg, determinations of constitution by qualitative migration experiments, 1903, A., ii, 263.

theory of amphoteric electrolytes,

1904, A., ii, 802.

inorganic ferments and organic enzymes, 1907, A., i, 372.

physiological catalysis, 1907, A., ii, 943.

Bredig, Georg, and Reuben Wilfred Balcom, kinetics of the elimination of carbon dioxide from camphorcarboxylic acid, 1908, A., ii, 268.

Bredig, Georg, and John Wesley Brown, catalytic oxidation of organic substances with concentrated sulphuric acid. I. Chemical kinetics of the Kjeldahl analysis and of the naphthalene oxidation process, 1904, A., ii,

Bredig, Georg, and Friedrich Epstein, rate of chemical auto-heating (adiabatic reaction kinetics), 1905, A., ii,

Bredig, Georg, and Kasimir Fajans, stereochemistry of catalysis, 1908, A.,

Bredig, Georg, and P. S. Fiske, asymmetric synthesis produced by the action of catalysts, 1912, A., i, 983.

Bredig, Georg, and Max Fortner, palladium catalysis of hydrogen

peroxide, 1904, A., ii, 318.

Bredig, Georg, and Walter Fraenkel, a new case of catalysis by hydrogen ions, 1905, A., ii, 692. anticatalytic action of water, 1906,

A., ii, 426.

Bredig, Georg, Walter Fraenkel, and Ernst Wilke, calcium cyanamide. and II., 1907, A., i, 396, 903.

Bredig, Georg, and Joh. Wolfgang Kerb, electrical stimulation of catalytic pulsations, 1909, A., ii, 786.

Bredig, Georg, and David Martin Lichty, chemical kinetics in concentrated sulphuric acid; the decomposition of oxalic acid, 1906, A., ii,

Bredig, Georg, and A. Marck, colloidal manganese dioxide and its behaviour towards hydrogen peroxide, 1911, A., ii, 399.

Bredig, Georg, W. S. Millar, and H. Braune, catalytic action of hydrogen ions in alcoholic solutions, 1912, A., ii, 748.

Bredig, Georg, Phil. F. Ripley, and Walter Fraenkel, kinetics of the introduction of acids into the diazoacetic ester molecule, especially with the aid of neutral salts, 1907, A., ii, 941.

Bredig, Georg, and Gregor von Schukowsky, proof of the nature of liquid crystals by aid of electric kataphoresis,

1904, A., ii, 714.

Bredig, Georg, and Fritz Sommer, inorganic ferments. V. Schardinger's reaction and similar enzyme catalyses, 1910, A., ii, 284.

Bredig, Georg, and James Henri Walton, jun., catalysis of hydrogen peroxide by iodine ions, 1903, A., ii, 282.

Bredig, Georg, and Ignaz Weinmayr, a periodic contact catalysis, 1903, A., ii, 279.

Bredig, Georg, and Ernst Wilke, periodic contact catalysis. 1905, A., ii, 151.

the excitation and regulation of catalytic pulsations by means of an electric current, 1908, A., ii, 679.

Bredt, [Conrad] Julius, a thermometer for melting-point determinations, 1910, A., ii, 261.

constitutions of Woringer's lauronolic acid, dihydrolaurolactone (campholactone), and laurolene, 1911, A., i,

Bredt, Julius, August Amann, S. Linck, and M. de Souza, cis-trans-camphoramide, chloronitrilocamphoric acid, and camphoronitrile, 1912, A., i, 411.

Bredt, Julius, and Karl Burkheiser, constitution of camphor and its derivatives. IX. Electrolytic reduction of camphorearboxylic acid to borneolearboxylic acid and dehydroborneolcarb. oxylic acid, 1906, A., i, 680.

Bredt, Julius, and W. Hilbing, \(\beta\)-camphor (bornylene) from bornylenecarboxylic acid, 1911, \(\Delta\), i, 657.

bornylene from β-iodohydrobornylenecarboxylic [β-iodocamphanecarboxylic] acid: dibromobornylenecarboxylic [αβ-dibromocamphanecarboxylic] acid and dihydrobornylenecarboxylic [ortho-camphanecarboxylic] acid, 1912, A., i, 112.

Bredt, Julius, and A. van der Maaren-Jansen, vacuum distillation apparatus with an electrically heated discharge contrivance for solid substances with high or low melting points, 1909, A.,

ii, 721.

Bredt, Julius, Wilhelm Lund, and August Amann, electrolytic reduction of camphononic acid to cis-trans-camphonolic acid: camphonolactone, 1912, A., i, 112.

Bredt, Julius, and Paul Marres, lauronolic and allocampholytic acids,

1911, A., i, 416.

Bredt, Julius, and Richard May, new method of preparation of tricyclene-carboxylic acid (dehydrocamphenylic acid), 1910, A., i, 32.

Bredt, Julius, and William Henry Perkin, jun., epicamphor, (β-camphor); preliminary note, 1912, P., 56.

phor); preliminary note, 1912, P., 56.

Bredt, Julius, and Hermann Sandkuhl, constitution of camphor and its
derivatives. X. Electrolytic reduction
of camphorcarboxylic acid to cisand cis-trans-borneolcarboxylic acid;
bornylenecarboxylic acid (preparation
of pure bornylene). XI. Relationship
of the camphylglycols to the borneolcarboxylic acids, 1909, A., i, 498.

Bredt, Julius, and K. Wornast, distillation of camphorimide with sodalime; a contribution to the explanation of the peculiar disruption of the camphornitrilic acids, on the distillation of their calcium salts, 1903,

A., i, 770.

Breest, Fritz. See Walter Dieckmann and Julius Sand.

Breger, Marie, and Stanislaus von Kostanecki, a second synthesis of apigenin, 1905, A., i, 366.

Brehme, P. See Rudolf Weissgerber.

Breinl, Anton, and Maximilian Nierenstein, the mechanism of atoxyl action, 1909, A., ii, 509.

biochemical and therapeutical studies on trypanosomiasis, 1910, A., ii,

Breinl, Ferdinand, the proteins of serum, 1911, A., ii, 741.

Breinl, Ferdinand, and Oskar Baudisch, the degradation of keratin by oxidation with hydrogen peroxide, 1907, A., i, 807.

Breit, Ernst. See Hugo Bauer and Wilhelm Wislicenus.

Breithut, F. E. See Martin Andre Rosanoff.

Breitwieser, Wilhelm. See Hermann Finger and Theodor Zincke.

Bremer, H. See Julius Tröger.

Bremer, Karl, action of potassium permanganate and of bromine on 1:4:5-trimethyluracil, 1911, A., i, 160.

Bremer, W., action of flour on hydrogen peroxide, 1906, A., ii, 587.

Brenans, P., new di-iodophenol, 1903.

A., i, 336, 478. a new tri-iodophenol, 1904, A., i, 157. iodine derivatives of m-nitroaniline, 1904, A., i, 661.

Brenchley, W. E., influence of copper and manganese sulphates on the growth of barley, 1910, A., ii, 889.

Breneman, H. Campbell. See Marston Taylor Bogert.

Brenner, Widar, nitrogen nutrition of Aspergillus niger, 1912, A., ii, 77.

Brenta, R. See A. Astruc.

Brenton, B. F. Parlett. See John Bishop Tingle.

Bresciani, Giuseppe. See Luigi Frances-

Breslauer, Adolf. See Rudolph Fittig. Breslauer, J., and Amé Pictet, condensation products of formaldehyde, 1907, A., i, 915.

Bresler, Harry Waldemar, solubility of β-l-asparagine and β-l-aspartic acid, 1904, A., i, 380.

nuclein bases in juice of Beta vulgaris, 1904, A., ii, 582.

Bresler, Harry Waldemar, W. H.
Friedemann, and Julius Mai, action
of diazohydrates on oximino-compounds, 1906, A., i, 321.
diazo-oximes, 1907, A., i, 567.

Bressanin, Giuseppe, volumetric estimation of mercury by means of ammonia, 1910, A., ii, 1000.

method for the detection and estimation of arsenic in organic compounds, 1911, A., ii, 1133.

detection, separation, and estimation of arsenic and antimony, 1911, A., ii. 1134.

purification of sulphuric acid, 1912, A., ii, 638.

organic arsenic products recently introduced into therapeutics, 1912, A., ii, 708. Bressanin, Giuseppe, further applications of the precipitation of iodides in sulphuric acid, 1912, A., ii, 994.

Bressanin, Giuseppe, and E. Segrè, action of alkaline solutions on trichlorinated organic compounds, 1911, A., i, 830.

Bresson, M., existence of a specific methylglucase in beer yeast, 1910, A.,

i, 798.

Bresson, M. See also Pierre Achalme. Breteau, Pierre, hydrides of phenanthrene, 1905, A., i, 338.

old decomposed cocaine hydrochloride,

1906, A., i, 600.

the quantity of arsenic contained in wines obtained from vines which have been treated with arsenical washes, 1908, A., ii, 887.

hydrogenations in presence of palladium; applications to phenan-

threne, 1911, A., i, 123, 776. hydrogenation by means of (1) spongy palladium and sodium hypophosphite, (2) nickel and sodium hypophosphite, 1911, A., i, 533.

hydrogenation by means of calcium and alcohol, 1911, A., i, 625.

method for complete destruction of organic matter in the detection of mineral poisons, 1911, A., ii, 226.

Breteau, Pierre, and Henri Leroux, rapid estimation of carbon and hydrogen in organic substances, 1907, A., ii, 908.

Breteau, Pierre, and Paul Woog, preservation of chloroform, 1907, A., i, 105.

Bretet, ascitic fluid containing albumin soluble in acetic acid, 1906, A., ii, 875.

Bretin. See Evesque.

Breton, M. See A. Calmette.

Bretsch, E. See Hermann Finger. Bretschneider, A. See Erich Frank.

Breuer, Robert, and Rudolf (Freiherr) von Seiller, influence of castration, 1904, A., ii, 189.

Breuil, Pierre, special constituent obtained in the tempering of an aluminium bronze, 1905, A., ii, 252.

copper steels, 1906, A., ii, 546, 677, 759.

Breuning, Wilhelm. See Fritz Reitzenstein.

Breustedt, Georg. See Georg Frerichs. Brewer, Robert K. See Louis Kahlen-

Brewster, Carl Milton. See Henry
Augustus Torrey.

Brewster, Joseph F. See Hermann Leuchs.

Breyer, Hans, action of various monohydric alcohols on ciliated epithelium and motor nerve fibres, 1904, A., ii, 65.

Breyer, Hans. See also Paul von Grützner.

Brezina, Aristides, meteoric stone of Mern, Seeland, 1911, A., ii, 48.

Brezina, Aristides, and Emil Wilhelm Cohen, meteoric iron from Mukerop, Great Namaqualand, 1908, A., ii, 492.

Brezina, H. See Josef Habermann.

Brichant, Omer, estimation of manganese in iron and steels, 1906, A., ii, 397.

Brichaux, A., law relating to the solubility of ammonia [in water] at different temperatures and pressures, 1911, Λ., ii, 390.

Bridel, Marc, pectins from the fruits of Lanicera cylostéum, Symphoricarpus racemosa, and Tamus communis, 1908, A., ii, 125.

a new glucoside hydrolysed by emulsin in Menyanthes trifoliata, 1910, A.,

i, 692.

meliatin, a new glucoside hydrolysable by emulsin, obtained from the marsh trefoil, 1911, A., i, 659.

variations in the composition of the root of the gentian during a year's growth, 1911, A., ii, 426.

the presence of sucrose in gentian root dried in the air without fermentation, 1912, A., ii, 82.

Bridel, Marc. See also Emile Bourquelot. Bridgett, Robert Currie. See Thomas Purdie.

Brieger, E. See Hermann Waldemar Fischer.

Brieger, Ludwig, purification of ricin and of diphtheria-antitoxin, 1904, A., ii 502

Brieger, Ludwig, and Max Krause, spear poison of the Cameroons, 1905, A., ii, 411.

Brieger, Richard, estimation of mercury in hydroxyphenylenedimercury acetate and mercurisalicylic acid, 1912, A., ii, 206.

Briem, Hermann, manurial experiments with seed beet, 1903, A., ii, 749.

sodium chloride experiments with mangolds, 1909, A., ii, 87.

amount of sugar in beet manured with nitrogen, 1909, A., ii, 339.

Briem, Hermann. See also Friedrich Strohmer.

Briggs, John Frederick, action of oxalic acid on cellulose. Cellulose-oxalic acid ester, 1912, A., i, 539.

Briggs, John Frederick. See also Charles

Frederick Cross.

Briggs, Lyman James, adsorption of water vapour and of certain salts in aqueous solution by quartz, 1903, A., ii, 13.

Briggs, Richard Victor. See Cyril

Bergtheil.

Briggs, Samuel Henry Clifford, a series of double chromates, 1903, T., 391. ammoniacal double chromates and molybdates, 1904, T., 672; P., 89. the hexahydrated double chromates; magnesium and nickel compounds, 1904, T., 677; P., 90.

the constitution of co-ordinated compounds, 1908, T., 1564; P., 94.

chromates, 1908, A., ii, 113.

nickel and cobalt chromates, 1909, A., ii, 893.

the isomerism of ferrocyanides, 1911, T., 1019; P., 24.

Briggs, Samuel Henry Clifford. See also Julius Berend Cohen.

Brigl, Percy, behaviour of histidine towards pierolonic acid, 1910, A., i, 336.

synthesis of closed rings by means of cyanamide. I. Cyanamide and ethyl acetoacetate, 1912, A., i, 533.

Brigl, Percy. See also Franz Sachs and Hermann Steudel.

Brill, Harvey C. See William Jay Hale.
Brill, Otto, use of the micro-balance in analysis, 1905, A., ii, 198.

dissociation of the carbonates of the alkaline earths and of magnesium carbonate, 1905, A., ii, 522.

determination of atomic weights of rare earths, 1906, A., ii, 27.

vapour tension of liquid ammonia, 1906, A., ii, 847.

calculation of the vapour density of dissociating substances, 1907, A., ii,

Brill, Otto, and (Miss) Clare de Brereton Evans, the use of the micro-balance for the determination of electrochemical equivalents and for the measurements of densities of solids, 1908, T., 1442; P., 185.

Brillouin, [Lowis] Marcel, theoretical considerations on electrolytic dissociation; influence of the solvent on the stability of the dissolved molecules, 1906, A., ii, 262. viscosity of liquids as a temperature

viscosity of liquids as a temperature function, 1909, A., ii, 867. Brindejone, Georges, alkaloid of Esch-

scholtzia Californica, 1911, A., i, 222.
Briner, Emil, heterogeneous equilibrium under variable pressures, 1906, A., ii, 424.

Briner, Emil, heterogeneous equilibria: formation of phosphonium chloride, ammonium carbamate, and ammonium hydrogen sulphide, 1906, A., ii, 529.

researches on chemical equilibria,

1906, A., ii, 657.

compressibility of mixtures of gases capable of combining to form solid or liquid compounds; vapour pressures and critical constants of hydrogen chloride, hydrogen phosphide, and sulphur dioxide, 1907, A., ii, 11.

electrolysis of the alkali chlorides: refractive index, viscosity, and ionic transport ratio of simple and mixed solutions of sodium chloride and hydroxide, 1907, A., ii, 68.

electrolysis of sodium chloride solution in a diaphragm apparatus, 1907, A.,

ii, 734.

criterion of the formation of a compound in the condensation of two gases, 1911, A., ii, 705.

velocity of reactions between gaseous substances; false equilibria, 1912,

A., ii, 544.

Briner, Emil, and Ettore Cardoso, compressibility and vapour tension of mixtures of methyl ether and sulphur dioxide; formation of a compound of these two substances, 1907, A., ii, 436.

liquefaction and compressibility of gaseous mixtures; a case in which combination occurs, 1909, A., ii, 124.

Briner, Emil, and Ernest L. Durand, action of the electric spark on a mixture of nitrogen and oxygen at low temperatures, 1907, A., ii, 759.

formation of ozone by the action of the electric discharge at low tempera-

tures, 1908, A., ii, 101.

non-existence of a polymeride chlorine, 1908, A., ii, 940.

chemical action of the electric discharge at low temperatures, 1909, A., i, 125.

conditions of formation of nitrous and nitric acids from oxides of nitrogen and water; application of the law of mass action, 1912, A., ii, 1045.

Briner, Emil, and Eric Mettler, synthesis of ammonia from its elements by the action of the electric spark, 1907, A., ii. 342.

Briner, Emil, and Adam Wroczynski, chemical action in gaseous mixtures submitted to very high pressures, 1909, A., ii, 557.

Briner, Emil, and Adam Wroczynski, effect of pressure and temperature on cyanogen, 1910, A., i, 660.

chemical reactions in gases submitted to very high pressures; decomposition of nitric oxide; formation of nitrosyl chloride, 1910, A., ii, 120.

chemical action of high pressure; compression of nitrous oxide and a mixture of nitrogen and hydrogen; decomposition of carbon monoxide by pressure, 1910, A., ii, 707.

Bringhenti, Aldo, catalysis and electromotive force. I., 1906, A., ii, 426.

Bringhenti, Aldo. See also Giacomo Carrara.

Brink, Francis Newton. See Gregory Paul Baxter and Theodore William Richards.

Brinton, Paul H. M. P., the estimation of manganese by the sodium bismuthate

method, 1912, A., ii, 93, 207.

Brinton, Paul H. M. P. See also Hein-

rich Fresenius.

Brion, Georg, experimental investigation of the high tension arc, 1908, A., ii,

is the fixation of atmospheric nitrogen in the electric discharge to be regarded as a purely thermal effect? 1908, A., ii, 561.

Briones, Narcisse. See Carl Graebe.

Brioni, Arnaldo, reaction between ferric salts and thiocvanates, 1909, A., i, 92. constitution of Prussian-blue, 1911, A., i, 618.

Briot, A., the milk curdling ferment of the juice of the fig (Ficus carica),

1907, A., ii, 644.

Brioux, Ch., calcium cyanamide; its analysis and the changes in composition it undergoes when exposed to the atmosphere, 1910, A., ii, 1010.

estimation of mustard oil in feeding cakes and in mustard, 1912, A., ii,

Brisac, Marc, ammonium magnesium arsenates; methylammonium and trimethylammonium magnesium arsenates, 1903, A., i, 606.

Brisac, Marc. See also Charles Porcher. Briscoe, Henry Vincent. See Philip

Wilfred Robertson.

Brislee, Francis Joseph, potential of the hydrogen-oxygen cell, 1905, A., ii,

the velocity of reduction of the oxides of lead, cadmium, and bismuth by carbon monoxide, and the existence of the suboxides of these metals, 1907, P., 286; 1908, T., 154.

Brislee, Francis Joseph, electrolytic potentials of silver and thallium, 1909, A., ii, 462.

the density and coefficient of linear expansion of aluminium, 1912, A., ii, 847.

Brislee, Francis Joseph. See also Robert Luther.

Brissemoret, Alphonse [Marc], derivatives of caffeine and reactions of its glyoxaline nucleus, 1906, A., i, 600.

colour reaction of the tannins, 1907,

A., ii, 515.

Brissemoret, Alphonse, and Blanchetière. method of formation of dithymol, 1910, A., i, 314.

Brissemoret, Alphonse, and Joseph Chevalier, pharmacological action of cyclohexane and some of its derivatives, 1908, A., ii, 771.

hypno-anæsthetics, 1909. A., ii, 419.

Brissemoret, Alphonse, and Combes, juglone [hydroxynaphthaquinone], 1906, A., ii, 118.

reaction of hydroxyquinones, 1907, A.,

ii, 411.

Brissemoret, Alphonse, and Albert Joanin, physiological action of organic bases, 1911, A., ii, 137. Bristol, Howard Stanley.

See Harry Ward Foote, Treat Baldwin Johnson, Horace Lemuel Wells, and Henry Lord Wheeler.

British Cyanides Co., preparation of alkali cyanides from metallic cyanogen compounds, 1903, A., i, 328.

Brittlebank, Cecil. See Volkmar Kohlschütter.

Brittner, Karl. See Fritz Ullmann.

Britzke, Erhard, separation of silica from silicon and carbon, 1909, A., ii, 937.

Brizard, Léopold. See Maurice de Broglie.

Brocard, H., Lavoisier's four laboratory note-books; the second volume supposed to be lost, but recently re-

covered, 1908, A., ii, 16.

Brocca, Edaardo. See Efisio Mameli.

Brochet, André [Victor], electrolytic reduction of potassium chlorate,

1903, A., ii, 210, 352.

electrolysis of chloric acid and chlor-

ates, 1904, A., ii, 249.

action of copper on chloric acid with and without electrolysis, 1904, A., ii, 337.

formation of basic copper salts under the influence of electrolysis, 1904, A., ii, 338.

basic cupric chlorate, 1904, A., ii, 338.

Brochet, André [Victor], the reactions of the nickel-plating bath, 1907, A., ii, 965.

radioactivity of the waters of Plombières, 1908, A., ii, 143.

electrolysis of chlorides, 1908, A., ii, 491.

electrolytic soda industry; theory of the bell-chamber process, 1908, A., ii, 1034; 1909, A., ii, 312.

determinations of the radioactivity of the thermal waters of Plombières, 1910, A., ii, 90.

radioactivity of some waste springs in the Vosges, 1910, A., ii, 174.

relation between the radioactivity and richness in solids of the thermal waters of Plombières, 1910, A., ii, 250.

configuration of equipotential lines in an electrolyte, 1912, A., ii, 124.

the polarisation of electrodes, 1912, A., ii, 891.

Brochet, André, and C. L. Barillet, bipolar electrodes with insoluble anodes, 1903, A., ii, 194.

bipolar electrodes with soluble anodes.

1903, A., ii, 195.

employment of bipolar electrodes, 1903, A., ii, 195.

Brochet, André, and Georges Boiteau, electrolytic oxidation of ammonia, 1909, A., ii, 657.

Brochet, André, and Joseph Petit, preparation of platinocyanides, 1904, A., i, 480.

the influence of complex ions on electrolysis by an alternating current, 1904, A., ii, 229.

use of alternating currents in electrolysis, 1904, A., ii, 230; 1905, A., ii, 7, 227, 672, 673.

electrolytic solution of platinum; new method of preparing platinocyanides, 1904, A., ii, 414.

influence of the nature of the anode on the electrolytic oxidation of potassium ferrocyanide, 1905, A., i, 38. electrolytic preparation of barium

platinocyanide, 1905, A., i, 39.

action of potassium cyanide solution on various metals, 1905, A., ii, 27. action of potassium cyanide on metallic electrodes, 1905, A., ii, 27.

theory of the dissolution of metals in potassium cyanide solution under the influence of an alternating current, 1905, A., ii, 28.

electrolysis of organic acids by means of an alternating current, 1905, A.,

ii, 227.

Brochet, André, and Joseph Petit, electrolytic solution of platinum in sulphuric acid, 1905, A., ii, 260.

Brochet, André, and Georges Ranson, electrolysis of alkali sulphides,

1903, A., ii, 477.

electrolysis of barium sulphide with a diaphragm, 1903, A., ii, 478.

electrolysis of alkaline-earth sulphides, 1903, A., ii, 478.

Brochet, André. See also Albin Haller.

Brockmöller, Johannes. See Gerhard Preuner.

Brocq-Roussen, and Edmond Gain, presence of amylase in old seeds, 1909, A., ii, 337.

Brode, Johannes, oxidation of the iodine ion to hypoiodite as an intermediate stage in several reactions, 1904, A., ii, 718.

oxidation of nitrogen in the high tension flame, 1906, A., ii, 6.

Brode, Johannes, and Wilhelm Lange, the chemistry of vinegar and the methods of investigation, 1909, A., ii,

Brode, Johannes. See also Max Le Blanc.

Brodie, Thomas Gregor, perfusion of surviving organs, 1903, A., ii, 439. some new forms of apparatus for the analysis of blood gases by the chemical method, 1910, A., ii, 342.

Brodie, Thomas Gregor, and Winifred C. Cullis, secretion of urine, 1906,

A., ii, 468.

estimation of small quantities of oxygen and carbon dioxide in small volumes of saline solutions, 1908, A., ii, 319.

heart perfusion apparatus, 1908, A., ii, 865.

the innervation of the coronary vessels, 1912, A., ii, 67.

Brodie, Thomas Gregor, Winifred C. Cullis, and William Dobinson Halliburton, gaseous metabolism of the II. The gaseous small intestine. exchanges during the absorption of Witte's peptone, 1910, A., ii, 518.

Brodie, Thomas Gregor, and Walter Ernest Dixon, action of drugs on bronchial muscles, 1903, A., ii,

effect of adrenaline on pulmonary and other vessels, 1904, A., ii, 196.

Brodie, Thomas Gregor, and William Dobinson Halliburton, heat contraction in nerve, 1904, A., ii, 831.

Brodie, Thomas Gregor, and Hans Vogt, gaseous metabolism of the small in-I. The gaseous exchanges during the absorption of water and dilute salt solutions, 1910, A., ii, 518.

Brodie, Thomas Gregor. See also Joseph Frederick William Barcroft and

Pavy.

Brodtkorb, Th. See Hermann Ost. Broeg, Wilhelm. See Theodore Zincke.

Brögger, Waldemar Christofer, hellandite, a new mineral, 1903, A., ii, 657.

composition of xenotime, 1906, A., ii,

37.

hellandite from Kragerö, Norway,

1907, A., ii, 36.

columbates, tantalates, and titanates from the Norwegian pegmatite-veins, 1907, A., ii, 884.

Brock, A. van den, the a particle and the periodic system of the elements,

1907, A., ii, 523.

Mendeléeff's "cubic" periodic system of the elements and the arrangement of the radio-elements in this system, 1911, A., ii, 709.

Brock, Carl Ten. See Christian Archi-

bald Herter.

Brocksmit, T. C. N., the iodoform reaction for citric acid, 1904, A., ii,

lead malate and barium citrate, 1905, A., ii, 868.

Brönsted, Johannes Nicolaus, detection of ordinary tartaric acid by means of l-tartarie acid, 1903, A., ii, 248.

calculation of the electromotive force between elements of the calomel element type, 1904, A., ii, 108.

reduction of mercurous chloride by silver, 1905, A., ii, 133.

studies in chemical affinity, 1906, A., ii, 339, 834.

inverse melting points, 1908, A., ii,

electromotive force of the hydrogenoxygen cell, 1909, A., ii, 10, 369.

chemical affinity. III. Solutionaffinity of binary systems. Theoretical, 1909, A., ii, 29.

chemical affinity. III. Solutionaffinity of binary systems. Sulphuric acid and water, 1910, A., ii. 112.

equilibria in the system water-ammonium chloride-lead chloride, 1911,

A., ii, 381.

chemical affinity. V. The formation of potassium lead sulphate, 1911, A., ii, 856.

Brönsted, Johannes Nicolaus, chemical affinity. VI. The formation of naphthalene picrate, 1912, A., i, 20.

chemical affinity. VII. Formation of double salts and double decomposition, 1912, A., ii, 736.

specific heats. I., 1912, A., ii, 897. Broglie, Maurice de, ionisation by spray-

ing, 1907, A., ii. 664.

[condition of air which has been passed between sparking electrodes, 1908, A., ii, 344.

electrically charged centres of small mobility in gases, 1909, A., ii, 207.

ionisation in gases through mechanical division of liquids: active and inactive substances, 1910, A., ii. 480.

ionisation of air by the carbon monoxide flame and by radium radiation : mobilities of the ions present, 1910,

A., ii, 570.

the exclusive presence in gases derived from certain hydrogen flames of ions completely analogous (in mobility) to those produced by Röntgen rays, 1910, A., ii, 769.

a special case of distribution of ionisation in a gas; thin superficial layer containing ions of both signs, 1911,

A., ii, 573.

Broglie, Maurice de, and Léopold Brizard, condition of electric charges on particles suspended in gases; charge on chemical fumes, 1909, A., ii, 535.

physical origin of the liberation of electricity in chemical reactions, 1909, A., ii, 637.

chemical reactions and the ionisation

of gases, 1910, A., ii, 11.

ionisation by bubbling and chemical actions, 1910, A., ii, 480.

radiation from quinine sulphate, ionisation, and luminescence, 1911, A., ii, 174.

the mobility of ions produced in air by sulphate of quinine in process of hydration, 1911, A., ii, 356.

certain ionisation effects observed in gases in presence of non-radioactive substances: activity and luminescence of quinine sulphate, 1911, A., ii, 837.

the absence of penetrating radiations during chemical reactions, 1912, A.,

ii, 883.

Broido, Joseph. See Fritz Ullmann. Bromberger, H. See Alexander Tschirch.

Bron, Antoine. See Charles Eugène Guye.

Broniatowski. Heinrich. Carl See

Broniewski, Witold, relations between the variation of electrical resistance and the expansion of monatomic solids, 1906, A., ii, 646.

electrical resistance and expansion of the metals, 1908, A., ii, 147.

electrical properties of aluminium copper alloys, 1910, A., ii, 128.

electrical properties of aluminiumsilver alloys, 1910, A., ii, 715.

electrical properties of aluminiummagnesium alloys, 1911, A., ii, 115.

the electrical properties of aluminium

alloys, 1912, A., ii, 258.

Broniewski, Witold, and L. Hackspill, electrical properties of alkali metals, rhodium, and iridium, 1911, A., ii, 1055.

Broniewski, Witold. See also Antoine Guntz.

Bronneck, Marianne von. See Josef

Herzig.

Bronnert, Emile, analysis of cellulose nitrates, glycerol nitrates, and other compounds from which nitric acid is liberated by concentrated sulphuric acid, 1910, A., ii, 1116.

Bronson, Howard L., effect of high temperatures on the rate of decay of the active deposit from radium,

1905, A., ii, 567.

ionisation produced by a-rays, 1906, A., ii, 413.

periods of transformation of radium-A, -B, and -C, 1906, A., ii, 594.

effect of temperature on the activity of radium and its transformation products, 1907, A., ii, 216.

relative activity of emanation and active deposit from thorium and from actinium, 1908, A., ii, 792.

a-rays from radium-B, 1909, A., ii,

Bronson, Howard L. See also Edward Montague Wellisch.

Bronstein, G., synthesis of β -p-isopropylphenyl-B-hydroxypropionic acid, 1907, A., i, 848.

Brooks, Barney. See James R. Bailey. Brooks, Benjamin T., destructive distillation of Manila copal, 1910, A., i, 691.

oxidation of Manila copal by the air, 1910, A., i, 691.

oleo-resin of Pinus insularis, 1910, A.,

natural dyes and colouring matters of the Philippines, 1911, A., i, 553.

Brooks, Benjamin T., champaca oil, 1911, A., i, 1000.

new Philippine essential oils, 1912, A., i, 122.

action of phosphorus trichloride on

organic acids: monoacetylphosphorous acid, 1912, A., i, 332. rôle of oxydases in the formation of

certain constituents of essential oils. I., 1912, A., ii, 288. Brooks, Benjamin T. See also William

Lloyd Evans.

Brooks, Clude. See Hugh McGuigan. Brooks, E. E., spectrum of magnesium and of the so-called magnesium hydride, as obtained by spark discharges under reduced pressure, 1908, A., ii, 242.

Brooks, R. O., rapid analysis of cream of tartar and tartaric acid baking powders,

1904, A., ii, 789.

Brossa, G. Alessandro, inorganic fer-IV. Iridium catalysis of ments. hydrogen peroxide, 1909, A., ii, 389.

Brossa, G. Alessandro, See also Emil Abderhalden and Richard Willstätter. Brough, Bennett Hooper, obituary notice

of, 1909, T., 2202.

Brouwer, Arjen. See Oskar Grohmann. Brouwer, H. A., a nephelinic syenite with sodalite from the Transvaal, 1909, A., ii, 589.

lujaurites from Pilandsberg (Trans-

vaal), 1910, A., ii, 48.

molengraaffite, a new mineral in lujaurite from the Transvaal, 1911, A., ii, 296.

Browiński, Józef, the occurrence of proteic acids in blood, 1908, A., ii, 205;

1909, A., ii, 69.

the fate of cholesterol in the animal organism, 1911, A., ii, 305.

Browinski, Józef, and Stephane Dabrowski, estimation of the fundamental colouring matter of urines, 1908, A., ii, 443.

estimation of amino-groups in the oxyproteic acids of normal urines,

1912, A., i, 324.

Brown, Alexander Crum, and Thomas Field Cowie, action of sodium ethoxide on trichloromethylsulphonyl chloride, 1908, A., i, 3.

Brown, Alexander Crum, and George Ernest Gibson, action of nitric anhydride on mucic acid, 1909, A., i, 207.

Brown, Adrian John, the influences regulating the reproductive functions of Saccharomyces cereirsiæ, 1905, T., 1395; P., 225.

Brown, Adrian John, selective permeability of the coverings of the seeds of Hordeum vulgare, 1909, A., ii,

Brown, Adrian John, and Edmund Theodore Millar, the liberation of tyrosine during tryptic proteolysis, 1905, P.,

286; 1906, T., 145.

Brown, Adrian John, and Frederick Palliser Worley, influence of temperature on the absorption of water by seeds of Hordeum vulgare in relation to the temperature-coefficient of chemical change, 1912, A., ii, 1086.

Brown, Alexander Russell, the absorption of light by inorganic salts. VI. The cobalt chloride colour change,

1912, A., ii, 507.

Brown, Alexander Russell. See also Robert Alexander Houston.

Brown, Bailey Edgar. See Frank Kenneth Cameron and Oswald Schreiner, Brown, B. Marion. See James Flack

Norris. See Walter G. Brown, Charles W.

Sackett. Brown, E. D. See Torald Sollmann.

Brown, Edward J., bismuth subnitrate, 1908, A., ii, 391.

Brown, E. W. See Frank Burnett Dains.

Brown, F. C., the kinetic energy of the positive ions emitted by hot platinum, 1909, A., ii, 368.

kinetic energy of the positive ions emitted from various hot substances,

1909, A., ii, 853.

high sensibility selenium cells, 1910, A., ii, 573.

new photoelectric property of selenium,

1910, A., ii, 573. Brown, F. C. See also Claude S. Hudson.

Brown, Horace Tabberer, the translocation of nitrogen compounds into the embryo of barley from the endosperm and from artificial culture solutions, 1908, A., ii, 882.

the soluble and non-coagulable nitrogen compounds in malt, 1908, A., ii,

883.

water-soluble polysaccharides of barley and malt, 1908, A., ii, 978.

note on the paper of Slator and Sand on the rôle of diffusion in fermentation by yeast-cells, 1910, P., 130.

Brown, Horace Tabberer, and Fergusson Escombe, variations in the amount of carbon dioxide in the air of Kew during the years 1898—1901, 1905, A., ii, 815.

Brown, Horace Tabberer, and Fergusson Escombe, physiological processes of green leaves, with special reference to the interchange of energy between the leaf and its surroundings, 1905, A., ii, 849.

new method for the determination of atmospheric carbon dioxide, based on the rate of its absorption by a free surface of a solution of an alkali hydroxide, 1905, A., ii, 858.

Brown, James, interaction of hydrochloric acid and potassium permanganate in the presence of ferric chloride, 1905, A., ii, 166.

interaction of hydrochloric acid and potassium permanganate in the presence of various inorganic salts,

1906, A., ii, 31.

Brown, Joseph A., estimation of nitrogen by Kjeldahl's method in fatty sub-

stances, 1910, A., ii, 804.

Brown, James Campbell, a direct method for determining latent heat of evaporation, 1903, T., 987; P., 164.

the latent heat of evaporation of benzene and some other compounds.

1905, T., 265; P., 75.

a precise method of estimating the organic nitrogen in potable waters, 1905, T., 1051; P., 208.

the critical temperature and value of of some carbon compounds,

1906, T., 311; P., 39.

some double ferrocyanides of calcium, potassium, and ammonium, 1907, T., 1826; P., 233.

obituary notice of, 1911, T., 1457. Brown, James Campbell, and John Smeath Thomas, an apparatus for the distillation of fats and fatty acids in the vacuum of the cathode light, 1910,

P., 149. Brown, Joseph Hallam. See John Albert

Newton Friend.

Brown, J. N., rate of emission of aparticles from uranium and its products, 1910, A., ii, 917.

Brown, John Wesley. See Georg Bredig. Brown, Louise. See (Miss) Charlotte Fitch Roberts.

Brown, M. J. See Arthur Wesley

Browne.

Brown, Orville Harry, immunity of Fundulus eggs and embryos to electrical stimulation, 1903, A., ii, 437. effects of salts on kidney excretion and glycosuria, 1904, A., ii, 273.

permeability of the membrane of Fundulus eggs, 1905, A., ii, 727.

Brown, Orville Harry, action of anæsthetics and narcotics, 1906, A., ii, 105. toxicity of strychnine, morphine, and quinine to Parameecium, 1906, A., ii, 188.

pharmacology of a colloidal compound of strychnine, 1906, A., ii, 188, 789. effect of quinine on cultures of pneumococci, 1912, A., ii, 376.

Brown, Orville Harry, and Charles Claude Guthrie, intravenous injection of bone-marrow extracts, 1905, A., ii,

Brown, Orville Harry, and Don R. Joseph, intravenous injection of bone marrow extracts, 1906, A., ii, 474.

Brown, Orville Harry, and Charles Hugh Neilson, influence of alkaloids and alkaloidal salts on catalysis, 1905, A., ii, 447.

Brown, Orville Harry. See also Samuel A. Matthews and Charles Hugh Neilson. Brown, Oliver W., reduction of metallic

sulphides, 1907, A., ii, 31.

Brown, Oliver W., and Frank Curry Mathers, electro-deposition of copper on iron, 1906, A., ii, 214.

Brown, Percy E., some bacteriological effects of liming, 1912, A., ii, 670.

Brown, Percy E. See also Jacob Goodale

Lipman and Edward Burnett Voorhees.

Brown, Thomas Graham, and Edward Provan Cathcart, creatine and creatinine in frog's muscle, 1908, A., ii, 516.

Brown, William, densities and specific heats of some alloys of iron, 1907, A., ii, 957.

Brown, William, See also William Fletcher Barrett.

Brown, William D., potassium per-carbonate, 1905, A., ii, 818. Browne, Arthur Wesley, synthesis of

hydronitric acid [azoimide], 1905. A., ii, 449.

Browne, Arthur Wesley, and M. J. Brown, a new portable gas generator,

1907, A., ii, 678.

a constant pressure gas generator for use over a wide range of pressure,

1907, A., ii, 679.

Browne, Arthur Wesley, and A. E. Houlehan, behaviour of the hydronitrogens [nitrogen hydrides] and their derivatives in liquid ammonia. II. Ammonolysis of certain hydrazine salts, 1911, A., ii, 1085.

behaviour of the hydronitrogens [nitrogen hydrides] and their derivatives in liquid ammonia. action of ammonium trinitride on certain metals, 1911, A., ii, 1085.

Browne, Arthur Wesley, and Gustave Ernst Fred Lundell, anhydrous hydronitric acid [azoimide]. I. Electrolysis of a solution of potassium trinitride [azoimide] in hydronitric

acid [azoimide], 1909, A., ii, 396. Browne, Arthur Wesley, and M. F. Mehling, modified hydrogen sulphide

generator, 1906, A., ii, 609.

Browne, Arthur Wesley, and Fred Floyd Shetterly, oxidation of hydrazine, 1907, A., ii, 863; 1908, A., ii, 373;

1909, A., ii, 233, 658.

Browne, Arthur Wesley, and T. W. B. Welsh, behaviour of the hydronitrogens [nitrogen hydrides] and their derivatives in liquid ammonia. I. Ammonolysis of hydrazine sulphate, 1911, A., ii, 1084.

Browne, Arthur Wesley. See also Walter Parke Bradley and Louis

Munroe Dennis.

Browne, Charles Albert, jun., effects of fermentation on the composition of cider and vinegar, 1903, A., ii,

hydrolytic products of sugar cane fibre, 1904, A., i, 976.

rice oil, 1904, A., ii, 75.

fermentation of sugar-cane products, 1906, A., i, 381.

analysis of sugar mixtures, 1906, A., ii, 498.

Browne, Frank, the estimation of graphite, 1908, A., ii, 896; 1909, A., ii, 937.

Browning, Carl Hamilton, and John Cruickshank, the action of cholesterol derivatives with lecithin in the syphilis reaction, 1911, A., ii, 1014.

the action of cholesterol and its derivatives with lecithin as syphilitic antigen and as hæmolysin with cobra venom, 1911, A., ii, 1118.

Browning, Carl Hamilton, John Cruickshank, and Walter Gilmour, the action of lecithin from different sources in the Wassermann reaction,

1911, A., ii, 312.

Browning, Carl Hamilton, John Cruickshank, and Ivy McKenzie, the constituents in the tissues which are concerned in the Wassermann reaction, especially lecithin and cholesterol, 1910, A., ii, 629.

Browning, Carl Hamilton, and Ivy McKenzie, the Wassermann reaction in rabbits infected with the trypanosomes of nagana, and the effect of treatment with arsenophenylglycine (Ehrlich), 1911, A., ii, 59, 219.

Browning, Carl Hamilton, and George Haswell Wilson, an anti-serum to globin, 1909, A., ii, 817, 1031.

the alterations in hæmolytic immunesubstance which occur during immunisation, 1911, A., ii, 997.

Browning, Carl Hamilton. See also Robert Muir.

Browning, Henry, jun. See Frederick Belding Power.

Browning, Philip Embury, detection of silicates, fluorides, and silico-

fluorides, 1911, A., ii, 1030.

Browning, Philip Embury, and Philip Lee Blumenthal, decomposition of the cerium earth double sulphates with the alkali sulphates by fusion with charcoal, 1911, A., ii, 890.

detection of certain elements which form insoluble sulphates: barium, strontium, (calcium) and lead, 1911,

A., ii, 1032.

Browning, Philip Embury, and William Allen Drushel, the arsenate process for the separation of magnesium and the alkalis, 1907, A., ii, 505.

Browning, Philip Embury, and William Ruthven Flint, quantitative precipitation of tellurium dioxide, and its application to the separation of tellurium from selenium, 1909, A., ii, 934.

complexity of tellurium, 1909, A., ii,

Browning, Philip Embury, and Charles Paxson Flora, ceric chromate, 1903, A., ii, 429.

Browning, Philip Embury, and Howard Earle Palmer, qualitative separation of ferrocyanides, ferricyanides, and thiocyanates, 1907, A., ii, 724.

estimation of cerium in the presence of other rare earths by the action of potassium ferricyanide, 1908, A.,

ii, 736.

volumetric and gravimetric estimation of thallium in alkaline solution by means of potassium ferricyanide, 1909, A., ii, 620.

gravimetric estimation of vanadium as silver vanadate, 1910, A., ii, 902.

Browning, Philip Embury, and Edwin Jay Roberts, substitution of bromine and of iodine for chlorine in the separation of cerium from the other cerium earths, 1910, A., ii, 159.

Brownlee, R. H., precipitated sulphur,

1907, A., ii, 757.

Brownsdon, Henry Winder, volumetric method for the estimation of mercury fulminate, 1904, A., ii, 591.

Brownsdon, Henry Winder: See also Ludwig Knorr.

Brubaker, Howard W., modification of the modified Winkler method for the estimation of sulphates in water, 1912, A., ii, 385.

Bruce, James. See Richard Willstätter. Bruce, W. M., oxygen ethers of carbamides, 1904, A., i, 491, 573.

Bruch, Paul, physiological importance of calcium in plants, 1903, A., ii, 233.

Bruchhausen, F. von, the detection of salicylic acid, 1912, A., ii, 501.

Bruck, Walter. See Fritz Ullmann. Bruckner, S. See Paul Friedländer.

Brudny, Viktor, a new form of hot filtering apparatus, 1910, A., ii, 494.

Brück, Oswald, estimation of calcium, 1904, A., ii, 681.

Brückner, Camillo, reduction of sul-

phates, 1905, A., ii, 516. the system: sulphur-sulphates, 1906,

A., ii, 279.

behaviour of sulphur towards potassium chromate and dichromate, 1906, A., ii, 364.

action of iodine on mercurous and mercuric sulphates, 1906, A., ii, 613. a triple salt of mercury, 1907, A., ii.

Brügelmann, Gottfried, crystallisation of the alkaline-earth oxides, especially of calcium oxide, from their nitrates, 1908, A., ii, 842.

Brühl, Julius Wilhelm, camphorearboxylic acid, 1903, A., i, 4, 64, 314,

457, 548; 1904, A., i, 139. remarks on Rupe's communication "influence of the double linking between carbon atoms on rotatory power," 1903, A., i, 742.

constitution and optical behaviour of the nitrosoalkylurethanes and of anthranil, 1904, A., i, 92, 160.

metal-organic syntheses of the acylcamphors, 1904, A., i, 435.

chemical and physical properties and constitution of the acylcamphors, 1904, A., i, 436.

alkyloxides, 1904, A., i, 545.

preparation of hydroxymethylene compounds, 1904, A., i, 690.

shaking and stirring apparatus, 1904, A., ii, 248.

cinnamylidenecamphor and its reduction products, 1905, A., i, 293.

development of spectro-chemistry, 1905, A., ii, 781.

the optical influence of contiguity of unsaturated groups, 1906, P., 319; 1907, T., 115.

Brühl, Julius Wilhelm, spectrochemistry of nitrogen, 1907, A., ii, 517; 1912, A., ii, 311.

spectroscopic behaviour of hydrocarbons with conjugate ethylene linkings, 1908, A., ii, 1002.

spectrochemistry of nitrogen. Spectrochemical constants of nitrogen in heterocyclic unsaturated systems, 1912, A., ii, 401.

Bruhl, Julius Wilhelm, Rudolf Kobert, and Rudolf Gottlieb, physiological behaviour of some camphor derivatives, 1904, A., ii, 501.

Brühl. Rüdiger, the camphor group. I. and

II., 1904, A., i, 601.

Brühl, Julius Wilhelm, and Heinrich Schröder, camphorearboxylic acid, its salts, esters, and ester salts, 1904.

A., i, 646, 969.

the desmotropic form of substances of the ethyl acetoacetate type in the homogeneous state and dissolved in neutral media, 1905, P., 164; discussion, P., 164; A., i, 506.

sodium acetoacetate and the formation of analogous salts in solution, 1905,

A., i, 170.

formation of salts in solution, especially in the case of substances exhibiting tautomerism (pseudo-acids, pseudobases). III., 1905, A., i, 407; ii, 70, 235.

Brüll, Leo, the influence of salt ions on

autolysis, 1911, A., ii, 54.

Brünecke, Kurt. See Ernst Laqueur. Brüning, August. See Wilhelm Autenrieth.

Brüninghaus, L., phosphorescence of calcium-manganese compounds; determination of the optimum, 1907, A., ii, 419.

phosphorescence of manganiferous-calcium compounds; influence of constitution and molecular mass on the wave lengths of the radiations emitted, 1907, A., ii, 520.

a relation between absorption and phosphorescence, 1910, A., ii, 88.

theory of the law of the optimum of phosphorescence, 1910, A., ii, 89.

Stokes' law and a general relation between absorption and phosphorescence, 1911, A., ii, 562.

Brünnich, Johannes Christian, hydroeyanic acid in fodder-plants, 1903, T., 788; P., 148.

fertilising value of rain water, 1910, A., ii, 647.

Brünnich, Johannes Christian, and F. Smith, detection and estimation of arsenic acid in presence of arsenious acid by means of magnesia mixture, 1910, A., ii, 1109.

Bruère, pellet test for enzymes for the rapid control of pasteurised milk,

1907, A., ii, 144.

Brugnatelli, Luigi, artinite, a new mineral, 1903, A., ii, 379.

hydromagnesite and artinite from Emarese in the Aosta Valley, 1904, A., ii, 48.

new mineral from the asbestos mines of the Lanterna Valley, 1905, A.,

ii, 173.

titanolivine from Val Malenco, Lombardy, 1905, A., ii, 176.

Brugsch, Theodor, protein decomposition and acidosis in extreme hunger, 1905. A., ii, 404.

Brugsch, Theodor, and Rahel Hirsch, excretion of amino-acids and total nitrogen during inanition, 1907, A., ii, 284.

hippuric acid synthesis and benzoic acid excretion in dogs, 1907, A., ii,

the elimination of alanine by the

urine, 1908, A., ii, 611.
Brugsch, Theodor, and K. Kawashima, the influence of hæmatoporphyrin, hæmin, and urobilin on the formation of bile-pigments. III., 1911, A., ii,

Brugsch, Theodor, and Alfred Schittenhelm, origin of uric acid and its

relation to digestion, 1908, A., ii, 611. Brugsch, Theodor, and S. Yoshimoto. formation of bile-pigment from the blood. II., 1911, A., ii, 629.

Brugsch, Theodor. See also Peter Bergell.

Bruhat, G., coefficient of diffusion of the emanation of actinium, 1909, A., ii, 300.

rotatory dichroism of a definite organic compound (l-bornyl diphenyldithiourethane), 1911, A., ii, 829.

Bruhat, J., and H. Dubois, perborates, 1905, A., ii, 246.

Bruhns, Gustav, new method for stating analytical results, 1906, A., ii, 389. standardisation of iodine and thio-

sulphate solutions, 1906, A., ii, 577.

estimation of carbon dioxide in waters,

1906, A., ii, 706.

estimation of small quantities of [combined] sulphuric acid in waters 1906, A., ii, 800.

Bruhns, Willy, the so-called leesbergite, 1908, A., ii, 703.

Brulé, I., action of hydrobromic acid on allyl cyanide, 1909, A., i, 895.

Brun, Albert, researches on vulcanism, 1907, A., ii, 33.

volcanic gases, 1910, A., ii, 135.

the behaviour of spodumene on heating, 1912, A., ii, 569.

Brun, Josef. See Eugen Bamberger. Brunck, Otto, action of sodium hyposulphite on metallic salts, 1903,

A., ii, 481; 1905, A., ii, 95. estimation of sulphur in coal, 1905,

A., ii, 762.

gravimetric estimation of calcium, 1906, A., ii, 307.

iodometric estimation of hydrogen sulphide, 1906, A., ii, 799.

new method for the estimation of nickel, 1907, A., ii, 582.

estimation of nickel by means of dimethylglyoxime and its separation from the metals of the ammonium sulphide group, 1907, A., ii, 989.

a new filtering crucible, 1909, A., ii,

826.

gas-volumetric estimation of hydrogen,

1911, A., ii, 149. use of the Edison accumulator in electro-analysis, 1911, A., ii, 1136.

tantalum electrodes, 1912, A., ii, 1128. Brune, Rudolf. See Theodor Zincke. Bruneau, P. See Gabriel Bertrand.

Brunel, Léon, additive compounds of cyclohexene, 1903, A., i, 157.

new o-cyclohexanediol and its derivatives, 1903, A., i, 338.

action of ammonia on the ethylene oxide of \$-o-cyclohexanediol [esoanhydride], 1903, A., i, 680.

oxide from β-cyclohexane-1:2-diol and its derivatives, 1903, A., i, 695.

preparation of hydroaromatic alcohols, 1904, A., i, 158.

new additive compounds of tetrahydrobenzene, 1905, A., i, 123, 340.

thymomenthol [hexahydrothymol] and its derivatives, 1905, A., i, 197. preparation of cyclohexene from cyclo-

hexanol, 1905, A., i, 268. ethers and esters of cyclohexanol, 1905,

A., i, 274. menthone derived from hexahydro-

thymol, 1905, A., i, 363. derivatives of cyclohexane, 1905, A., i,

hydrogenation derivatives of carvacrol, 1906, A., i, 81.

ketone derived from β-hexahydrocarvacrol, 1908, A., i, 91.

Brunel, Léon, cyclohexanetriols and their derivatives, 1910, A., i, 476.

conversion of hydroaromatic alcohols into the corresponding phenols, 1910, A., i, 479.

Brunel, Léon, and Paul Woog, catalytic synthesis of ammonia from its ele-

ments, 1908, A., ii, 34.

Brunel, Robert. See Friedrich Kehrmann. Brunel, Roger Frederick, equilibrium between isobutyl and tert. -butyl bromides at elevated temperatures, 1911, A., i, 413.

course of the intramolecular transformations between isobutyl and tert.-butyl bromides, and the catalytic actions thereby coming into

play, 1911, A., ii, 974.

Brunel, Roger Frederick, and Solomon Farley Acree, urazoles. XVI. Salts of tautomeric compounds; reactions of urazole salts with alkyl haloids, 1910, A., i, 520.

Brunel, Roger Frederick, and Eugene G. Probeck, additive power of 2-pentene [$\Delta \beta$ -amylene], 1910, A., i, 805.

Brunel, Roger Frederick. See also Solomon Farley Acres and Arthur

Michael.

Bruner, Ludwik, the factor of proportionality between the mobility and absolute velocity of ions, 1906, A., ii, 262.

theory of the precipitation of metals by hydrogen sulphide, 1907, A., ii,

electrolytic conductivity of bromine and iodine in nitrobenzene solution, 1908, A., ii, 149.

Bruner, Ludwik, and E. Bekier, electrolysis of fused iodine chloride and bromide, 1912, A., ii, 732.

Bruner, Ludwik, and Stefan Czarnecki, kinetics of bromination, 1909, A., i,

photo-kinetics of bromine substitution. I. The course of the photoreaction, 1911, A., ii, 241.

Bruner, Ludwik, and (Mlle.) J. Dluska, chemical dynamics of the bromination of toluene, 1908, A., i, 146.

Bruner, Ludwik, and A. Galecki, conductivity of the halogens in nitro-

benzene, 1910, A., ii, 382.

Bruner, Ludwik, and Jan Kozak, photocatalysis; action of light on mixtures of uranium salts and oxalic acid, 1911, A., ii, 564.

Bruner, Ludwik, Jan Kozak, and G. Mariasz, nitromethane as a solvent, 1904, A., i, 2.

Bruner, Ludwik, and M. Królikowski, the photochemical inversion of maleic acid, 1911, A., i, 9.

Bruner, Ludwik, and Z. Lahociński. photochemical after-effect, 1909, A.,

ii, 951.

photo-kinetics of bromine substitution. The course of and the factors which influence the photochemical after-effect, 1911, A., ii, 242.

Bruner, Ludwik, and Stanislaw Totłoczko, velocity of solution of solid substances, 1903, A., ii, 470; 1905, A., ii, 806; 1907, A., ii, 935.

solubility of arsenic and the molecular condition of the solution, 1904, A.,

Bruner, Ludwik, and Julian Vorbrodt, influence of the solvent on the ratio of isomerides [in substitution], 1909, A.,

Bruner, Ludwik, and J. Zawadski, co-precipitation of thallium sulphide with other sulphides, 1909, A., ii,

equilibria in the precipitation of metals by hydrogen sulphide, 1910, A., ii,

944, 945.

Bruner, Ludwik. See also Fritz Haber. Brunetti, Wladimir. See Franz Sachs. Bruni, Giuseppe, solid solutions and isomorphism, 1904, A., i, 536.

configuration of maleic and fumaric stereoisomerides and of the corresponding acetylene compounds, 1904, A., ii, 527.

copper and nickel salts of some aminoacids, 1905, A., i, 263.

racemism, 1905, A., ii, 69.

physiological action of optical antipodes on higher organisms, 1908, A., ii, 876.

formation of salts and basicity of acids, 1908, A., ii, 935, 1012.

freezing of jellies, 1909, A., ii, 304.

basicity of acids and the constitution of certain anomalous acid salts, 1909, A., ii, 993.

freezing of mixtures of isomeric benzene derivatives, 1910, A., i, 467.

theoretical and experimental researches on solid solutions, 1912, A., ii, 1043.

Bruni, Giuseppe, and Mario Amadori, the molecular weight of water in different solvents, 1910, A., ii, 948.

solid solutions of iodine in some cyclic hydrocarbons, 1912, A., ii, 342.

heats of formation of solid solutions, 1912, A., ii, 899.

Bruni, Giuseppe, and Alessandro Borgo. persulphides of hydrogen, 1908, A., ii, 102; 1909, A., ii, 477.

Bruni, Giuseppe, and Alessandro Callegari, solid solutions between nitroand nitroso-derivatives, 1904, A., ii, 545.

freezing of solutions in dimorphous solvents, 1904, A., ii, 545.

Bruni, Giuseppe, and Angelo Contardi. reactions of double decomposition between alcohols and esters, 1906, A., i. 621.

Bruni, Giuseppe, Angelo Contardi, and Costante Da Ponte, reactions of double decomposition in organic chemistry,

1912, A., ii, 925.

Bruni, Giuseppe, and L. Ferrari, additive compounds of aromatic hydrocarbons with polynitro-derivatives, 1906, A., i, 491.

Bruni, Giuseppe, and F. Finzi, racemism,

1905, A., ii, 2.

Bruni, Giuseppe, and Cesare Fornara, copper nickel salts of some amino-

acids, 1904, A., i, 855.

Bruni, Giuseppe, and Antonio Manuelli, molecular state of anhydrous and hydrated salts of metals in organic solvents, 1904, A., ii, 713.

hydrolytic decomposition of nonaqueous solutions, 1905, A., ii, 689.

solvent and ionising properties of ethylene cyanide (succinonitrile), 1906, A., ii, 71.

Bruni, Giuseppe, Luigi Mascarelli, and Maurizio Padoa, solid solutions, 1903,

A., ii, 63.

Bruni, Giuseppe, and Domenico Meneghini, formation and decomposition of mixed crystals of alkali nitrates and nitrites, 1909, A., ii, 885.

formation of solid metallic solutions by diffusion in the solid state, 1911,

A., ii, 703, 860.

formation of solid solutions of alkali salts by diffusion in the solid state,

1912, A., ii, 914.

Bruni, Giuseppe, and Maurizio Padoa, relations between the properties of different substances as cryoscopic solvents and their crystallisation constants. I., 1903, A., ii, 715.

solid solutions and isomorphism, 1904,

A., ii, 388.

conditions of precipitation and of solution of metallic sulphides, 1906, A., ii, 157.

Bruni, Giuseppe, and Emanuele Quercigh, the equilibrium diagram of the silvercadmium alloys, 1910, A., ii, 953.

Bruni, Giuseppe, and B. Sala, dissociation of nitro-derivatives in certain solvents. III., 1905, A., ii, 146.

Bruni, Giuseppe, and Carlo Sandonnini, formation of salts and basicity of acids. III., 1909, A., ii, 115.

formation of salts from the physicochemical standpoint, 1910, A., ii, 383.

Bruni, Giuseppe, Carlo Sandonnini, and Emanuele Quercigh, the ternary alloys of magnesium, zinc, and cadmium. I., 1910, A., ii, 954.

Bruni, Giuseppe, and Ercole Tornani, picrates of unsaturated compounds,

1904, A., i, 875.

picrates and other additive products of unsaturated compounds, 1905, A., i, 269.

Bruni, Giuseppe, and Arturo Trovanelli, solid solutions, 1904, A., ii, 712. solid solutions and isomorphism, 1905,

A., ii, 153. Bruni, Giuseppe, and Bartolo Lino Vanzetti, velocities of diffusion of electro-

lytes, 1907, A., ii, 74.

Brunn, Julius, employment of the guaiacol method for the quantitative estimation of peroxydase, 1910, A., ii,

Brunner, Arnold. See Emil Fischer. Brunner, Erich, densities of fused salts and the chemical equilibrium of

their mixtures, 1904, A., ii, 244. velocity of reaction in non-homogeneous systems, 1904, A., ii, 315.

rate of solution of zinc, 1905, A., ii,

reaction velocity and free energy, 1905, A., ii, 236.

theory of the velocity of solution of arsenious oxide, 1905, A., ii, 386.

reactions which take place in several stages, 1905, A., ii, 511.

electrochemistry of the iodine-oxygen compounds, 1906, A., ii, 723.

relation between current and potential difference at the cathode and anode in the electrolysis of solutions of iodine in potassium iodide, 1907, A., ii, 223.

relation between current and potential difference in solutions of iodine in potassium iodide; experiments with bright platinum electrodes, 1908, A.,

ii. 754.

Brunner, Georg. See Alexander Gutbier. Brunner, Heinrich, action of hydrogen on isosalicylic acid in alkaline solution, 1903, A., i, 171.

Brunner, Heinrich, action of an ammoniacal solution of silver oxide on salicylic acid and salicylaldehyde,

1905, A., i, 59.

Brunner, Heinrich, and Rudolf Mellet, formation of organic nitro-compounds by the action of ammoniacal silver oxide solution, 1908, A., i, 176.

estimation of chlorates, bromates, iodates, and periodates, by means of formaldehyde, silver nitrate, and potassium persulphate, 1908, A., ii. 222.

Brunner, Heinrich, and A. Rapin, reduction of nitriles in neutral solu-

tions, 1908, A., i, 863.

Brunner, Heinrich, and V. Vuillellmier. phenylcarbylamine from pyrogallol and nitrobenzene, 1908, A., i, 878. p-aminophenolsulphonic acid, 1908,

A., i, 879.

action of hydrogen persulphide on organic compounds, 1908, A., i,

Brunner, Karl, transformation of indolinones into alkyleneindolines, 1905, A., i, 468.

lecture experiments [decomposition of carbon dioxide by magnesium], 1905, A., ii, 381.

indolinones, 1907, A., i, 240.

chemical process of synthesis by absorption of carbon dioxide, 1907. A., i, 319.

Brunner, Otto, the relationship between chemical constitution and pharmacological action of preparations of antimony, 1912, A., ii, 584.

Bruno, Albert, preparation of hydrogen by means of iron and carbon dioxide in the cold and at ordinary pressure, 1907, A., ii, 756.

estimation of the total soluble fatty acids in fats, 1910, A., ii, 757.

Bruno, Albert, and P. Turquand D'Auxay. the estimation of sulphates in solution by the volumetric physico-chemical method, 1912, A., ii, 600.

Bruns, Daniel, corybulbine and isocory-

bulbine, 1904, A., i, 185.

products of the condensation of opianic acid, 1905, A., i, 353.

tarconine methiodide and its relations to cotarnine and hydrocotarnine, 1905, A., i, 370.

Bruns, Daniel. See also Ernst Schmidt. Brunton, (Sir) Thomas Lauder, and Thomas Jessopp Bokenham, the power of the liver to destroy diphtheria toxin, 1904, A., ii, 832.

Bruschi, Diana, digestion and secretory activity in the endosperm of Ricinus, 1907, A., ii, 124.

formation of glycogen in yeast cells,

1912, A., ii, 283.

Brussow, S., adsorption of gold by charcoal from aqueous solutions of its salts, 1909, A., ii, 795.

Brust, Eduard. See August Micha-

elis.

Brustier, V. See Jules Aloy.

Bruylants, Pierre, identification of aldehydes by the spectroscope and their differentiation from ketones, 1907, A., ii, 656.

estimation of citral in essence of lemon,

1908, A., ii, 330.

estimation of aldehydes by the spectro-

scope, 1908, A., ii, 437.

preparation of trimethylene chlorobromide and dibromide, 1909, A., i, 198.

cyclic trimethylene compounds of the

 CH_2 , 1909, A., i, 226. type RHC CH₂

glutaric pinacone, OH CMe2 [CH2]3 ·CMe2·OH [B\(\zeta\)-dimethylheptane-\(\beta\)\(\zeta\)diol] 1909, A., i, 625.

rapid electrolytic estimation of cobalt, 1910, A., ii, 77.

electrolytic separation of nickel and cobalt, 1910, A., ii, 1114. Bruyn, Balthasar Rutger de, mechanism

of the reaction by which y-hydroxyacids are converted into lactones, 1905, A., ii, 805.

Bruyn, Cornelis Adriaan Lobry de, do the ions carry the solvent with them in electrolysis? 1903, A., ii,

hydrates of nickel sulphate and methyl alcohol, 1904, A., ii, 39.

aromatic nitro-compounds. XVIII. Comparative study of the three dinitrobenzenes. V. Summary of dinitrobenzenes. results, 1904, A., i, 388.

aromatic nitro-compounds. XIX. Action of potassium cyanide, 1904,

A., i, 388.

obituary notice of, 1905, T., 570.

Bruyn, Cornelis Adriaan Lobry de, and William Alberda van Ekenstein, methylene compounds of hydroxyacids, 1903, A., i, 149.

Bruyn, Cornelis Adriaan Lobry de, and John Waterloo van Geuns, aromatic nitro-compounds. XVII. Comparative study of the three dinitrobenzenes. IV. Action of potassium cyanide, 1904, A., i, 387.

Bruvn, Cornelis Adriaan Lobry de, and Coenraad Lodewyk Jungius, dissociation in, and crystallisation from, a solid solution, 1903, A., ii, 531.

the condition of hydrates of nickel sulphate in methyl alcohol solution,

1903, A., ii, 651.

the conductive power of hydrates of nickel sulphate dissolved in methyl

alcohol, 1903, A., ii, 651. Bruyn, Cornelis Adriaan Lobry de, and Carel Herman Sluiter, the Beckmann rearrangement; velocity of transformation of acetophenoneoxime into acetanilide, 1904, A., ii, 473.

Bruyn, Cornelis Adriaan Lobry de, and Sybe Tymstra, jun., mechanism of the synthesis of salicylic acid, 1905,

A., i, 209.

mechanism of ether formation from alkyl haloid (or halogendinitrobenzene) and sodium alkyloxide,

1905, A., ii, 150.

Bruyn, Cornelis Adriaan Lobry de, and Ludwig Karl Wolff, does the application of Tyndall's optical method permit of the demonstration of the presence of molecules in solutions? 1904, A., ii, 470.

Bruyn, Cornelis Adriaan Lobry de. See also R. P. van Calcar and Ernst Cohen. Bryan, Albert Hughes, precipitation of

reducing sugars with basic lead acetate, 1909, A., ii, 271.

Bryan, Thomas J., delivery funnel for introducing liquids under increased or diminished pressure, 1906, A., ii, 154.

Bryant, A. P., rapid estimation of fat,

1904, A., ii, 597.

Bryant, A. P., and R. D. Milner, digestibility of vegetables, 1903, A., ii, 739. Bryant, A. P. See also Wilbur Olin

Atwater.

Brynildsen, A. See John Sebelien.

Bubanović, Franz, the removal of the blood-pigment from corpuscles under the influence of carbon monoxide, 1912, A., ii, 59.

influence of substances, soluble in fats, on the viscosity and the surface tension of olive oil, 1912, A., ii,

Traube's theory of cohesion pressure, 1912, A., ii, 833. Bubanović, Franz. See also Hartog

Jakob Hamburger.

Bube, Karl. See Emil Erlenmeyer. Bube, Kurt, magnesium ammonium

phosphate, 1910, A., ii, 804. Bublitz, Heinrich. See Julius Tafel. Bucci, G. See Federico Giolitti.

Buch, Kurt, decomposition of dicalcium phosphate by water, 1907, A., ii,

ammonium phenoxide, 1908, A., i,

hydrolysis of ammonium salts of vola-

tile acids, 1910, A., ii, 291.

Buch, Kurt. See also Frederick Murray Godschall Johnson.

Buchanan, Florence, an electrical response to excitation in Desmodium gyrans, 1905, A., ii, 752.

Buchanan, John Young, a method of determining the specific gravity of soluble salts by displacement in their own mother liquor, and its application in the case of the alkali haloids, 1905, P., 122.

Buchböck, Gustav, hydration of the ions.

I., 1906, A., ii, 519.

Bucher, John Emery, constitution of 1-phonylnaphthalene-2:3-dicarboxylic acid, 1908, A., i, 791.

constitution of retene and its deriva-

tives, 1910, A., i, 239.

acids of the phenylpropiolic series and their condensation to naphthalene derivatives, 1910, A., i, 258. Bucher, John Emery, and W. Clifton

Slade, anhydrides of isophthalic and terephthalic acids, 1910, A., i, 38.

Bucher, John Emery. See also Arthur Michael.

Bucherer, Hans Theodor, preparation of the nitriles of hydroxy-acids from ketones, 1903, A., i, 612.

the isomeric 8-hydroxysulphonaphthoic acids L and S, and the determination of their structure by the "sulphite method," 1903, A., i,

action of sulphites on aromatic aminoand hydroxy-compounds, 1904, A.,

i, 309; 1905, A., i, 48.

the so-called diazosulphonaphtholsulphonic acids of the German Patent 121226, 1904, A., i, 536.

ω-cyanodimethylaniline, 1904, A., i, 729.

behaviour of sulphites towards wood and tanning materials, 1904, A., ii,

nitriles of hydroxy- and amino-carboxylic acids, 1905, A., i, 59.

preparation of nitriles, 1905, A., i, 438.

simple method for the synthesis of a-amino-acids, 1906, A., i, 584.

the mechanism of the indamine and azine synthesis; Willstätter's paper on aniline-black, 1907, A., i, 981.

Bucherer, Hans Theodor, constitution of morphine and thebaine, 1908, A., i, 43.

mechanism of coupling reactions, 1909, A., i, 193.

v-nitrobenzenediazonium chloride, 1909, A., i, 536.

constitution of aniline-black, 1909, A., i, 820.

Bucherer, Hans Theodor, and André Grolée, nitriles of arylglycines, 1906, A., i, 349.

ketone-cyanohydrins, 1906, A., i, 405. Bucherer, Hans Theodor, and Julius Schenkel, pyridine, 1908, A., i, 452.

Bucherer, Hans Theodor, and Maximilian P. Schmidt, action of sulphites on aromatic amino- and hydroxy-compounds. VI. Action of sulphites on hydrazines, particularly the naphthylhydrazines, 1909, A., i, 521.

Bucherer, Hans Theodor, and Arthur

Schwalbe, hyposulphites, 1904, A.,

ii. 725.

ω-sulphonic acids and ω-cyanides of aromatic amines, 1906, A., i, 828.

aldehyde bisulphates and [the constitution of] hyposulphites, 1906, A., ii, 741.

Bucherer, Hans Theodor, and Franz Seyde, behaviour of arylated naphthylamines with formaldehyde and with nitrous acid, 1907, A., i, 344.

action of sulphites on aromatic aminoand hydroxy-compounds, 1907, A., i, 509; 1908, A., i, 455.

[preparation of carbazole derivatives],

1909, A., i, 735.

Bucherer, Hans Theodor, and Ernst F. Sonnenburg, action of sulphites on aromatic amino- and hydroxy-com-VIII. Behaviour of hydrpounds. azines, especially of phenylhydrazine, in the sulphite reaction, 1910, A., i, 144.

Bucherer, Hans Theodor, and Adolf Stohmann, aryl-substituted β-naphthylamines and their preparation by the sulphite method, 1904, A., i, 395.

action of sulphites on aromatic aminoand hydroxy-compounds. III. Preparation of arylated \$B-naphthylamines and of BB'-dinaphthylamines, 1905, A., i, 585.

Bucherer, Hans Theodor, and Armin Uhlmann, action of sulphites on aromatic amino- and hydroxy-com-VII. pounds. Application of the sulphite reaction to some ana-(1:5)derivatives of naphthalene, 1909, A.,

i, 787.

Bucherer, Hans Theodor, and Salomon Wolff, p-nitrobenzenediazonium chloride, 1909, A., i, 272.

Buchholz, Otto. See Paul Rabe and

Georg Schroeter.

Buchholz, Yngve, degree of hydration of cuprouranite, 1903, A., ii, 554.
Buchler & Co. See Chininfabrik Braun-

schweig.

Buchner, Eduard, refutation of Billow's views concerning pyrazolinecarboxylic

acids, 1912, A., i, 213.

Buchner, Eduard, and Wilhelm Antoni, further researches on cell-free fermentation, 1905, A., ii, 473.

the co-enzyme of zymase, 1906, A., i,

56.

Buchner, Eduard, and Konrad Delbrück, ethyl diazoacetate and m-xylene, 1908, A., i, 87.

Buchner, Eduard, and Leon Feldmann, ethyl diazoacetate and toluene, 1904,

A., i, 57.

Buchner, Eduard, and Rufus Gaunt, acetic acid fermentation, 1906, A., i, 920.

Buchner, Eduard, and Josef Geronimus, trans-phenyltrimethylenecarboxylic acid, 1904, A., i, 53.

Buchner, Eduard, and Hugo Haehn, action of yeast enzymes, 1909, A., i, 624.

the anti-protease of yeast juice, 1910,

A., i, 648.

amount of phosphorus in yeast and in some yeast preparations, 1910, A., ii. 989.

Buchner, Eduard, and Stephan Hediger, benzonorcaradienecarboxylic acid,

1904, A., i, 56.

Buchner, Eduard, and Richard von der Heide, enantiomorphism of the cyclopropanecarboxylic acids, 1905, A., i, 780.

Buchner, Eduard, and Robert Hoffmann, researches on expressed yeast juice,

1907, A., ii, 571.

Buchner, Eduard, and Fritz Klatte, the co-enzyme of expressed yeast in juice, 1908, A., i, 380.

adsorption of tryptase by solids, 1908,

A., i, 489.

the properties of yeast juice; the zymase formation in yeast, 1908, A., i, 589.

Buchner, Eduard, and Jakob Meisenheimer, enzymes in mould fermentations, 1903, A., ii, 318.

enzyme from Monilia candida and a milk sugar enzyme, 1904, A., i, 212. Buchner, Eduard, and Jakob Meisenheimer, chemical reactions occurring during alcoholic fermentation, 1904, A., ii, 199; 1905, A., ii, 274; 1906, A., ii, 790; 1910, A., ii, 737; 1912, A., ii, 671.

lactic acid fermentation, 1906, A., i, 919.

butyric acid fermentation, 1908, A., ii, 525.

lactic acid in alcoholic sucrose fermentation, 1909, A., i, 881.

Buchner, Eduard, Jakob Meisenheimer, and Heinrich Schade, fermentation of sugar without enzymes, 1907, A., i, 17.

Buchner, Eduard, and Sigurd Mitscherlich, preparation of yeast poor in glycogen and its use for the detection of sugar in urine, 1904, A., ii, 834.

Buchner, Eduard, and Lasar Perkel, reduced derivatives of 4-phenylpyrazole: cis-1-phenyl-trans-2:3-trimethylenedicarboxylic acid, 1904, A., i, 101.

Buchner, Eduard, and Kurt Scheda, attempts to synthesise cyclooctane derivatives, 1904. A., i. 412.

derivatives, 1904, A., i, 412.

Buchner, Eduard, and Paul Schulze, ethyl diazoacetate and p-xylene, 1911,

A., i, 50.

Buchner, Eduard, and Wilhelm Wedemann, brominated cyclopropanedicarboxylic acids, 1905, A., i, 439.

Buchner, Eduard, and Hermann Wüstenfeld, citric acid fermentation by Citromycetes, 1909, A., ii, 602.

Buchner, Fritz, tri-imides of m- and pazo- and azoxy-benzenes, 1909, A., i, 979.

Buchner, Georg, assay of beeswax, 1905, A., ii, 126.

Indian Ghedda-wax, 1906, A., i, 478. rapid estimation of albumin in urine, 1906, A., ii, 912.

Buchner, Karl. See Karl Andreas Hofmann.

Buchta, F. See Anton Skrabal.

Buchtala, Hans, the amounts of cystine in various horny materials, 1907, A., i, 993.

elementary analysis and distribution of nitrogen in various egg-shells, 1908, A., ii, 610.

the sulphur and cystine in the keratin of birds, 1911, A., i, 97.

the shield of Chelone imbricata, 1911, A., ii, 1009.

keratin of elephant epidermis, 1912, A., i, 520.

Buchtala, Hans. See also Fritz Pregl.

Buchwald, Ernst, assay of highly concentrated sulphuric acid, 1908, A., ii.

Buchwitz, Julian, See Hermann Stau-

dinger.

Buck, Christian. See Otto Fischer. Buck, Ernst. See Rudolf Schenck. Buckley, B. G. See Ebenezer Henry

Archibald.

Buckley, Melville L. See James Munsie

Buckmaster, George Alfred, behaviour of blood and hamatoporphyrin towards guaiaconic acid and aloin, 1907, A., ii, 660.

reaction between hæmoglobin and the leuco-base of malachite-green, 1908,

A., ii, 643.

behaviour of colloidal metals (platinum, gold, silver, and palladium) prepared by Bredig's method on solutions of guaiaconic acid, 1911, A., i, 390.

pseudo-peroxydase reaction between hæmoglobin, its derivatives, and guaiaconic acid (guaiacum reaction for blood pigment),

1911, A., i, 390.

Buckmaster, George Alfred, and John Addyman Gardner, the estimation chloroform in the blood of anæsthetised animals, 1907, A., ii,

supposed presence of carbon monoxide in normal blood and in the blood animals anæsthetised with chloroform, 1910, A., ii, 50.

a new form of blood-gas pump, 1910,

A., ii, 727.

the gases of cat's blood, 1910, A., ii, 969.

composition of the blood-gases in chloroform anæsthesia, 1910, A., ii, 1080.

the nitrogen content of blood, 1912, A., ii, 362.

composition of the blood gases during the respiration of oxygen, 1912, A., ii, 459.

Buckmaster, George Alfred. See also John Addyman Gardner.

Buckminster, Irving H., and Edgar Fahs Smith, electrolytic separations, 1910, A., ii, 1112.

Buckney, Frank, an optically active tetrahydroquinoline compound, 1907, A., i, 722.

Buckney, Frank, and Humphrey Owen Jones, the optical activity of cyclic ammonium compounds, 1907, 1821; P., 234.

Buckton, George Bowdler, notice of, 1907, T., 663. obituary

Bucky, Arthur. See Frédéric Reverdin. Budde, Hans, the explosion method.

I. The molecular heat of ammonia, 1912, A., ii, 1137.

the explosion method. II. The dissociation into atoms of sulphur

vapour, 1912, A., ii, 1145.

Budde, Th., estimation of combined sulphur in caoutchoue, 1909, A., ii, 828.

the estimation of caoutchouc as tetrabromide, 1911, A., ii, 545.

Budrick, W. See Leo A. Tschugaeff. Budy, Kurt. See Johannes Herzog. Büchner, Ernst Hendrik, transformation of diphenyliodonium iodide and chloride and its velocity, 1903.

A., i, 615. critical temperature of solutions in liquid carbon dioxide, 1906, A., ii, 71, liquid carbon dioxide as solvent, 1906,

A., ii, 274.

a mineral which retards the discharge of an electroscope, 1906, A., ii, 645.

limited miscibility of liquids; the system diphenylamine and carbon dioxide, 1906, A., ii, 731.

composition of thorianite and the relative radioactivity of its constituents, 1907, A., ii, 149.

false equilibria, 1908, A., ii, 184. radioactivity of rubidium compounds, 1909, A., ii, 779.

investigations on the radium content of rocks, 1910, A., ii, 1025; 1911,

A., ii, 243; 1912, A., ii, 525. the radioactivity of rubidium and potassium compounds, 1912, A., ii, 724.

Büchner, Ernst Hendrik, and Barta J. Karsten, the system hydrogen bromide and bromine, 1909, A., ii, 224.

Büchner, Ernst Hendrik, and Ada Prins, solubility and heat of solution of chromium trioxide in water, 1912, A., ii, 1177.

Bückel, Carl, tolylenediaminesulphonic acids, 1904, A., i, 532.

Bückendorff, Oskar, alkyl derivatives of methyluracil, 1912, A., i, 54.

Büeler de Florin, H., apparatus for distillation in high vacua, 1908, A., ii, 83.

Bühler, Emil. See Friedrich Kehrmann and Fritz Ullmann.

Bühler, L. See Albert Edinger.

Adolf, benzamidesulphonic acid, 1904, A., i, 882.

alkylation of acid amides, 1904, A., i, 882.

Bühner, Adolf. See also Johannes Thiele.

Buelens, Armand, ethylisoamylcarbinol and methylisohexylcarbinol, A., i, 78.

Buelens, Armand. See also Louis Henry. Bülow [Theodor] Carl [Heinrich], phenylhydrazides of organic acids, 1903, A., i, 54.

condensation product formed from methylacetylacetone and m-dihydroxybenzene, 1903, A., i, 272.

constitution of Nencki and Sieber's "resacetein," C₁₆H₁₂O₄, 1903, A., i, 357.

Curtius's 4-bis-3-methylpyrazolone, 1904, A., i, 272.

ethyl benzoylpyruvate and its derivatives, 1904, A., i, 623.

phenylhydrazino-oxalic hydrazide and its derivatives, 1904, A., i, 689.

ethyl 1-camphyl-2:5-dimethylpyrrole-3:4-dicarboxylate and its derivatives, 1905, A., i. 231.

condensation products of oxalylhydrazide. I., 1906, A., i, 46.

1-amino-3:4-triazole (N-amino-ββ'pyrrodiazole); the so-called "N-di-hydrotetrazine" (isobisdiazomethane, trimethinetriazoimide), 1906, A., i, 905.

"dihydrotetrazine": condensation of 1-anino-1:3:4-triazole with acetonyl-

acetone, 1907, A., i, 99.

ethyl malonylbishydrazoneacetoacetate, a substance with three reactive methylene groups, 1908, A., i,

the amino-group of 1-amino-1:3:4-tri-

azole, 1909, A., i, 680.

hetero-condensed, heterocyclic compounds with two nuclei: substituted "tetrazotopyrimidines," 1910, A., i, 81.

constitution of Buchner's so-called pyrazolinecarboxylic acids, 1912,

A., i, 134, 316.

Bülow, Carl, and Carl Bozenhardt, malonyldihydrazones and their decomposition products, 1910, A., i,

formation and decomposition of symmetrical bisazo-compounds of ethyl arylhydrazonemesoxalylbishydrazoneacetoacetates and of ethyl malonylbishydrazoneacetoacetate, 1910, A., i, 205.

preparation and decomposition of the oximino-derivative of ethyl malonylbishydrazoneacetoacetate, 1910, A.,

i, 233.

Bülow, Carl, and Fritz Busse, mixed diazo-compounds from p-phenylenediamine with heterocyclic sidechains, 1906, A., i, 717.

diazo-compounds from p-phenylenediamine with heterocyclic side-chains,

1907, A., i, 165.

Bülow, Carl, and Ivo Deiglmayr, 3alkyl-substituted benzopyranols. 1904, A., i, 609.

ethylacetylacetone and its condensation products with polyvalent

phenols, 1905, A., i, 149.

Bülow, Carl, and Max Deseniss, formaof 2-acetyl-1:3-diketohydrindene by the interaction of phthalyl chloride and acetylacetone, 1905, A., i, 42.

transformations of phthalylacetyl-

acetone, 1906, A., i, 588.

combination of phthalylacetylacetone with pyrogallol, 1906, A., i, 966. acetylacetonebenzyl-o-carboxylic acid

and its condensation products, 1907, A., i, 252.

Bülow, Carl, and Hans Filchner, action of hydrazine on ethyl phenacylacetoacetate, 1908, A., i, 578.

action of N-amino-compounds on bromocoumalinic acid esters, 1908.

A., i, 1017.

action of N-amino-compounds on dehydracetic acid, 1909, A., i, 95. Bülow, Carl, and August Ganghofer,

dimethyl mesoxalate phenylhydrazone and its derivatives, 1905, A., i, 90.

Bülow, Carl, and Hermann Göller, ethyl arylazoacetonedicarboxylates and their isomeric condensation products with hydrazines, 1911, A., i, 1043.

Bülow, Carl, and Karl Haas, synthetical experiments on the preparation of derivatives of hetero-condensed-"1:3-triazo-7:0'-pyriheterocyclic "1:3-triazo-7:0'-pyri-midine" [1:3:7:9-benzotetrazole],

1910, A., i, 80.

synthesis of hetero-condensed-heterocyclic compounds with two nuclei; derivatives of 2-methyl-1:3-triazo-7:0'-pyrimidine [2-methyl-1:3:7:9benzotetrazole] from 5-amino-2-methyl-1:3:4-triazole, 1910, A., i, 203.

heterohydroxylic acids, 1910, A., i, 595. synthesis of derivatives of 1:2:7-pyrazopyridine[1:2:7-benzotriazole]: a new series of homo (C.C) condensed, heterodicyclic compounds, 1911, A.,

peculiar reactions of the diazo-compound of p-aminobenzeneazosalicylic acid, 1911, A., i, 338.

Bülow, Carl, Karl Haas, and Hermann Schmachtenberg, decomposition of azopyrazolones by means of concentrated nitric acid, 1910, A., i, 902.

Bülow, Carl, and Arnulf Hecking, o-arvlazo-compounds of heterocyclic phenols: 4-arylazo-5-hydroxy-3-methylisooxazole, 1911, A., i, 244.

conversion of arylamineazoisooxazolones into azopyrazolones, 1911, A.,

i, 403.

Bülow, Carl, and Gotthold Issler, 2:4substituted-7-hydroxyquinolines, 1903, A., i, 718.

derivatives of 7-hydroxyquinoline,

1904, A., i, 191.

Bülow, Carl, and Emil Klemann, the amino-groups attached to the nitrogen atom of heterocyclic compounds, 1908, A., i, 54.

Bülow, Carl, and Berthold Koch, preparation and properties of benzoylphthalylacetone, 1904, A., i, 321.

new condensation derivatives of benzoylphthalylacetone, 1904, A., i,

Bülow, Carl, and Erhard von Krafft, action of hydrazine on ethyl diacetyl-.

succinate, 1903, A., i, 196.
Bülow, Carl, and Martin Lobeck, ethyl oxalylbishydrazoneacetoacetate; decomposition products of esters of B-ketonic acid acylhydrazones, 1907, A., i, 301.

azo-derivatives of esters of bis-\$-ketonic acid oxalyldihydrazones,

1907, A., i, 986.

Bülow, Carl, and Ernst Nottbohm, ethyl N-dimethyldicarboxypyrryl-p-ben-

zoylpyruvate, 1903, A., i, 274. diketones and tetraketones from paminoacetophenone, 1903, A., i, 862.

Bülow, Carl, and Gustav Riess, 3:5-dimethoxybenzoylacetophenone, 1903,

A., i, 101.

quinonoid derivatives of benzopyranol 3:5-dimethoxybenzoylacetophenone. I. and II., 1903, A., i, 715; 1904, A., i, 82.

Bülow, Carl, Gustav Riess, and Constantin Sautermeister, condensation products of semicarbazide and ethyl diacetylsuccinate, 1905, A., i, 660.

Bülow, Carl, and Constantin Sautermeister, synthesis of Nencki and Sieber's "resacetein," 1904, A., i,

ethvl N-amino-2:5-dimethylpyrrole-3:4-dicarboxylate as the parent substance for the preparation of N-bispyrrole derivatives, 1904, A., i, 690. Bülow, Carl, and Constantin Sautermeister, three position isomeric hydroxyl derivatives of resacetein, 1905, A., i, 150.

1-phenylthiouramino-2:5-dimethylpyrrole-3:4-dicarboxylate,

1906, A., î, 314.

Bülow, Carl, and Otto Schärer, ethyl mesoxalylhydrazone-bis-(1-amino-2:5dimethylpyrrole-3:4-dicarboxylate). 1909, A., i, 850.

Bülow, Carl, and Fritz Schaub, 3:4-dimethyl-1:2-pyrazo-6:7-pyrone (lactone of 5-hydroxy-3-methylpyrazole-4-isopropylenecarboxylic acid), 1908, A., i, 579.

the benzoylhydrazone of ethyl isonitrosoacetoacetate and its fission

products, 1908, A., i, 687.

ethyl arylazoacetoacetateacylhydrazones and their conversion into derivatives of 4-arylazo-3-methyl-5pyrazolones with an acid radicle attached to the primary nitrogen atom, 1908, A., i, 704.

Bülow, Carl, and Hermann Schmachtenberg, brominations by means of diazobenzene perbromides, 1908, A., i, 743.

Bülow, Carl, and Carl Schmid, 7-hydroxy-2-o-m-p-trimethoxyphenyl-4-methylene-1:4-benzopyran and its derivatives, 1906, A., i, 201.

synthesis of Nencki and Sieber's gallacetein, 1906, A., i, 300. quinonoid benzopyran derivatives,

1906, A., i, 598.

Bülow, Carl, and Erwin Siebert, coumarin derivatives from ethyl ocarboxy-phthalyland acetoacetates, 1905, A., i, 294.

ethyl phthalylacetoacetate, 1905, A.,

i, 529.

Bülow, Carl, and Theodor Sprösser, benzylethyl-m-aminophenol and its condensation with esters of 1:3ketocarboxylic acids to coumarin derivatives, 1908, A., i, 272.

primary bisazo-compounds of benzylethyl-m-aminophenol, 1908, A., i,

Bülow, Carl, and Hermann Wagner, 7-hydroxy-2-phenyl-1:4-benzopyranol-4-carboxylic acid and its lactone, 1903, A., i, 647.

Bülow, Carl, and Fritz Weber, action of 1-amino-1:3:4-triazole and its 2:5substitution products on methylbromocoumalic acid, 1909, A., i,

triazolepyrrole and triazolelutidone derivatives, 1909, A., i, 614.

Bülow, Carl, and Fritz Weber, action of 1-amino-1:3:4-triazole on diketones, 1909, A., i, 614.

synthesis of heterocyclic dinuclear compounds: heterohydroxylic acids,

1909, A., i, 615.

Bülow, Carl, and Richard Weidlich, condensation products of the dihydrazides of dibasic acids, 1906, A., i, 981.

derivatives of methyl mesoxalate-p-tolylhydrazone, 1907, A., i, 1089.

Bültemann, August, electrolytic preparation of salts of tervalent vanadium, 1904, A., ii, 266.

Bünming, Gustav. See Ernst Schmidt. Bünz, R., cholesterol esters in the brain,

1905, A., ii, 841.

Bünz, Rudolf. See Alexander Gutbier.
Bünzly, Hans [Valentin], and Herman
Decker, ammonium compounds.
XV. Synthesis of a hydroxydihydro-base, 1904, A., i, 344.

oxidation of \$8-dinaphthol, 1905, A.,

i, 884.

Bünzly, Hans, Herman Decker, and C.
Wittmann, xanthonium and thioxanthonium compounds, 1904, A.,
i, 912.

Bünzly, Hans. See also Herman

Decker.

Bürger, A. See David Reichenstein.

Bürger, Hermann. See Eberhard Rimbach.

Bürger, Otto. See Karl Auwers.

Bürgi, Emil, tetramethylarsonium iodide and its pharmacological action, 1907, A., i, 302.

Bürgin, James. See Hans Rupe. Bürker, Karl, blood platelets and coagulation, 1904, A., ii, 353.

decomposition of blood platelets, blood coagulation, and muscle coagulation, 1908, A., ii, 510.

Bury, Otto, relationship between the atomic weights and spectra of the

alkali metals, 1912, A., ii, 821.

Bütschli, Otto, action of concentrated solutions of potassium hydroxide and potassium carbonate on calcium carbonate and the two double salts of calcium carbonate and potassium carbonate formed, 1907, A., ii, 544.

gaylussite and a second double salt of calcium and sodium carbonates,

1907, A., ii, 616.

Büttner, Ernst, derivatives of 2:4:6trichloropyrimidine, 1903, A., i, 658. Büttner, Ernst. See also Rudolf Friedrich Weinland. Büttner, Georg, occurrence of boric acid in honey, 1912, A., ii, 394.

Büttner, Georg, and Julius Neumann, formation of hydrocelluloses by means of sulphuric acid, 1909, A., i, 86, 290.

Büttner, Georg, and Hans Wislicenus, distillation of wood with superheated steam, 1909, A., i, 290.

Bufalini, Giovanni, strychnine and per-

sodine, 1904, A., ii, 66. characteristic reactions of toad poison, 1911, A., ii, 348.

Buff. Max. See Theodor Zincke.

Bugarszky, Stefan, velocity of action of bromine on ethyl alcohol, 1903, A., ii, 276.

action of bromine on acetaldehyde in aqueous solution, 1904, A., ii, 551. influence of the medium on the reaction velocity and the chemical

equilibrium, 1910, A., ii, 281.

Bugarszky, Stefan, and Bela von Horvath, new method for the estimation of iodides and of free iodine, 1909, A.,

ii, 932.

Bugge, Günther, and Ignaz Bloch, persulphides of aldehydes, 1911, A., i, 60.
Bugge, Günther. See also Ignaz Bloch,

Ferdinand Henrich, and Karl Andreas Hofmann.

Buglia, Giuseppe, influence of cations on the coagulability of the blood, 1904, A., ii, 747.

physico-chemical changes in muscle during fatigue, 1907, A., ii, 898.

the regulation of the physico-chemical properties of the blood after injection of different solutions, 1908, A., ii, 958.

does absorption depend on the surface tension of the absorbed fluid? 1909,

A., ii, 1032.

the influence of bile salts on the pancreatic digestion of starch, 1910, A., ii, 627.

investigations on smooth muscle (dog's oesophagus). III. Replacement of calcium in so-called physiological

fluids, 1910, A., ii, 630.

the replacement of calcium in socalled physiological fluids; (experiments on the excitability of striated muscles of warm-blooded animals, and the variations of tonus of the atrium in *Emys europea*), 1911, A., ii, 181.

investigations on smooth muscle. IV.

The replacement of calcium in socalled physiological fluids; (experiments on smooth muscle; dog's
oesophagus), 1911, A., ii, 131.

Buglia, Giuseppe, the surface-tension of lymph. I. and II., 1911, A., ii, 1113.

the biological importance and metabolism of proteins. V. The metabolism of young dogs fed on meat, and the products of the artificial digestion of meat, 1912, A., ii, 182.

the biological importance and metabolism of proteins. X. Total nitrogen and amino-acid nitrogen in the urine of animals fed on flesh or on the digestive products of the introduced intravenously. same 1912, A., ii, 462.

Buglia, Giuseppe, and A. Costantino, muscle chemistry. I. The total amino-nitrogen titratable formaldehyde in the smooth, striped, and cardiac muscle of mammals,

1912, A., ii, 1077.

II. The nitrogen muscle chemistry. of certain extractives and purine bases in the smooth, striped, and cardiac muscle of mammals, 1912,

A., ii, 1077.

III. The free muscle chemistry. amino-nitrogen titratable with formaldehyde in the smooth, striped, and cardiac muscle of mammals, 1912, A., ii, 1078.

chemistry of the embryo. I. The total amino-nitrogen titratable with formaldehyde in mammalian embryonic muscle, 1912, A., ii, 1078.

chemistry of the embryo. II. free amino-nitrogen titratable with formaldehyde in the musculature of the ox-embryo, 1912, A., ii, 1078.

Buglia, Giuseppe, and László Karczag. influence of stereochemical configuration on certain physico-chemical properties of organic colloids, 1910, A., ii, 52, 139.

Buglia, Giuseppe, and Italo Simon, physico-chemical variations of serum during the action of alcohol and of anæsthetics, 1907, A., ii, 485.

Buglia, Giuseppe. See also Filippo

Bottazzi.

Buguet, Abel, cryoscopy of organic mixtures and additive compounds, 1910, A., i, 105.

cryoscopy of the naphthylamines and their additive compounds, 1910, A., ii, 826.

Buhlert, Hans, and Ernst Fickendey, estimation of nitric acid in soils, 1906, A., ii, 125.

bacteriological investigation of soils, 1906, A., ii, 476.

Buisine, Alphonse [Jean-Baptiste Aimable), action of alkalis on glycerol; estimation of glycerol, 1903, A., i. 455; ii, 515.

Buisson, Albert, estimation of ammonia in waters by means of Nessler's reagent, 1906, A., ii, 704.

new method of estimating ammonia in

water, 1907, A., ii, 306.

Buisson, Henri, variations in certain properties of quartz, 1906, A., ii, 350.

Buisson, Henri, and Charles Fabry. wave-lengths in the iron spectrum, 1912, A., ii, 505.

Buisson. Henri. See also Charles

Fabry.

Buisson, M., estimation of starch [in potatoes, etc.], 1909, A., ii, 626.

Bukovansky, Josef. See Johann Vañha.

Bukovský, A., manganiferous carbonates from Kuttenberg, Bohemia, 1904, A., ii, 417.

Bukowska, H. See Bronislaw Radziszewski.

Bulíř, Jaromir. See Emil Votoček.

Bull, Henrik, separation of the fatty acids of cod-liver oil, 1906, A., i,

Bull, Henrik, and J. C. F. Johannesen, characterisation of fish oils by the bromine additive products, 1909, A., ii, 274.

Bull, Henrik, and Lelf Saether, a simple apparatus for bromination, 1910, A., ii, 758.

Bull, Irving C., estimation of lead in

ores, 1903, A., ii, 183. Bulla, Alfred. See Walter Herz. Bulle, Fritz, See George Senter.

Bullier, L. M., a new method forming calcium carbide, 1904, A., ii,

Bulloch, William, opsonic content of blood serum in health and in lupus, 1905, A., ii, 844.

Bulloch, William, and J. Andersen Craw, a new porcelain filter, 1906, A., ii, 662.

efficiency of Berkefeld filters. II., 1909, A., ii, 509.

Bulloch, William, J. Andersen Craw, and E. E. Atkin, relative efficiency of filters, 1908, A., ii, 314.

Bulloch, William, and John James Rickard Macleod, chemistry of the tubercle bacillus, 1904, A., ii, 277.

Bullot, G., action of oxygen on corneal endothelium, 1904, A., ii, 627. Bum, Friedrich. See Moritz Kohn.

Bumstead, Henry Andrews, heating effects produced by Röntgen rays in different metals and their relation to the question of change in the atom, 1906, A., ii, 141.

heating effects produced by Röntgen rays in lead and zinc, 1908, A., ii.

342.

the emission of electrons (δ -rays) by metals under the influence of a-rays,

1912, A., ii, 8.

Bumstead, Henry Andrews, and A. G. McGougan, the emission of electrons by metals under the influence of a-rays, 1912, A., ii, 1026.

Bumstead, Henry Andrews, and Lynde Phelps Wheeler, radioactive gas in surface water, 1904, A., ii, 29.

radioactive gas in the soil and water near New Haven, 1904, A., ii, 255. Bunel, L. J. See Charles Marie.

Bunge, Gustav von, calcium and iron in

nutriment, 1904, A., ii, 271. Bunge, Nikolai N., action of iodine on silver benzoate and salicylate, 1909, A., i, 472.

synthesis of methoxycinnamic acid,

1909, A., i, 478.

Bunge, O. D. E. See Arthur Michael. Bunimowicz, J. See Alfred Junghahn. Bunker, Sidney W., determination of melting points, 1909, A., ii, 295.

Bunte, Hans [Hugo Christian], salts and substances for incandescent light-

ing, 1905, A., ii, 88.

Bunzel. Herbert Horace, rate of oxidation of sugars in an acid medium, 1908, A., i, 135.

mechanism of the oxidation of dextrose by bromine, 1910, A., i, 222.

quantitative measurement of oxydases, 1912, A., i, 403.

measurement of the oxydase content of plant juices, 1912, A., ii, 378.

Bunzel, Herbert Horace, and Albert Prescott Mathews, mechanism of the oxidation of dextrose by bromine in neutral and acid solutions, 1909, A., i, 289.

Herbert Horace, See Bunzel, Herbert Newby McCoy and Lorande

Loss Woodruff.

Bunzen. See Nicolai N. Ljubavin.

Bunzl, Felix. See Otto Diels.

Buraczewski, Józef, and Miecislas Dziurzyński, bromination of strychnine, brucine, and other alkaloids, 1909, A., i, 672, 953.

action of acetone on di-iodostrychnine and on the brominated products of strychnine and of some other alkaloids, 1910, A., i, 873.

Buraczewski, Józef, and Tadeusz Kózniewski, iodine derivatives of strychnine and brucine, 1908. A., 1007.

Buraczewski, Józef, and L. Krauze. oxyprotosulphonic acid, 1911, A., i 408

oxyprotosulphonic acids. I. and II. 1912, A., i, 58, 1041.

Buraczewski, Józef, L. Krauze, and A. Krzemecki, diastase, 1911, A., i, 1052.

Buraczewski, Józef, and Léon Marchlewski, colouring matter of blood, 1905, A., i, 399; 1906, A., 779.

Buraczewski, Józef, and T. Nowosielski, oxidation products of brominated strychnines. I., 1910, A., i, 874.

Buraczewski, Józef, and Z. Zbijewski, brominated and iodinated products of curare alkaloids, 1910, A., i, 872.

action of chlorine on strychnine, brucine, cinchonine, quinine, and other alkaloids, 1910, A., i, 873.

red compounds from brucine, 1912, A., i, 49.

Burbidge, P. W. See T. H. Laby. Burck, Arthur. See Karl Bernhard Lehmann.

Burdakoff, W. A., preparation and composition of double compounds of $Pd(NH_3)_2X_2$ with $Pd(NH_3)_4X_2$: preparation of $Pd(NH_2\cdot NH_2)Cl_2$, 1909, A., ii, 899.

[hydration of calcium oxide], 1912,

A., ii, 1170.

Burdett, (Miss) Frances. See Kennedy Joseph Previté Orton.

Burdick, W. L. See Frank Austin

Burgassi, Giovanni, changes in metabolism due to the action of strontium, 1908, A., ii, 405. Burge, W. E., the separation of rennet

and pepsin, 1912, A., i, 148.

Burger, Alfred, behaviour of chromium towards sulphuric acid, 1907, A., ii, 30.

cerium sesquioxide, 1907, A., if, 466.

Burger, Alfred, and Martin W. Neufeld, new gas-generating apparatus, 1907, A., ii, 339.

Oskar Krafft Heinrich, the sensitiveness of pentamminenitrosocobalt salts to light, 1911, P., 160.

Burger, Oskar Krafft Heinrich. also Karl Andreas Hofmann and Julius Sand.

Burgess, Charles Frederick, and S. G. Engle, corrosion of iron by acids,

1907, A., ii, 29.

Burgess, Charles Hutchens, and David Leonard Chapman, the nature of a solution of iodine in aqueous potassium iodide, 1904, T., 1305; P., 62.

photochemically active chlorine; preliminary notice, 1904, P., 52;

164

the interaction of chlorine and hydro-

gen, 1906, T., 1399; P., 37.

Burgess, Charles Hutchens, and Alfred Holt, jun., the behaviour of metallic oxides towards fused boric anhy-

dride, 1903, P., 221.

some physical characters of the sodium borates, with a new and rapid method for the determination of melting points, 1905, A., ii, 162.

Burgess, Charles Hutchens. See also

David Leonard Chapman.

Burgess, George Kimball, [determination of the] melting points of the iron group elements by a new radiation method, 1908, A., ii, 41.

Burgess, George Kimball. See also

Charles William Waidner.

Burgess, Herbert Edward, [analysis of] civet, 1903, A., ii, 520.

estimation of aldehydes and ketones in essential oils and allied sub-

stances, 1904, A., ii, 371.

Burgess, Herbert Edward, and Theodore Henry Page, a note on the composition of distilled oil of limes and a new sesquiterpene, 1904, T., 412; P., 62.

a note on bergamot oil and other oils of the citrus series, 1904, T., 1327;

P., 181.

Burgess, Laurie Lorne, and Oliver Kamm, cobaltinitrites and their applications to analytical chemistry, 1912, A., ii, 604.

Burgess, Laurie Lorne. See also Gregory Paul Baxter and Theodore William

Richards.

Burgess, Maurice John, and Richard Vernon Wheeler, the volatile constituents of coal, 1910, T., 1917; P., 210; 1911, T., 649, P., 70. the lower limit of inflammation of

the lower limit of inflammation of mixtures of the paraffin hydrocarbons with air, 1911, T., 2013; P., 262.

Burgess, William Thomas, volumetric methods for the estimation of lime and magnesia in water, 1907, A., ii, 578. Burgstaller, A. See Victor Rothmund. Burian, Richard, diazoamino-compounds of iminazoles and purine derivatives, 1904, A., i, 354.

state of combination of the purine bases in nucleic acid, 1904, A., i.

358, 956,

oxidations with calcium permanganate; reply to Kutscher and See-

mann, 1905, A., i, 725.

oxidation of nucleic acid with calcium permanganate; oxidation and synthetic formation of uric acid in extracts of ox liver: the source of endogenous purine in man and mammals, 1905, A., ii, 271.

uric acid, 1905, A., ii, 335.

diazoamino-compounds derived from purine bases, 1907, A., i, 734. pyrimidine derivatives from purine

bases, 1907, A., i, 735.

Burián, Richard, and Karl Drucker, freezing-point measurements on small quantities of liquids, 1910, A., ii, 484.

Burian, Richard, and John Walker Hall, estimation of purine derivatives in animal organs by aid of the method of corrected values, 1903, A., ii, 617.

Burian, Richard, and Heinrich Schur, purine excretion in man, 1903, A., ii,

313.

Burke, Charles E. See William Albert Noyes and John Bishop Tingle.

Burke, Edmund. See Frank Weiss

Traphagen.

Burke, (Miss) Katharine Alice, and Frederick George Donnan, chemical dynamics of the alkyl iodides, 1904, T., 555; P., 46; 1909, A., ii, 987.

Burke, (Miss) Katharine Alice. See also Edward Charles Cyril Baly.

Burke, W. E. See Stewart Woodford

Young.

Burket, I. R., the influence of adrenaline modified by salts on the blood pressure of the cat, 1912, A., ii, 789.

Burkhard, Karl. See Conrad Will-

gerodt.

Burkhardt, Ludwig, a chemically characterised hemolysis of bacterial origin, hydroxythioldimethylerucic acid, the hemolysin of Bacterium putidum (Lehmann and Neumann), 1910, A., ii, 799.

Burkhardt, Wilhelm [Friedrich], solution phenomena on anhydrite, 1912.

A., ii, 357.

Burkheiser, Karl, and G. Christie, simple arrangement for passing gases into reacting masses which are stirred by a turbine, 1906, A., ii, 347. Burkheiser. Karl. See also Julius Bredt.

Burlingham, Gertrude S., influence of magnesium sulphate on the growth of seedlings, 1907, A., ii, 806.

Burman, Sigurd, estimation of titanium in iron ores, 1904, A., ii, 369.

Burmann, James, preparation of methylamine from ammonia and methyl sulphate, 1906, A., i, 933.

accurate method for the estimation of caffeine in tea and green or roasted

coffee, 1910, A., ii, 468. estimation of digitoxin in foxglove leaves and their preparations, 1910,

A., ii, 1010.

fresh gentian root, and a preparation from the same, "dialysé golaz," 1911, A., ii, 528.

manganese in Digitalis purpurea, 1911,

A., ii, 1125.

development of active principles in some medicinal plants in 1911, 1912, A., ii, 379.

assay of digitalis, 1912, A., ii, 503. Burmeister, Frerik. See Georg Wiegner. Burmeister, Fritz. See Berthold Ras-

Burnett, Theodore Charles, influence of temperature on striped muscle and its relation to chemical reaction velocity, 1906, A., ii, 872.

production of glycosuria in rabbits by intravenous injection of sea-water made isotonic with the blood, 1908,

A: , ii, 213.

inhibiting effect of potassium chloride on sodium chloride glycosuria, 1909, A., ii, 80.

Burnett, Theodore Charles. See also Thorburn Brailsford Robertson.

Burnham, Gerald. See Treat Baldwin Johnson.

Burnley, M. Cloyd. See Elmer Peter Kohler.

Buroni, G., mercury salicylate, 1903, A., i, 256.

organo-mercury compounds of salicylic acid, 1903, A., i, 392.

Burow, Robert, the presence of iron-containing lipoids in the spleen, 1910, A., ii, 630.

Burr, Anton, saponification of fat by ammonia in the Röse-Gottlieb method of estimating fat in milk, 1905, A., ii, 559.

estimation of fat in butter by Gottlieb's method, 1905, A., ii, 774.

Burr, Karl. See Hugo Kauffmann. Burrell, G. A., new forms of gas analysis apparatus, 1912, A., ii, 1089.

Burres, Opal. See Amos William Peters.

Burri, Robert, and O. Allemann, chemical and biological investigations on slimeproducing lactic acid bacteria, 1909, A., ii, 1043.

Burri, Robert, and M. Düggeli, bacteriological examination of some samples of abnormal milk, 1906, A., ii,

the coli-aerogenes group of organisms.

1909, A., ii, 336.

Burri, Robert, and H. Schmid, the influence of the cooling of milk on the socalled Schardinger reaction, 1911, A., ii, 1115.

Burridge, W., chemical factors of fatigue, 1911, A., ii, 131.

rôle of potassium salts in frog's muscles. 1911, A., ii, 628.

lactic acid and cardiac muscle, 1911, A., ii, 750.

nicotine and curarised muscles, 1911, A., ii, 750.

Burrows, George Howard, electrolytic reduction of potassium chlorate. 1903, A., ii, 7.

Burrows, George Howard, and Gilbert Newton Lewis, the equilibrium between ammonium carbonate and ammonium carbamate in aqueous solutions at 25°, 1912, A., ii, 915. Burrows, G. J., and Charles Edward

Fawsitt, corrosion of steel in water,

1912, A., ii, 558.

Burrows, Harry, and Charles Alexander Keane, the condensation of diethylmalonamide with aldehydes, 1907, T., 269; P., 36.

Burrows, Harry. See also Charles Alexander Keane and (Sir) William Augustus Tilden.

See Iwan von

Burschanadze,

Ostromisslensky. Bursill, A. See Joseph H. Vincent.

Burstyn, Walther, metacetaldehyde, 1903, A., i, 67.

Burt, Bryce Chudleigh, vapour pressures. of sulphuric acid solutions, 1903, P., 224.

the vapour pressure of sulphuric acid solutions and the molecular condition of sulphuric acid in concentrated solution, 1904, T., 1339; P., 182.

amount and composition of the drainage waters collected during the year 1907-8, 1909, A., ii, 261.

amount and composition of the drainage waters collected during the year 1908-9, 1909, A., ii, 1049.

Burt, Bryce Chudleigh, amount and composition of drainage-water collected during the years 1909-10 and 1910-11, 1912, A., ii, 199.

Burt, Bryce Chudleigh. See also Fred-

erick George Donnan.

Burt, Frank Playfair, a new sulphide of nitrogen, 1910, T., 1171; P., 127; discussion, P., 127.

compressibilities of helium and neon,

1910, A., ii, 823.

Burt, Frank Playfair, and Francis Lawry Usher, the relative atomic weights of nitrogen and sulphur, 1911, A., ii, 389.

Burt. Frank Playfair, and Robert Whytlaw-Gray, the weight of a normal litre of hydrogen chloride and the atomic weight of chlorine, 1912,

A., ii, 152.

Burt, Frank Playfair. See also Robert

Whytlaw-Gray.

Burton, C. V. See (the Earl of) Berkeley. Burton, E. F., radioactive gas obtained from crude petroleum, 1904, A., ii,

properties of electrically-prepared colloidal solutions, 1906, A., ii,

action of electrolytes on colloidal solu-

tions, 1906, A., ii, 841. action of electrolytes on copper colloi-

dal solutions, 1909, A., ii, 372. Burton, E. F., and Percy Phillips, susceptibility of iron in colloidal solu-

tion, 1906, A., ii, 421. Burton, E. F. See also John Cunning-

ham McLennan.

Burton, R. Cooksey, formation of kaolinite in some coal-measure shales of Northumberland, 1911, A., ii, 735.

Burton, William, refractive index and dispersion of light in argon and helium,

1908, A., ii, 545.

Burton-Opitz, Russell, changes in the viscosity of the blood produced by alcohol, 1905, A., ii, 98. changes in viscosity of blood during

narcosis, 1905, A., ii, 540. viscosity of blood, 1906, A., ii, 372.

Burwell, A. L. See Alpheus Grant Woodman.

Busch, Albert, preparation of stable soluble compounds of hexamethylenetetramine silver nitrate with albumoses, 1908, A., i, 712.

[stable soluble compounds of organic substances and silver double salts],

1909, A., i, 706.

Busch, Albert. See also Joachim Biehringer.

Busch, E. See R. Heerde.

Busch, Hans, and Klara Goldenthal, preparation of an unsaturated aldehyde from formylisobutacetaldol and an attempt to condense formylisobutacetaldol with formaldehyde, 1907, A., i,

Busch, Hans. See also Robert Pschorr.

Busch, Max [Gustav Reinhold], behaviour of magnesium organo-compounds towards benzylideneaniline, 1904, A., i, 663.

endoiminotriazoles, 1905, A., i, 307. gravimetric estimation of nitric acid, 1905, A., ii, 282; 1909, A., ii,

estimation of nitric acid in water, 1905.

A., ii, 418.

oxidation of nitrous acid by hydrogen peroxide; estimation of nitrates in the presence of nitrites, 1906, A., ii,

estimation of nitrogen in nitrocellulose,

1906, A., ii, 708.

so-called "dihydrotetrazine," 1907, A., i, 564.

function of the nitrogen atoms in primary hydrazines, 1910, A., i, 75. homochromoisomerism, 1910, A., i,

determination of configuration stereoisomeric hydrazones, 1912, A., i, 221.

Busch, Max, and Ed. Bergmann, oaminoazo-dyes, 1905, A., i, 308.

Busch, Max, Ernst Blume, W. Kamphausen, Sebastian Schneider, and Albert Spitta, heterodicyclic compounds of the thiodiazole and triazole series, 1903, A., i, 530.

Busch, Max, and Gustav Blume, estimation of pieric acid, 1908, A., ii,

Busch, Max, Gustav Blume, and Hermann Brandt, triazoles, 1907, A., i,

Busch, Max, Gustav Blume, Ernst Pungs, and Martin Fleischmann, carbodiimides, 1909, A., i, 565.

Busch, Max, and Hermann Brandt,

behaviour of certain azo-compounds towards hydrogen chloride, 1906, A., i, 465.

Busch, Max, and Ferdinand Falco, ketoanils, 1910, A., i, 747.

Busch, Max, and Martin Fleischmann, magnesium alkyl haloids and aldazines, 1910, A., i, 282.

action of magnesium alkyl haloids on anilides and their chlorides, 1910,

A., i, 728.

Busch, Max, and Robert Frey, 2:4dialkylsemicarbazides and their intramolecular transformations, 1903, A., i,

Busch, Max, and Georg Hefele, hydrazones of phenacylamines, 1911, A.,

i, 582.

Busch, Max, and Richard Hobein, behaviour of organo-magnesium compounds towards oximes their O-ethers, 1907, A., i, 535.

triphenylhydrazine, 1907, A., i, 552. magnesium alkyl haloids and carbodiimides, 1907, A., i, 1075.

Busch, Max, and Walter Kögel, salts of aromatic polynitro-compounds, 1910, A., i, 472.

picrylpyridinium chloride, 1912, A., i, 50.

Busch, Max, and Hermann Krapf, isomeric hydrazones of dithiocarbonic

esters, 1911, A., i, 811.

Busch, Max, and Ludwig Leefhelm, action of magnesium organic compounds on hydramides, 1908, A., i,

action of magnesium organic compounds on benzylidene-alphyl-

amines, 1908, A., i, 153. Busch, Max, and Otto Limpach, intramolecular changes, 1911, A., i,

derivatives of phenylcarbamide hydrazine, 1911, A., i, 689.

Busch, Max, and Gustav Mehrtens, endoiminotriazoles. II., 1906, A., i,

Busch, Max, and Eduard Meussdörffer, action of mono- and di-chloroacetic acids on primary hydrazines; hindrance of chemical reactions, 1907, A., i, 347.

inner anhydrides of thiosemicarbazideacetic acids, 1907, A., i, 448.

Busch, Max, and Erich Opfermann, transformations in the urazole series. II., 1904, A., i, 630.

Busch, Max, Erich Opfermann, and Hans Walther, addition of alkylcarbimides and thiocarbimides to primary hydrazines, 1904, A., i, 628.

Busch, Max, and Ernst Pungs, coloured isomeric picrylamines, 1909, A., i,

Busch, Max, and Johannes Reinhardt, addition of thiocarbimides to ringsubstituted arythydrazines, 1910, A., i, 75.

Busch, Max, Johannes Reinhardt, and Otto Limpach, isomeric thiourazoles, 1910, A., i, 142.

Busch, Max, and Arthur Rinck, products of the action of magnesium organic compounds on alkylidene bases, 1905, A., i, 519.

Busch, Max, and Richard Ruppenthal. Pechmann's isomeric hydrazidines,

1911, A., i, 86.

Busch, Max, Sebastian Schneider, and August Walter, the two phenylhydrazinoacetic acids, 1904, A., i, 97.

Busch, Max, and August Walter. chloride of benzaldehydephenylhydrazone-N-carboxylic acid, 1903, A., i, 522.

Busch, Max, and Wilhelm Wolbring, action of diazonium compounds on malonic acid, 1905, A., i, 493.

Buschmann, E., basic constituents of Helianthus annuus, 1911, A., ii, 324.

Buschmann, K., weighing-bottle for

liquids, 1906, A., ii, 832.

Buschueff, L. V., new method of preparing ellagic acid, 1910, A., i, 117.

action of piperidine on d-pinene chlorooxime, 1910, A., i, 122; 1911, A.,

Busck, Gunni, photo-biological sensitisers and their protein compounds, 1907, A., ii, 105.

Bush, G. C. See Robert Edward

Lyons.

Bushong, Frank W., esters of sulphuric acid and of chlorosulphonic acid, 1903, A., i, 732.

Busignies, G., some ethylenic compounds containing nitrogen, 1909, A., i,

some cyclic ethylenic ethers and their bromo-derivatives, 1910, A., i, 668.

Busolt, Ernst. See Hans Rupe.

Busquet, H., the comparative cardiac action of the physiological extract of digitalis and other digitalis preparations, 1912, A., ii, 966.

Busquet, H., and V. Pachon, inhibitory action of potassium salts on the

heart, 1907, A., ii, 563.

antagonism between trisodium citrate and calcium in their action on the heart and its inhibitor nerve supply, 1909, A., ii, 332.

Busquet, H., and Marc Tiffeneau, the rôle of caffeine in the cardiac action of

coffee, 1912, A., ii, 966.

Busquet, H. See also Marc Tiffeneau. Busse, Fritz. See Carl Bülow. Busti, G. See Giacomo Ponzio.

Buswell, H. L. F. See Bertram James Collingwood.

Busz. Karl Heinrich Emil Georg, apatite and milarite from Switzerland, 1907, A., ii, 183.

Butavand, F., absorption and secondary radiation of cathodic rays, 1911, A.,

the law of the ionising ranges of the successive radiations of radioactive substances, 1912, A., ii, 722.

Butescu, D. See Carl Liebermann.

Butjagin, P. W., chemical changes produced in flesh by fungi, 1905, A., ii, 101.

Butkewitsch, Wl., transformation of starch in plants, 1908, A., ii, 723.

the protein changes taking place in green plants when kept in the dark,

1908, A., ii, 884.

ammonia as a decomposition product of the nitrogenous compounds in higher plants, 1909, A., ii, 424; 1912, A., ii, 799.

fermentative ammonia cleavage in higher plants, 1909, A., ii, 1046.

Butler, B. S., pyrogenetic epidote, 1909, A., ii, 901.

Butler, B. S., and Waldemar Theodore Schaller, thaumasite from Beaver county, Utah, 1911, A., ii, 209.

some minerals from Beaver county,

Utah, 1912, A., ii, 56.

Butler, Howard. See Ludwig Knorr. Butler, Thomas Howard, reactions of benzoyl nitrate with amines, 1907, A.,

Butscher, Egon, substituted rhodanic acids and their condensation products with aldehydes and ketonic substances. XI., 1911, A., i, 333.

Buttenberg, Paul, and F. Tetzner, composition of goat's milk, 1904, A., ii,

357.

Buttenberg, Paul. See also K. Farnsteiner.

Butterfield, E. E., the light extinction, the capacity to unite with gases, and the percentage of iron in human blood-pigment in normal and pathological conditions, 1909, A., ii, 903.

photometry of blood-pigment, 1912,

A., ii, 820.

Butterfield, William John Atkinson, analysis of the air of the House of Commons, 1904, A., ii, 54. Buttgenbach, H., borates from Argen-

tina, 1903, A., ii, 157.

Buttlar, Richard (Freiherr) 'von, the analysis of chlorates, 1912, A., ii, 87. Buttlar, Richard (Freiherr) von. See

also Hermann Pauly.

Buttle, Bertram Howard, and John Theodore Hewitt, solubility of silver chloride in mercuric nitrate solution, 1908, T., 1405; P., 173.

the constitution of polynitrophenols in alkaline solution, 1909, T., 1755;

P., 231.

Butureanu, Vasile C., manganese and iron minerals from the crystalline schists of Brosteni, Roumania, 1908, A., ii, 955; 1909, A., ii, 745.

crystalline form of manganous chloride tetrahydrate, 1912, A., ii, 944.

manganese and iron minerals from the valley of Borca, Roumania, 1912, A., ii, 949.

Butzbach, G., and G. Fenner, simplified apparatus for estimating carbon in

iron, 1911, A., ii, 937.

Buxton, Bertram Henry, and Alfred H.

Rahe, the influence of temperature on the co-aggregation of colloids, 1908, A., i, 707.

Buxton, Bertram Henry, and Philip Anderson Shaffer, agglutination and allied reactions from the physical standpoint. I., 1906, A., ii, 839.

Buxton, Bertram Henry, and Oscar Teague, agglutination from the physical standpoint. II. A comparison of various suspensions, 1906, A., ii, 840.

Buxton, Bertram Henry. See also Silas Palmer Beebe and Oscar Teague.

Buytendyk, F. J. J., ultra-filtration, 1910, A., ii, 601.

Buzio, Giulio. See Giuseppe Oddo.

Buzzard, Edward Farguhar, and Richard W. Allen, effects of choline on animals, 1906, A., ii, 41.

Byers, Horace Greeley, behaviour of calcium and sodium amalgams as electrodes in solutions of neutral salts, 1908, A., ii, 926.

passive state of metals; review of the literature and theories and some experiments on cobalt, iron, and nickel,

1908, A., ii, 1026.

Byers, Horace Greeley, and Marc Darrin, influence of the magnetic field on the passive state of iron, 1910, A., ii, 579.

Byers, Horace Greeley, and Ebenezer Emmet Reid, perchromic acid and the perchromates, 1905, A., ii, 37.

Byers, Horace Greeley, and Agnes Fay Morgan, influence of the magnetic field on passive nickel and iron, 1911, A., ii, 1057.

Byers, Horace Greeley, and Floyd T. Voris, passivity of iron under boiler conditions, 1912, A., ii, 1058.

Byers, Horace Greeley. See also Max Le Blanc.

Bygdén, Arthur, minerals [stilbite, chabazite, etc.], from Gellivare, Sweden, 1906, A., ii, 38.

preparation of methyl bromide, 1911,

A., i, 413.

tetra-alkylsilicanes, 1911, A., i, 845. new silicanes, 1912, A., i, 341.

pyrimidine derivatives. Byk, Alfred, 1903, A., i, 657.

exceptions to the phase rule, especially in the case of optically active substances, 1904, A., ii, 16, 313.

possibility of resolving racemic compounds by circularly polarised light; the primary production of optically active substances, 1905, A., ii, 70.

relations between power of absorption of radiant energy and chemical character, 1905, A., ii, 566.

violet and ultra-violet absorption spectra of complex copper compounds, 1906, A., ii, 317.

methods of deducing the phase rule,

1906, A., ii, 339.

the mathematical treatment of photochemical reactions on thermodynamical and electrochemical basis, 1908, A., ii, 339.

total asymmetric syntheses, 1909, A.,

i. 130.

calculations in photochemical processes, 1909, A., ii, 454.

photopolymerisation of anthracene,

1909, A., ii, 632.

Byk, Alfred, and Hermann Borck, photoelectric experiments with anthracene,

1910, A., ii, 814.

Byk, Alfred, and Helene Jaffe, relations between constitution and absorption towards the violet end of the spectrum for solutions of certain chromium and iron salts, 1910, A., ii, 3.

Byk, Heinrich. See Chemische Werke

vorm. Dr. Heinrich Byk.

Byl, Hendrik Coenraad, nature of cadmium amalgams and their electromotive behaviour, 1903, A., ii, 6.

Byrtschenko, Sergius, n-butylhexylcar-

binol, 1911, A., i, 1.

Bysoff, B. V., vulcanisation of caout-chouc, 1910, A., i, 865; 1911, A., i, 314, 390.

Bythell, William James Storey, bacteriology of empyema, 1904, A., ii, 629.

Bywaters, Hubert William, seromucoid in blood, 1907, A., ii, 105.

seromucoid, 1909, A., ii, 159.

the so-called "albumose" in normal blood, 1909, A., ii, 159.

Bywaters, Hubert William, a mucoid in the intestinal mucous membrane of the horse, 1909, A., ii, 415.

Bywaters, Hubert William, and Augustus Désiré Waller, poisons and enzymes,

1910, A., ii, 736.

Bywaters, Hubert William. See also Frederick William Pavy and Wilhelm Wislicenus.

Caccia. Piero. methods of estimating trimethylamine in urine; contribution to the study of lecithin metabolism, 1911, A., ii, 550.

Caccia, Piero. See also Aldo Patta. Cáceres, Toribio, classification of the

elements, 1911, A., ii, 593.

Cadéac, Jean, and F. A. Maignon, comparative study of sugar in muscles, 1903, A., ii, 310. production of dextrose in animal

tissues, 1903, A., ii, 675.

elimination of sugar and compounds of glycuronic acid under the influence of traumatism, and injections of sugar into the blood, 1904, A., ii, 192.

Cady, Hamilton Perkins, concentration cells in liquid ammonia, 1905, A., ii,

569.

Cady, Hamilton Perkins, and David Ford McFarland, occurrence of helium in natural gas and the composition of natural gas, 1907, A., ii, 949. dy, Hamilton Perkins.

See also

Edward Curtis Franklin.

Cady, Walter Guyton, and H. D. Arnold, electric arc between metal electrodes, 1908, A., ii, 10. Caemmerer, Gottfried. See Emil Abder-

halden.

Cæsar, Heinrich, quantitative investigations on the change of toxicity of morphine when in presence of other

opium alkaloids, 1912, A., ii, 857. Caffin, A., and F. Dhuique-Mayer, assay of ferrochrome with high carbon

content, 1908, A., ii, 538.

Caffin, M., analysis of orpiment, 1909, A., ii, 1052.

Edward, Pozzi-Escot's and Cahen, Devarda's methods for the estimation of nitrates, 1910, A., ii, 752.

Cahen, Edward, and Harry Frank Waldemar Fischer's Victor Little, modification of Volhard's method for the volumetric estimation of mangannese, and its comparison with other well-known methods, 1911, A., ii, 229.

Cahen, Edward, and Gilbert Thomas
Morgan, estimation of antimony and

tin, 1909, A., ii, 187.

Cahen, Edward. See also Harry Frank Victor Little and Gilbert Thomas Morgan.

Cahn, M. See Iwan Koppel.

Cahn-Speyer, Paul, esterification of unsymmetrical di- and poly-basic acids. XVI. Derivatives of aminoterephthalic acid, 1907, A., i, 849.

Caille, E., derivatives of phenyl anaphthyl ketone, 1908, A., i,

800.

[combinations of camphor with

phenols], 1909, A., i, 594.

modification of the Friedel and Crafts' reaction admitting of the preparation of α-naphthyl ketones to the exclusion of the β-isomerides, 1911, A., i, 792.

Caille, E. See also Gustave Perrier.

Cailler, C., thermal conductivity of crystalline bismuth, 1905, A., ii, 10.

Cailletet, Louis, origin of carbon assimilated by plants, 1911, A., ii,

642.

Cain, John Cannell, the diazo-reaction in the diphenyl series. Part I. On dianisidine and 3:3'-dichlorobenzidine, 1903, T., 688; P., 136.

halogen derivatives of diphenyl and dihydroxydiphenyl, 1903, P., 284;

1904, T., 7.

the diazo-reaction in the diphenyl series. Part II. Ethoxybenzidine, 1904, P., 249; 1905, T., 5.

constitution of ammonium salts, 1904, A., ii, 726; 1905, A., i, 747.

rate of decomposition of diazonium

salts, 1905, A., i, 724.

the constitution of diazo-compounds, 1907, T., 1049; P., 158; discussion, P., 159.

para- and meta-nitrosoacetanilide,

1908, T., 681; P., 78. note on the oxidation of phenylhydraz-

ine by Caro's acid, 1908, P., 76. nitrosoacetylamino-derivatives of the benzene and diphenyl series, 1909, T., 714; P., 123.

3-nitrodurene, 1909, P., 260.

decomposition of diazo-solutions, 1909, A., i, 70.

constitution of diazonium and ammonium salts, 1909, A., i, 70,

p-nitrosomethylethylaniline: a new intermediate product for the manufacture of dyes, 1911, A., i, 437. Cain, John Cannell, and Oscar Lisle Brady, studies in the diphenyl series. Part III. Diphenyldiphthalamic acids and pyronine colouring matters containing the diphenyl group, 1912, T., 2304; P., 285; discussion, P., 286.

Cain, John Cannell, Albert Coulthard, and (Miss) Frances Mary Gore Micklethwait, studies in the diphenyl series. Part II. The dinitrobenzidines: a new form of isomerism, 1912, T., 2298;

P., 277.

Cain, John Cannell, and Percy May, studies in the diphenyl series. Part I. Acetylation of benzidine derivatives, 1910, T., 720; P., 71.

Cain, John Cannell, and George Marshall Norman, the action of water on diazosalts, 1905, P., 206, 308; 1906, T., 19.

Cain, John Cannell, and Frank Nicoll, the rate of decomposition on diazocompounds. Part II. Diazo-compounds of the naphthalene series, 1903, T., 206.

the rate of decomposition of diazocompounds. Part III. The temperature coefficient, 1903, T., 470; P.,

63.

note on the determination of the rate of chemical change by measurement of the gases evolved, 1908, P., 282; discussion, P., 282.

Cain, John Cannell, and John Lionel Simonsen, researches on santalin. Part I. Santalin and its derivatives,

1912, T., 1061; P., 139.

Cain, John Cannell. See also Victor Herbert Veley.

Cain, John R., the estimation of vanadium in vanadium and chromovanadium steels, 1912, A., ii, 390.

the estimation of manganese in vanadium and chromo-vanadium

steels, 1912, A., ii, 494.

the estimation of chromium, and its separation from vanadium in steels, 1912, A., ii, 692.

Cain, John R., and D. J. Demorest, a new method for the estimation of vanadium; an explanation, 1912, A., ii, 1101.

Cain, John R., and J. Clyde Hostetter, reduction of vanadic acid in concentrated sulphuric acid solution by hydrogen peroxide and by persulphates, 1912, A., ii, 356.

a rapid method for the estimation of vanadium in steels, ores, etc., based on its quantitative inclusion by the phosphomolybdate precipitate, 1912, A., ii, 1101. Cain, John R. See also Henry Newlin Stokes.

Calabresi, Giuseppe A., formation and physiological rôle of pentosans in plants, 1906, A., ii, 883; 1908, A., ii,

Calafat y León, Juan, natural ferrous sulphate, 1909, A., ii, 745. assay of aluminium ores, 1910, A., ii,

1113.

Calamai, A. See Nazareno Tarugi. Caland, P. See Arnold Frederik Holle-

Calberla, Robert, See Hermann Thiele, Calcagni, Gennaro, glucinum lactate, 1910, A., i, 708.

the ability of alcoholic hydroxyl groups to form complexes, 1910, A., i, 811.

basicity of acids containing alcoholic hydroxyl groups. II., 1912, A., i, 935. anhydrous sulphates. II. and III.,

1912, A., ii, 761, 918.

Calcagni, Gennaro, and Luigi Bernardini, basicity of the organic acids containing alcoholic hydroxyl groups, 1911, A., ii, 1078.

Calcagni, Gennaro, and G. Mancini, anhydrous sulphates, 1910, A., ii, 1064.

Calcagni, Gennaro, and D. Marotta, anhydrous sulphates, 1912, A., ii, 918, 1056.

Calcagni, Gennaro. See also Nicola Parravano and Arnaldo Piutti.

Calcar, R. P. van, and Cornelis Adriaan Lobry de Bruyn, variations in concentration of solutions and the crystallisation of dissolved substances under the influence of "centrifugal" force, 1904, A., ii, 470.

Caldarella, A. See Francesco Carlo

Palazzo.

Caldecott, William Arthur, the influence of sunlight on the dissolution of gold in aqueous potassium cyanide, 1904, P., 199.

Calderato, Bortolo, butylchloralantipyrine, 1903, A., i, 200.

Caldieri, S. See Sante de Grazia and Francesco Scurti.

Caldwell, Benjamin Palmer, Budde effect with reference to bromine, 1904, A., ii, 105.

Caldwell, G. H., effect of intravenous injections of thyroid pressure liquid in dogs and cats, 1912, A., ii, 467.

Caldwell, Kenneth Somerville, and William Holdsworth Hurtley, the distillation of butter fat, cocoanut oil, and their fatty acids, 1909, T., 853; P., 73.

Caldwell, Kenneth Somerville. See also Arthur Hantzsch.

Caldwell, Robert John, hydrolysis of sucrose by d- and l-camphor-8sulphonic acids, 1905, A., i, 22.

the hydrolysis of sugars, 1907, A., i. 1012.

studies of the processes operative in solution. I. The sucroclastic action of acids as influenced by salts and

non-electrolytes, 1907, A., ii, 14. Caldwell, Robert John, and Stephen Lewis Courtauld, the hydrolysis of amygdalin by acids, 1907, T., 666; P.,

71; discussion, P., 72.

mandelonitrile glucosides; prulaurasin, 1907, T., 671; P., 71; discussion, P., 72.

enzyme action. IX. The enzymes of yeast; amygdalase, 1907, A., i, 809.

Robert John, Caldwell, and Robert Whymper, studies of the processes operative in solution. IX. Determination of optical rotatory power, 1908, A., ii, 817.

studies of the processes operative in solutions. X. Changes effected by the reciprocal interference of sucrose and other substances (salts and non-electrolytes), 1908. 817.

Caldwell, Robert John. See also Edward Frankland Armstrong and Henry

Edward Armstrong.

Caldwell, William, and Emil Alphonse Werner, derivatives of multivalent iodine. Part II. Action of heat on p-iodoacetophenone dichloride, piodoacetanilide dichloride, and on the dichlorides derived from o-, m-, and p-iodotoluene, 1907, T., 240; P., 17.

derivatives of multivalent iodine. Part III. The action of heat on iodobenzene dichloride, and on the m- and p-nitro- and p-chloro-derivatives, 1907, T., 528; P., 64.

Calhane, Daniel Francis, oxidising power of sodium peroxide; its use in qualitative analysis, 1908, A., ii,

635.

Calhane, Daniel Francis, and J. C. Woodbury, an application of graded potentials to ore analysis, 1909, A., ii, 1054.

Calhane, Daniel Francis. See also

Charles Loring Jackson.

Calian, J., the formation of osmondite in hypo-eutectoid steels, 1912, A., ii, 769.

and Frank Tutin, Thomas, chemical examination of the leaves of Anona muricata, 1912, A., ii, 81.

Callan. Thomas. See also Theodor Curtius and Frederick Belding Power.

Callegari, Alessandro, copper and nickel salts of certain amino-acids, 1906, A., i, 937.

Callegari, Alessandro. See also

Giuseppe Bruni.

Callendar, Hugh Longbourne, vapour pressure and osmotic pressure of strong solutions, 1908, A., ii, 671.

the vapour pressure and osmotic pressure of a volatile solute, 1908, A., ii, 1019.

the boiling point of sulphur, 1908, A.,

ii, 1029.

the variation of the specific heat of water, with experiments by a new method, 1912, A., ii, 428.

Callendar, Hugh Longbourne, Herbert Moss, boiling point of sulphur corrected by reference to new observations on the absolute expansion of mercury, 1910, A., ii, 28.

Calliess, Franz Wilhelm, ephedrine and ψ-ephedrine, 1911, A., i, 76.

propiophenone derivatives, 1912, A., i, 365.

Calliess, Franz Wilhelm. See also Ernst Sehmidt.

Calmette, A., and M. Breton, effects of tuberculin absorbed from the digestive canal in healthy and tuberculous animals, 1906, A., ii, 378.

Calugareanu, D., the action of chloroform on lipoid suspensions, 1910, A.,

ii. 1049.

Calvello, Enrico. See Angelo Angeli and Francesco Angelico.

Calvert, R. P. | See Hermann I. Schles-

inger.

Calvi, Giovanni, and Mario Malacarne, toxicological detection of hydrocyanic acid, 1907, A., ii, 409. Calvin, J. W. See Walter E. Mathew-

son. Calvo, Antonio Reyes, the relation of the electrical conductivity of some

silver amalgams to temperature, 1911, A., ii, 574.

the conductivity of a cadmium amalgam, 1911, A., i, 575.
Calzolari, Filippo, thorium peroxide,

1911, A., ii, 404. compounds of ferric salts with anti-

pyrine, 1912, A., i, 51. compounds of alkali and alkali-earth salts with organic bases, 1912, A., i, 609.

Calzolari, Filippo, compounds of certain hydrated metallic salts with caffeine, 1912, A., i, 812.

solubility and electro-affinity, 1912, A., ii, 905.

Calzolari, Filippo. See also Giuseppe A. Barbieri.

Calzolari, J., double thiocyanates of bivalent copper and of cobalt with organic bases, 1910, A., i, 614.

Calzolari, J. See also Giuseppe A.

Barbieri.

Cambi, Livio, formation of double salts in solvents other than water, 1907, A., i, 460; 1909, A., ii,

constitution of Roussin's salts, 1907. A., ii, 960; 1908, A., ii, 41.

ferronitrososulphides, 1908, A., ii,

ferrinitrososulphides, 1908, A., ii,

certain reactions of nitro-derivatives, 1909, A., i, 373.

thiohydroxamic acids, 1909, A., i, 646.

silicon monosulphide, 1910, A., ii,

action of hydrogen sulphide on fulminic acid, 1911, A., i, 429.

so-called perferricyanides, 1911, A., i, 430.

amorphous states of silicon, 1911, A., ii, 600.

silicon sulphides. II., 1911, A., ii,

also Cambi. Livio. See Maurizio Padoa.

Cambier, R. See Eugène Tassilly. Camboulives, Pierre, action of carbon tetrachloride vapour on minerals, 1910, A., ii, 202.

action of carbon tetrachloride vapour on anhydrides and oxides, 1910, A.,

ii, 202

William, iron in mother's Camerer, milk, 1905, A., ii, 183.

urea in human urine, 1905, A., ii. 186.

Camerer, William, Meinhard Pfaundler. and Friedrich Söldner, analysis of human urine, 1903, A., ii, 688.

Camerer, William. See also Friedrich Söldner.

Cameron, Adam. See James Colquhoun

Cameron, Alexander Thomas, variations in the crystallisation of potassium hydrogen succinate due to the presence of other metallic compounds in the solution, 1905, A., i, 259.

Cameron, Alexander Thomas, constitution of complex salts. I. Derivatives of the sesquioxides, 1905, A., ii, 529. Cameron, Alexander Thomas, and Basil

Charles MacEwen, the determination of malonic acid by potassium perman-

ganate, 1910, P., 144.

Cameron, Alexander Thomas, and Erich Oettinger, electromotive forces produced by acid and alkaline solutions streaming through glass capillary tubes, 1909, A., ii, 856.

Cameron, Alexander Thomas, and (Sir) William Ramsay, some properties of radium emanation, 1907, T., 1266; P., 178; discussion, P., 178.

the chemical action of radium emanation. Part II. On solutions containing copper, and lead, and on water, 1907, T., 1593; P., 217.

the chemical action of radium emana-Part III. On water and certain gases, 1908, T., 966; P.,

the chemical action of radium emanation. Part IV. On water, 1908, T., 992; P., 133.

spectrum of radium emanation, 1908,

A., ii, 786.

Cameron, Alexander Thomas. See also Albrecht Kossel, Hugh Marshall, and (Sir) William Ramsay.

Cameron, Frank Kenneth, toxic action of acids and salts on seedlings; (a correction), 1904, A., ii, 364.

comparison of the organic matter in different soil types, 1905, A., ii,

calcium sulphate in aqueous solutions of sodium chloride, 1907, A., ii, 867.

soil solution, 1910, A., ii, 646.

Cameron, Frank Kenneth, and James Munsie Bell, phosphates of calcium, 1906, A., ii, 164; 1910, A., ii, 711.

solubility of gypsum in magnesium sulphate solutions, 1906, A., ii, 353. system lime, gypsum, water, at 25°,

1906, A., ii, 751.

phosphates of calcium. III. Superphosphate, 1906, A., ii, 752.

phosphates of magnesium and iron, 1907, A., ii, 617.

Cameron, Frank Kenneth, James Munsie Bell, and William O. Robinson, solubility of certain salts present in alkali soils, 1907, A., ii, 648.

Cameron, Frank Kenneth, and James Frank Breazeale, solubility of calcium sulphate in aqueous solutions of sulphuric acid, 1904, A., ii, 34.

Cameron, Frank Kenneth, and James Frank Breazeale, toxic action of acids and salts on seedlings, 1904. A., ii, 283.

organic matter in soils and subsoils,

1904, A., ii, 286.

solubility of calcium sulphate in aqueous solutions of potassium and sodium sulphates, 1904, A., ii, 544.

Cameron, Frank Kenneth, and Bailey Edgar Brown, solubility of calcium sulphate in solutions of other salts,

1905, A., ii, 388.

Cameron, Frank Kenneth, and George
Henry Failyer, estimation of very small amounts of potassium, 1904, A., ii, 87.

Cameron, Frank Kenneth, and L. Hurst, action of water and saline solutions on certain slightly soluble phosphates, 1904, A., ii, 655,

Cameron, Frank Kenneth, and William J. McCaughey, apatite and spodiosite, 1911, A., ii, 784.

Cameron, Frank Kenneth, and Harrison Eastman Patten, removal of "black alkali" by leaching, 1907, A., ii, 126.

distribution of solute between water

and soil, 1908, A., ii, 126.

solubility of lime in aqueous solutions of sucrose and of glycerol, 1911, A., i. 179.

Cameron, Frank Kenneth, and William O. Robinson, the system-lime, nitric acid, and water, 1907, A., ii,

solubility of calcium carbonate in aqueous solutions of potassium chloride and potassium sulphate at 25°, 1908, A., ii, 105.

ferric chlorides, 1908, A., ii, 112. ferric sulphates, 1908, A., ii, 112.

action of oxalic acid on ferric hydroxide, 1909, A., i, 205.

action of carbon dioxide under pressure on metallic hydroxides at 0°, 1909, A., ii, 42.

ferric nitrates at 25°, 1909, A., ii, 405.

condensation of water by electrolytes,

1910, A., ii, 188, 692. Cameron, Frank Kenneth, and Atherton

Seidell, solubility of magnesium carbonate in aqueous solutions of certain electrolytes, 1904, A., ii, 36. action of water on the phosphates of calcium, 1905, A., ii, 33.

phosphates of calcium. I., 1906, A.,

ii, 163.

Cameron, Frank Kenneth. See also James Munsie Bell.

Cameron, William. See George Gerald

Henderson.

Camilla, Stefano, and C. Pertusi, detection and identification of "saccharin" and "dulcin" in beverages, foods, drugs, cosmetics, etc., 1912, A., ii, 104.

detection and estimation of the xanthine bases in cocoa, tea, coffee, and their derivatives, 1912, A., ii, 1111. assay of ferro-silicon, 1912, A., if,

1215.

Camiola, G. See Sante de Grazia.

Camis, Mario, heats of solution of gases in blood, 1908, A., ii, 1047.

the sugar utilised in the isolated heart,

1909, A., ii, 73.

action of guanidine on muscles, 1909, A., ii, 819.

Camis, Mario. See also Joseph Barcroft. Campagne, Emile, estimation of vana-dium, 1903, A., ii, 761.

volumetric estimation of vanadium and chromium in the same solution, 1904, A., ii, 684.

Campagne, Emile. See also Gustav

Kroupa.

Campbell, Arthur Fred, and Jocelyn Field Thorpe, the formation and reactions of imino-compounds. Part XIII. The constitution of ethyl imino-a-cyanoglutarate and of its alkyl derivatives, 1910, T., 1299; P., 176.

an instance illustrating the stability of the four-carbon ring, 1910, T.,

2418; P., 296.

Campbell, A. V., carbohydrates of the mangold leaf, 1912, A., ii, 290.

Campbell, D. G. See Charles Edmund

Simon.

Campbell, Edward DeMille, convenient air-bath and hot plate, 1907, A., ii, 446.

distribution of hydrogen sulphide in a large laboratory and the use of aluminium stopcocks, 1911, A., ii, 596.

Campbell, Edward DeMille, and Walter Arthur, estimation of nickel and chromium in steel, 1908, A., ii, 779.

Campbell, Edward DeMille, and Charles E. Griffin, the volumetric estimation of uranium and vanadium, 1910, A., ii, 550.

Campbell, Edward DeMille, and William B. Hurley, modified colorimeter and some tests of its accuracy, 1911, A., ii, 765.

Campbell, Edward DeMille, and Edwin LeGrand Woudhams, estimation of vanadium in iron and steel, 1908, A., ii, 901.

Campbell, Edward DeMille, and Henry S. Rawdon, decomposition of methylene iodide and its bearing on the constitution of steel, 1912, A., i, 741. Campbell, Edward DeMille. See also

Alfred Holmes White.

Campbell, F. H., action of alkali chlorides on the double silicates of calcium and aluminium, 1907, A., ii, 24. chemistry of gold, 1907, A., ii, 968.

a modified explosion eudiometer, 1912,

A., ii, 86.

Campbell, Henry Donald, and James Lewis Howe, meteoric iron from Augusta Co., Virginia, 1903, A., ii,

Campbell, J. Argyll, the effects of certain animal extracts on the bloodvessels, 1911, A., ii, 315.

action of chloroform on blood-vessels,

1911, A., ii, 738.

Campbell, Norman Phillips. See Harold

Brewer Hartley. Campbell, Norman Robert, radiation from

ordinary materials, 1905, A., ii, 296. radioactivity and chemical change, 1905, A., ii, 296.

radioactivity of metals and their salts, 1906, A., ii, 411.

β-rays from potassium, 1907, A., ii, 597.

number of electrons in an atom, 1907. A., ii, 943.

radioactivity of potassium, with special reference to solutions of its salts, 1909, A., ii, 8.

absorption of \(\beta\)-rays by liquids, 1909,

A., ii, 205.

radioactivity of rubidium, 1909, A., ii,

δ-rays, 1911, A., ii, 841; 1912, A., ii, the spontaneous charging of polonium,

1911, A., ii, 959. ionisation by collision, 1912, A., ii,

ionisation by a-rays, 1912, A., ii, 411. further experiments on δ-rays, 1912, A., ii, 1027.

δ-rays produced by β-rays, 1912, A., ii, 1121.

Campbell, Norman Robert, and Alexander Wood, radioactivity of the alkali metals, 1907, A., ii, 217.

Campbell, William, structure of alloys. Part I. Aluminium alloys, 1904,

A., ii, 820.

Campbell, William, structure of alloys.

Part II. Certain ternary alloys of
tin and antimony, 1904, A., ii,
822.

alloys of lead, tin, and antimony, 1911,

A., ii, 1056.

Campetti, Adolfo, variation of the degree of dissociation of certain electrolytes with temperature, 1908, A., ii, 1010. absorption and mobility of didymium

ions, 1909, A., ii, 787.

mobility of the positive ions produced in the oxidation of copper, 1911, A., ii, 356.

Campo y Cerdan, Angel del, colour test for salts of zinc, 1909, A., ii, 439; 1910, A., ii, 1111.

stereochemistry of 1:4-dimethyltetrahydrofuran and 1:4-dimethylfuran,

1910, A., i, 868.

rare earths in Spain; spectra of the cathode phosphorescence of the fluorites of Aulestia and Mañaria (Biscay), 1912, A., ii, 564.

Campo y Cerdan, Angel del, and Jaime Ferrer Hernández, detection of nickel and cobalt in mixtures, 1912, A., ii, 95.

and cobalt in mixtures, 1912, A., ii, 95. Campo y Cerdan, Angel del. See also Jaime Ferrer Hernandez.

Campredon, G. See Louis Campredon. Campredon, Louis, and G. Campredon, analysis of commercial tin; rapid estimation of tungsten and iron, 1904, A., ii, 295.

Camps, Rudolf, synthesis of indigo-blue from o-nitroacetophenone, 1903, A., i,

33.

Camus, Jean, toxicity of mineral salts in the cerebro-spinal fluid, 1912, A., ii, 968.

Camus, Lucien, hordenine, its degree of toxicity, symptoms of intoxication, 1906, A., ii, 188.

action of hordenine sulphate on the circulation, 1906, A., ii, 224.

action of hordenine sulphate on soluble ferments and microbes, 1906, A., ii, 244.

Camus, Lucien, and Eugène Gley, variations in the proteolytic activity of pancreatic juice, 1908, A., ii, 205.

comparison of the hæmolytic and toxic action of eel's serum on the marmot, 1908, A., ii, 215.

Canaval, Richard, microchemical analysis of silicates, 1911, A., ii, 1029.

Candler, John Pycock. See William Dobinson Halliburton.

Candussio, G., reaction to differentiate α- from β-eucaine, 1909, A., ii, 450, 838. Canfield, Frederick A., thomsonite in New Jersey, 1911, A., ii, 615.

Canfield, Frederick A., William Francis Hillebrand, and Waldemar Theodore Schaller, mosesite, a new mercury mineral from Terlingua, Texas, 1910, A., ii, 965.

Cann, Jessie Y. See John Livingston

Rutgers Morgan.

Cannegieter, H. G., ionisation of gases by light emitted from Geissler tubes; the existence of selective effects in the ionisation, 1911, A., ii, 455.

Cannizzaro, Stanislao, memorial lecture

on (Tilden), 1912, T., 1677.

Cannon, Walter Bradford, the passage of different foods from the stomach, 1904, A., ii, 189.

the passage of food-stuffs from the stomach and through the small in-

testine, 1905, A., ii, 44.

movements of the alimentary canal after section of nerves, 1905, A., ii, 179.

mechanism of the pylorus, 1906, A., ii, 180.

the acid control of the pylorus, 1907, A., ii, 974.

Cannon, Walter Bradford, and H. F. Day, salivary digestion in the stomach,

1903, A., ii, 308, 667.

Cannon, Walter Bradford, and Roy Graham Hoskins, the effects of asphyxia, hyperpnæa, and sensory stimulation on adrenal secretion, 1912, A., ii, 70.

Cannon, Walter Bradford, and F. T. Murphy, movements of stomach and intestines, 1906, A., ii, 180.

Cannon, Walter Bradford, A. T. Shohl, and W. G. Wright, emotional glycosuria, 1912, A., ii, 72.

Cantone, Michele, emission spectra of uranium salts at low temperatures, 1907, A., ii, 829.

experimental researches on solutions, 1912, A., ii, 1043.

Cantoni, Carlo. See Max Le Blanc and Guido Pellizzari.

Cantoni, H., apparatus for the determination of the solubility of salts in liquids other than water and at temperatures above 100°, 1904, A., ii,

analysis of ferro-silicon, 1904, A., ii, 592. decomposition of the oxalates of the alkaline earths by aqueous solutions of alkali sulphates, 1906, A., i, 557.

Cantoni, H., and M. Basadonna, standardisation of potassium permanganate, 1904, A., ii, 844.

Cantoni, H., and M. Basadonna, solubility of alkaline earth malates in water, 1906, A., i, 799.

Cantoni, H., and J. Chautems, separation of arsenic, 1905, A., ii, 480.

Cantoni, H., and D. Diotalevi, solubility of metallic succinates in water, 1905, A., i, 115.

Cantoni, H., and G. Goguélia, decomposition of carbonates of the alkaline earths by ammonium chloride in presence of water, 1904, A., ii, 334.

decomposition of alkaline earth carbonates by alkali chlorides in presence of water, 1905, A., ii, 87.

Cantoni, H., and (Mme.) Jolkowsky, decomposition of calcium and barium tartrates by alkali chlorides, 1908, A., i, 128.

Cantoni, H., and L. Mauri, decomposition of lead oxalate by saline solutions.

1908, A., i, 853.

Cantoni, H., and Jechonon Pasmanik, decomposition of zinc carbonate by solutions of alkali chlorides, 1905, A., ii, 586.

Cantoni, H., and M. Rosenstein, volumetric estimation of copper by means of potassium iodide, 1907, A., ii, 54.

volumetric estimation of nickel, 1908,

A., ii, 230.

Cantoni, H., and (Mlle.) Zachoder, solubility of the tartrates of the alkaline earths in water, 1905, A., i, 14.

solubility of certain metallic tartrates

in water, 1905, A., i, 633.

Cantoni, Ludovico, and Veratietti, chemico-physical properties of the malates of the alkaline earths, 1904, A., i, 142.

Cantor, Mathias, basis of the theory of solution, 1903, A., ii, 201.

Canzoneri, Francesco, olive leaves, 1906,

A., ii, 886. Canzoneri, Francesco, and Filippo Perciabosco, substances accompanying the

oil in sesame seeds, 1904, A., i, 178. Capelle, Georges, action of sulphur on hydrocarbons, 1908, A., i, 201.

dibromothiophten, 1908, A., i, 201. variation of the surface tension of sulphur with rise of temperature; $S\lambda^{1}$ and $S\lambda^{2}$, 1908, A., ii, 683. Capellmann, R. See Arthur Heffter.

Cappa, A. See V. Pasquero.

Cappelli, A., alkaloid contained in the leaves of mate, 1912, A., ii, 1086.

Cappenberg, H., estimation of halogens

in lipoids, 1911, A., ii, 927.

Cappezzuoli, Cesare, mineral constituents of bone in osteomalacia, 1909, A., ii, 422.

the iron of the spleen, 1909, A., ii,

Cappezzuoli, Cesare. See also Carl Neuberg.

Cappon, Thomas W. See William Jay Schieffelin.

See Oscar Tobler. Caramelli, R.

Eduardo, phenylacetyl-Carapelle, carbinol, 1904, A., i, 158.

hydrolysis of nucleoproteins, 1907. A., i, 884.

Carapelle, Eduardo. See also Francesco Carlo Palazzo and Alberto Peratoner.

Caravaggi, A. See Giuseppe Plancher. Carbone, Domenico, and Renato Marincola-Cattaneo, the influence of oxygen on the decomposition of plants (contribution to the study of humus formation), 1909, A., ii, 83.

Carcano, Luigi, and Rodolfo Namias. titration of ferric iron, 1904, A., ii,

Carcano, Luigi. See also Carlo Casanova. Card, George William, eclogite-bearing breccia from the Bingera Diamond Field, 1904, A., ii, 350.

Cardarelli, Eugene James. See Henry

Augustus Torrey.

Cardell, Ivor Southwell, and Fred Thomas, synthesis of ammonia by

heat, 1911, P., 138.

Cardoso, Ettore, densities of co-existing phases (orthobaric densities) and the diameter for sulphur dioxide in the neighbourhood of the critical point, 1911, A., ii, 854.

Cardoso, Ettore, and Georges Baume, critical constants of acetylene and cyanogen, 1910, A., i, 605.

Cardoso, Ettore. See also Emil Briner and Albert F. O. Germann.

Carette, [Denis] Henri, certain salts of quinine, 1904, A., i, 1044.

essential oil of rue, 1906, A., i, 685. detection of wood spirit in galenical

tinctures, 1909, A., ii, 623.

Cari-Mantrand, Maxime, influence of invert sugar on the estimation of crystallisable sugar with reference to the yield of refined sugar, 1905, A., ii, 657.

wine analysis; estimation of "added" water, alcohol, or sugar; determination of sugar in "incompletely fermented" and "liqueur" wines, 1906, A., ii, 253.

Cario, Fritz. See Ernst Dorn. Carl, Hans. See Emil Fischer.

Carles. P., assay of commercial tartaric acid, 1906, A., ii, 313, 710.

fluorite crystals from Néris-les-Bains,

1906, A., ii, 680.

fluorine in mineral waters, 1907, A., ii,

causes which modify the estimation of fluorine in mineral waters, 1907, A., ii, 195.

fluorine in the shells of molluscs, 1907, A., ii, 282.

fluorine in the shells of non-marine molluses, 1907, A., ii, 567.

estimation of tartaric acid in argol and wine lees, 1907, A., ii, 655. fluorine in cenological products, 1908,

A., ii, 318.

detection of phosphatic compounds in cereals, 1909, A., ii, 265.

estimation of "total tartaric acid" in tartaric products, 1909, A., ii, 525.

the phosphoric compounds in wines, 1909, A., ii, 927.

inertia of crystallisation of tartrate mother liquors, 1910, A., i, 360.

conventional methods for the analysis of materials [tartrates] adopted by the seventh International Congress of applied chemistry, 1910, A., ii, 758.

harmlessness of sulphurous acid in wines, 1910, A., ii, 1104.

estimation of amylaceous substances in dressed provisions, 1911, A., ii, 340.

assay of vintage marcs for tartaric acid; separate estimation of potassium hydrogen tartrate and calcium tartrate, 1911, A., ii, 342.

occurrence of manganese in animal organs, 1912, A., ii, 1193.

Carles, P., and Léonce Barthe, detection of arsenic and lead in wines, wine lees, and grape seed from vines sprayed with lead arsenate, 1912, A., ii, 594.

Carleton, Paul Whittier. See Latham Clarke and Charles Loring Jackson.

Carletti, Ottorino, criterion of purity of mannitol, 1907, A., ii, 202. criterion of the purity of salicylic

acid, 1907, A., ii, 656.

estimation of the total acidity of wines, 1909, A., ii, 189. new reaction of abrastol, 1909, A., ii,

528. reaction of pyrogallol, 1909, A., ii, 769.

Carlier, A., manurial value of manganese sulphate, 1911, A., ii, 147.

Carlier, Edmond William Wace, physiological action of allylthiocarbimide, 1909, A., ii, 508.

Carlier, Edmond William Wace, physiology of allyl compounds, 1912, A., ii. 278.

Carlier, Edmond William Wace, and C. A. Lovatt Evans, physiological action of allyl sulphide, with an analysis of the leek (Allium porrum), 1907, A., ii, 572.

composition of the secretion of Timarcha tenebricosa, 1911, A., ii,

908.

Carlinfanti, Emilio, and A. Germain, the xylenol from dehydracetic acid, 1910, A., i, 732.

Carlinfanti, Emilio, and Mario Levi-Malvano, melting and solidifying points of fatty substances. Binary mixtures of stearic, palmitic, and oleic acids, 1910, A., i, 5.

melting and solidifying points of fatty substances. II. Ternary mixtures of palmitic, stearic, and oleic acids,

1910, A., i, 6.

Carlson, Anton Julius, osmotic pressure and heart activity, 1906, A., ii, 241. the cause of cessation of rhythm in

isotonic solutions of non-electrolytes, 1906, A., ii, 466.

chemical conditions for heart activity, with special reference to the heart of Limulus, 1906, A., ii, 558.

action of chloral hydrate on the heart, 1906, A., ii, 877.

action of drugs on the heart of Limulus, 1906, A., ii, 878.

the normal heart rhythm, and the artificial rhythm produced by sodium chloride, 1907, A., ii, 111. action of cyanides on the heart, 1907,

A., ii, 636.

the condition of the digestive tract in parathyroid tetany in cats, 1912, A., ii, 787.

Carlson, Anton Julius, and A. L. Crittenden, the relation of ptyalin concentration to the diet and to the rate of secretion of saliva, 1910, A., ii, 516.

Carlson, Anton Julius, and Fred M. Drennan, passage of the internal secretion of the pancreas of the fœtus into the blood of the mother, 1911, A., ii, 995.

Carlson, Anton Julius, J. R. Greer, and Frank C. Becht, elimination of water by salivary glands, 1907, A., ii, 798.

the blood supply of the salivary glands and character of saliva in dog and cat, 1907, A., ii, 891.

lymphagogue action of lymph, 1908, A., ii, 611.

Carlson, Anton Julius, J. R. Greer, and Arno B. Luckhardt, excess of chlorides in lymph, 1908, A., ii, 610.

Anton Julius, and Clara Jacobson, the depression of the ammonia-destroying power of the liver after complete thyroidectomy, 1910, A., ii, 324.

nature of parathyroid tetany, 1911,

A., ii, 632.

Carlson, Anton Julius, and Arno B. Luckhardt, increase of osmotic concentration of the blood during anæsthesia, 1908, A., ii, 304.

diastases in the blood and body fluids,

1909, A., ii, 68.

Julius, and F. C. Carlson, Anton McLean, oxygen supply and saliva, 1908, A., ii, 118.

Carlson, Anton Julius, J. R. Rooks, and J. F. McKie, experimental hyperthyroidism, 1911, A., ii, 217.

attempts to produce experimental hyperthyroidism in mammals and birds, 1912, A., ii, 468.

Carlson, Anton Julius, and J. G. Ryan, dextrose in cat's saliva, 1908, A., ii,

the diastase in cat's saliva, 1908, A., ii, 606.

Albert

Carlson, Anton Julius, and Woelfel, the internal secretion of the

thyroid, 1910, A., ii, 526. Carlson, Anton Julius, Albert Woelfel, and H. W. Powell, physiology of lymph. XVI. Local hæmodynamic action of tissue metabolites, 1911, A.,

ii, 620. Carlson, Anton Julius. See also B. Braude, L. K. Gould, and W. T.

Hughes.

Carlson, Birger, and Julius Gelhaar, detection and estimation of chlorites and hypochlorites in chlorates, 1908, A., ii, 731.

Carlson, C. E., the guaiacum test for

blood, 1906, A., ii, 591.

different behaviour of organic and inorganic compounds of arsenic towards reagents, and estimation of arsenic in the urine, 1907, A., ii, 130.

the mechanism of the guaiacum reaction, 1908, A., ii, 644.

estimation of morphine in opium, 1909,

A., ii, 838.

easy detection of arsenic; rapid separation of arsenic and some other metals from liquids, 1910, A., ii,

Carlson, Fredrik, preparation of calcium cyanamide, 1907, A., i, 116.

Carlson, Tor, the alkaline hydrolysis of alkyl nitrates in the presence of hydrogen peroxide, 1907, A., i.

rate of dissolution in gas-liquid systems, 1911, A., ii, 589.

diffusion of oxygen and carbon dioxide

in water, 1912, A., ii, 141.

the decomposition of asparagine by bacteria in presence of free oxygen. I. The course of the oxidation processes, 1912, A., ii, 191.

the decomposition of asparagine by bacteria in presence of free oxygen. II. Respiration quotient and proportion of gaseous product, 1912,

A., ii, 972.

Carlson, Tor. See also Peter Klason.

Carlton, Henry Avery. See Launcelot Winchester Andrews and Charles

Loring Jackson.

Carmichael, Edward William Scott, introduction of foreign bodies into the gall-bladder, 1903, A., ii, 500.

Carmichael, George Scott. See Robert

Henry Elliot.

Carmichael, Herbert, separation of gold, silver, and platinum, 1904, A., ii, 151.

Carnazzi, Procida, influence of the pressure and temperature on the coefficient of compressibility of mercury, 1903, A., ii, 714.

Carnevali, Federico, additive compounds of selenium dioxide, 1909, A., i, 14.

See also Italo Carnevali, Federico. Bellucci and Federico Giolitti.

Carney, Robert J., two new and very delicate tests by use of the reagent "tetramethyl base," 1912, A., ii, 298.

Carniol, J. See Jacques Pollak.

Carnot, [Marie] Adolphe, and Alfred Lacroix, composition of morinite, 1909, A., ii, 58.

Caro, Nikodem, preparation of cyanides,

1909, A., i, 895.

Caro, Nikodem, and Hermann Grossmann, the chemical nature of dicyanodiamide, 1909, A., i, 558.

Caro, Nikodem, Richard Jacoby, and Bernhard Schück, calcium cyanamide,

1911, A., i, 118.

Caro, Nikodem, and Bernhard Schück, estimation of cyanamide, dicyanodiamide, and carbamide in calcium cyanamide (kalkstickstoff), 1911, A., ii, 162.

Carobbio, Arturo, detection of traces of resorcinol, 1906, A., ii, 809.

detection of magenta, 1907, A., ii, 916. Carobbio, Arturo. See also Annibale Ferraro.

Caron, Hubert, detection of nitrates with diphenylamine, 1911, A., ii, 767. estimation of nitrates in urine, 1912,

A., ii, 296.

iodometric estimation of uric acid [in urine], 1912, A., ii, 502.

Caron, Hubert, and Désiré Alphonse Raquet, separation of barium, stron-

tium, and calcium, 1907, A., ii, 52. preparation of strontium salts free from barium, 1908, A., ii. 496.

detection of barium in strontium salts,

1908, A., ii, 535.

qualitative analysis of phosphates and other salts soluble in acids, 1908,

A., ii, 630.

analysis of nitrates by Grandval and Lajoux's method; estimation of nitrates in water by a sulphosalicylic reagent, 1911, A., ii, 69.

assay of bismuth salicylate, 1911, A.,

ii, 667.

Campbell C. See Robert Carpenter,

Edward Lyons.

Carpenter, Frederick William. See Humphrey Owen Jones.

Carpenter, Henry Cort Harold, the growth of cast irons after repeated heatings, 1911, A., ii, 1091. the critical point at 470° in copper-

zinc alloys, 1912, A., ii, 764.

Carpenter, Henry Cort Harold, and Charles Alfred Edwards, the liquidus curves and constitutional diagram of the ternary system: aluminium-copperzinc, 1912, A., ii, 1057.

Carpenter, John Lattimore. See Harmon

Northrop Morse.

Carpenter, Russell Forbes, and Ernest Linder, examination of methods employed in estimating the total acidity of gases escaping from the chamber process for manufacture of sulphuric acid, with suggestions arising from the study of the interaction of nitrous and sulphurous acids, or their salts, in aqueous solution, 1903, A., ii, 238.

Carpenter, Thorne M., the increase of metabolism due to the work of type-

writing, 1911, A., ii, 621.

Carpenter, Thorne M., and Francis Gano Benedict, metabolism in man with greatly diminished lung area, 1909, A., ii, 327.

mercurial poisoning of men in the respiration calorimeter; metabolism during fever, 1909, A., ii, 508.

metabolism during typewriting, 1909, A., ii, 683.

Carpenter, Thorne M. See also John Raymond Murlin.

Carpi, Umberto. See Julius Morgenroth. Carpiaux, Em., the assimilation of phosphorus and calcium during the embryonic life of the chick, 1908, A., ii, 963.

Carpiaux. Em. See also Ach. Grégoire. Carpini, Camillo, variation of the resistance of bismuth in a feeble magnetic

field, 1905, A., ii, 72. photoelectric effect of selenium, 1906,

A., ii, 143.

Carquet. See Henri Fonzes-Diacon. Carr, Emma P. See Waldemar Koch.

Carr, Francis Howard, the oxidation of aconitine, 1912, T., 2241; P., 253;

discussion, P., 254.

Carr, Francis Howard, and William Colebrook Reynolds, the specific rotatory power of hyoscyamine and the relation between that of alkaloids and their salts, 1910, T., 1328; P., 180.

nor-hyoscyamine and nor-atropine; alkaloids occurring in various solanaceous plants, 1912, T., 946; P.,

Carr, Francis Howard. See also George

Barger.

Carr, W. R., laws governing electric discharges in gases at low pressures, 1903, A., ii, 627.

Carracido. See Rodriguez Carracido.

Carrara, Giacomo, theory of electrolytic dissociation in solvents other than water. III. Influence of the solvent on the transport numbers, 1903, A., ii, 708.

electrochemistry of non-aqueous solutions, 1907, A., ii, 431.

supertensions in organic solvents, 1909, A., ii, 958.

Carrara, Giacomo, and Aldo Bringhenti, hydrogen peroxide ions and their discharge potential, 1904, A., ii,

discharge potentials of the ions in solutions of alkali alkyloxides, 1908,

A., ii, 755.

Carrara, Giacomo, and Angelo Coppadora, behaviour and melting points of some organic substances at very low temperatures, 1903, A., ii, 712

Carrara, Giacomo, and Leonida D'Agostini, electromotive force between metals and solutions of their salts in water and methyl alcohol, 1905, A., ii,

Carrara, Giacomo, and G. Ferrari, magnitude of the liquid molecules of certain organic compounds, 1906, A.,

ii, 599.

Carrara, Giacomo, and Mario Giacomo Levi, temperature coefficients of electrical conductivity of solutions in water and in organic solvents; influence of superfusion and of maximum density, 1903, A., ii, 4.

Carrasco, Oreste, new method for the elementary analysis of organic com-

pounds, 1906, A., ii, 200.

basic tri-iodophenoxide of bismuth, 1908, A., i. 336.

electrolytic reduction of the indoles, 1908, A., i, 912.

elementary analysis according Carrasco-Plancher, 1909, A., ii,

magnesium peroxides, 1909, A., ii, 808.

nature of the peroxides of zinc, 1911,

A., ii, 282.

Carrasco, Oreste, and E. Belloni, a new catalyst in organic combustion according to the Carrasco-Plancher method, 1908, A., ii, 631.

Carrasco, Oreste, and Maurizio Padoa, formation and decomposition of the indole nucleus by the catalytic action of nickel, 1906, A., i, 695. new method of preparation of 1-

methylindole, 1907, A., i, 152.

Carrasco, Oreste, and Giuseppe Plancher, new method for estimating the carbon and hydrogen in organic substances by means of electrical incandescence, 1906, A., ii, 201.

Carrasco, Oreste. See also Giuseppe Plancher.

Carré, Paul, action of phosphoric acid on erythritol, 1903, A., i, 307.

esterification of mannitol by phosphoric acid, 1903, A., i, 307. action of phosphorus trichloride on

ethylene glycol, 1903, A., i, 405. action of phosphorous acid on erythri-

tol, 1903, A., i, 456.

action of phosphorus trichloride on glycerol, 1903, A., i, 598.

action of phosphorous acid on mannitol; mannide, 1904, A., i, 16.

esterification of phosphoric acid by glycerol, 1904, A., i, 133, 215.

phosphoric esters of ethylene glycol, 1904, A., i, 281.

quinine glycerophosphates, 1904, A., i, 819.

a new anhydride of dulcitol, 1904, A., i, 974.

decomposition of o-nitrobenzyl alcohol under the influence of aqueous and alcoholic sodium hydroxide, 1905, A., i, 307.

Carré, Paul, esterification of polyhydric alcohols by phosphoric and phosphorous acids, 1905, A., i, 814.

decomposition of m- and p-nitrobenzyl alcohols under the influence of aqueous and of alcoholic sodium hydroxide, 1905, A., i, 889.

formation of indazyl derivatives from o-hydrazobenzoic acid, 1906, A., i,

705.

molecular conductivity of phosphoric esters, 1906, A., ii, 4.

the alkaline reduction of p- and m nitrobenzophenones, 1907, A., i 142.

the lactone of By-dihydroxybutyric acid, 1908, A., i, 500.

alkaline reduction of o-nitrodiphenyl-

methane, 1909, A., i, 121. acid glycerophosphates, 1909, A., i,

128.

preparation of indazyl derivatives by means of orthoketonic hydrazines, 1909, A., i, 262.

formation of an ether by the dehydration of the alcohol by heat, 1909,

A., i, 300.

alkaline reduction of the three nitrobenzophenones, 1909, A., i, 339.

magnesium derivatives of xylyl bromides, 1909, A., i, 544.

fixation of trioxymethylene by magnesium derivatives of the homologues of benzyl bromide, 1910, A., i, 620.

preparation of glyceryl mono- and di-bromohydrins, 1910, A., i, 649.

Contardi's polyphosphoric esters of mannitol, quercitol, inositol, and dextrose, 1911, A., i, 263.

constitution of glycerophosphoric acid prepared by esterification of phosphoric acid or sodium dihydrogen phosphate, 1912, A., i, 155.

Carrel, Alexis, Gustare M. Meyer, and Phæbus A. Levene, influence of the removal of fragments of the intestinal tract on the character of nitrogen metabolism. II. The removal of the small intestine, 1910, A., ii, 323.

influence of the removal of fragments of the gastro-intestinal tract on the character of nitrogen metabolism. III. The excision of the stomach, 1910, A., ii, 974.

Carrez, Cyrille, estimation of lactose in

milk, 1908, A., ii, 236. use of potassium ferrocyanide and zine acetate as defecating agents in urine analysis, 1908, A., ii, 329.

Carrez, Cyrille, defecation of milks for the estimation of the lactose by copper solutions, 1909, A., ii, 625.

copper reagents and estimation of sugars; copper lactate reagent, 1909,

A., ii, 835.

separation of urobolin by means of tale and its detection, 1911, A., ii, 944.

Carrier, C. F., jun. See Wilhelm Ket-

tembeil.

Carrière, E., acyclic aldehydes; succinic semi-aldehyde [β-aldehydopropionic acid], 1912, A., i, 410.

Carrière, E. See also Paul Thiébaud

Muller.

Carroll, Charles G., ionic velocity and ionic hydration. I., 1907, A., ii, 75. Carroll, Charles G. See also Harry Clary

Jones. Carroll, E. C. See A. D. Emmett.

Carron, E. C., estimation of calcium in the presence of magnesium, 1912, A., ii, 490.

analysis of ferro-nickel containing zinc, aluminium, and manganese, 1912,

A., ii, 691.

Carse, George A., thermal expansion of dilute solutions of certain hydroxides, 1904, A., ii, 803.

Carse, George A., and T. H. Laby, relation between the velocity and the volume of organic ions in aqueous solutions, 1907, A., ii, 236.

Carse, George A. See also T. H. Laby. Carson, Charles Macdonald, amorphous sulphur; study of the two forms of liquid sulphur as dynamic isomerides, 1907, A., ii, 451.

Carson, Charles Macdonald. See also William Robert Lang and Alexander

Smith.

Carstens, Johann. See Karl Seubert.
Cartaud, G., evolution of structure in metals, 1904, A., i, 729.

Cartaud, G. See also Floris Osmond.

Carteighe, Michael, obituary notice of, 1911, T., 602.

Carter, Harry, radioactive properties of high temperature flames, 1911, A., ii, 1046.

Carter, Sidney Raymond. See Percy Faraday Frankland.

Carter, Taylor S., absorption and fluorescence of rubidium vapour, 1910, A., ii, 672.

Carteret, Georges, a simple reaction for producing a disinfectant gas [formaldehyde vapour], 1908, A., i, 393.

Carteret, Georges. See also M. Carteret.

Carteret, M., and Georges Carteret, action of sulphur dioxide on flour and cereals, 1909, A., i, 341.

Carughi, Achille. See Maurizio Padoa. Carulla, Facundo Joaquin Ramon, standardised ammonia in acidimetry, 1907, A., ii, 390.

Carvallo, J., electrical purification and conductivity of liquid sulphur dioxide, 1910, A., ii, 1026.

conductivity of pure ethyl ether, 1912,

A., ii, 119.

the law of Guldberg and Waage in the case of gaseous dissociation, 1912, A., ii, 632.

Carvallo, J. See also Émile Kohn-Abrest. Carveth, Hector Russell, and Bert Edwin Curry, electrolytic chromium, 1905, A., ii, 460.

Carveth, Hector Russell, and Roy Edward Fowler, saturation by the method of air-bubbling, 1904, A., ii, 541.

Carveth, Hector Russell, and John Peter Magnusson, studies in vapour composition. IV., 1906, A., ii, 727.

sition. IV., 1906, A., ii, 727. Carveth, Hector Russell, and William Roy Mott, electrolytic chromium. I.,

1905, A., ii, 394.

Casanova, Carlo, additive product of iodine and essential oil of turpentine, 1909. A. i. 813.

1909, A., i, 813. behaviour of iodine towards terpine hydrate, eucalyptol, and terpineol,

1911, A., i, 218.

lecithins ex ovo; a characteristic colour reaction for them and a change which they always undergo, 1911, A., ii, 673.

theory of indicators in relation to the estimation of the acidity of lecithin,

1912, A., ii, 1109.

Casanova, Carlo, and Luigi Carcano, behaviour of iodine towards tannin and peptone, 1912, A., ii, 934.

Casardi, E. See Giorgio Errera.

Casares, Román, stereochemistry of the aromatic series, 1912, A., i, 247, 616.

Casares Gil, José, occurrence of fluorine in mineral waters of the Pyrences and in geysers of the Yellowstone Park, 1908, A., ii, 80.

[fluorine in] thermal springs, 1906, A.,

ii, 896.

Weszelszky's method for estimating bromine and iodine, 1910, A., ii, 1107.

Casares Gil, José, and S. Piña de Rubies. concretions of the geysers and springs of the Yellowstone Park, 1912, A., ii, 357.

Winkler's method for the estimation of carbon dioxide in water, 1912, A.,

ii, 603.

Casaretto, Hermann, the band spectrum obtained by introduction of manganous chloride into the oxygen coal-gas blowpipe flame, 1910, A., ii, 671.

Cash, G. See Harmon Northrop Morse. Cash, John Theodore, and Wyndham Rowland Dunstan, the pharmacology of indaconitine and bikhaconitine, 1906, A., ii, 41.

Casolari, Angelo, behaviour of thiosulphuric acid and its use in volumetric analysis, 1908, A., ii, 173.

estimation of bromic and iodic acids by means of thiosulphuric acid, 1908, A., ii, 222.

iodometric estimation of the oxygen in quinols and in chromic acid, 1909, A., ii, 769.

the quantitative analysis of some inorganic sulphur acids, 1910, A., ii,

phenyl thiocarbonate, 1911, A., i, 197.

Casoria, Eugenio, [palmerite] new hydrated aluminium potassium phosphate, 1906, A., ii, 554.

See Georg Schroeter. Caspar, Carl. Caspari, Charles Edward, estimation of codeine in opium, 1904, A., ii, 791. the use of potassium hydrogen iodate

for standardising volumetric solutions, 1904, A., ii, 840.

Caspari, Charles Edward, and Leo R. A. Suppan, estimation of arsenious oxide, 1906, A., ii, 50.

Caspari, Fritz, lecture apparatus; [action of acids on pure and impure zinc], 1911, A., ii, 270.

Caspari, Fritz. See also Wilhelm Biltz and Fritz Straus.

Caspari, Wilhelm, fat in milk, 1905, A., ii, 101.

vegetarianism, 1905, A., ii, 840. Caspari, Wilhelm, and Adolf Loewy, influence of a rise of body temperature on the blood gases, 1910, A., ii, 969.

Caspari, Wilhelm, and Hugo Winternitz, the passage of fat in the food into the milk, 1907, A., ii, 708.

gutta Caspari, William Augustus, percha and balata, 1906, A., i, 100. chemistry of submarine glauconite, 1910, A., ii, 722.

Casperowicz, G., pyrargyrite from the Pervoblagodatsk Mine in the Urals,

1907, A., ii, 561.

Cassal, Charles Edward, and Benjamin Henry Gerrans, new colour reactions with borie acid, 1903, A., ii, 331.

colorimetric process for the estimation of boric acid, 1903, A., ii, 332.

Cassal. Noel Charles, estimation of salicylic acid by distillation of its dilute aqueous solutions, 1910, A., ii, 760.

Cassal, Noel Charles, and Benjamin Henry Gerrans, estimation of cocoanut oil in admixture with butter fat, 1910, A., ii, 1008.

Cassella & Co., Leopold, [dialkylaminohydroxydiphenylamines], 1903, A.,

aryl derivatives of alkylisorosindulines, 1903, A., i, 866.

azo-dve from 4-acetyl-2:4-diaminophenol-6-sulphonic acid, 1904, A.,

blue sulphur dyes, 1904, A., i, 681. triphenylmethane dyes from dimethyland diethyl-p-toluidines, 1904, A., i. 804.

[4-nitro-2-amino-6-acetylaminophenol], 1906, A., i, 165.

action of carbonyl chloride on 4-acetylamino-m-phenylenediamine, A., i, 712.

4-acetylamino-2-aminophenol-6-carboxylic acid, 1906, A., i, 741.

4-acetylamino-2-aminophenol-6sulphonic acid, 1906, A., i, 741.

azo-derivatives of 3-amino-5-acetylaminosalicylic acid, 1906, A., i, 908.

preparation of 2-nitro-6-amino-4acetylaminophenol, 1906, A., i,

preparation of 5-hydroxynaphthabenzaldehyde-7-sulphonic acid and its diamino-derivative, 1906, A., i, 989.

preparation of 5-hydroxynaphthaminobenzaldehydine-7-sulphonic 1907, A., i, 254.

4'-nitroso-4-acetylpreparation of aminodiphenylamine and its sulphonic acid, 1907, A., i, 347.

eparation of polyazo-derivatives, 1907, A., i, 364. preparation

preparation of aminoaryl derivatives of 5-hydroxy-1:2-naphthatriazine-7sulphonic acid, 1907, A., i, 451.

preparation of 5-amino-a-naphthol-3sulphonic acid, 1908, A., i, 160.

preparation of thiosalicylic acid, 1908, A., i, 177.

[1:2'-dihydroxy-1':4'-dimethyldiphenylamine and its indophenol

derivative], 1908, A., i, 416. [2-amino-4:6-diacetyldiaminophenol], 1908, A., i, 457.

preparation of 6-amino-2:4-diacetyldiaminophenol, 1908, A., i, 458.

[azo-derivatives of naphthalenoid triazines], 1908, A., i, 482.

Cassella & Co., Leopold, preparation of 2-aminophenol-5-sulphonic acid. 1908, A., i, 785.

preparation of arylsulphonates of 2aminophenol-4-sulphonic acid, 1908,

A., i, 785.

[reduction of nitrodiazo-compounds to azoxy-derivatives], 1909, A., i. 746. preparation of bromoindigotin sul-

phide, 1910, A., i, 438.

[preparation of N-alkyl- and of N-arylcarbazoles and their indophenol derivatives], 1910, A., i, 775.

preparation of 3:6-diaminoacridine,

1911, A., i, 504.

[preparation of 4-hydroxy-2-m-aminophenyl-a-naphthiminazole-7-sulphonic acid], 1911, A., i, 682.

preparation of halogen-substituted indophenol derivatives from carbazoles and p-nitrosophenols, 1911, A., i, 1025.

preparation of derivatives of indophenols, 1912, A., i, 140.

preparation of indophenol condensation products and their leuco-derivatives from carbazolecarboxylic acids, 1912. A., i, 512.

preparation of 3:6-diamino-10-alkylacridinium compounds, 1912, A., i,

517.

Cassirer, Erwin. See Fritz Ullmann. Cassuto, Leonardo, solubility of gases in liquids. I., 1904, A., ii, 161.

Castellana, Vincenzo, transformation of pyrroles into derivatives of pyrazole, 1905, A., i, 941; 1907, A., i, 646.

detection of nitrogen in organic substances, 1905, A., ii, 201.

detection of certain acids [boric and volatile organic], 1905, A., ii,

detection of boric acid; reply to Velardi, 1906, A., ii, 491.

Castellana, Vincenzo, and Antonino d'Angelo, diazoindoles, 1905, A., i, 940.

Castellana, Vincenzo, and R. Ferrero, some derivatives of dicamphor, 1911, A., i, 217.

Castellana, Vincenzo. See also Angelo Angeli, Mario Giacomo Levi, and Alberto Peratoner

Castellani, Sergio. See Mario Giacomo Levi.

Castelli, Enrico, gradual modification of the first linear spectrum of emission of mercury, 1908, A., ii, 3. astillo. See Muñoz del Castillo.

Castillo. Castner, Lothar. See Otto Fischer. Castorina, Giovanni Trovato, radioactivity of products of Etna, 1906, A...

Castoro, Nicola, evolution of free nitrogen during germination, 1904 A ii, 506.

preparation of colloidal metals, 1904. A., ii, 742.

the occurrence of ammonia during germination and autolysis of plants. 1907, A., ii, 192.

preparation of colloidal silver, 1907.

A., ii, 684.

hemicelluloses, 1906, A., ii, 884.

preparation of solid ammonio-silver nitrate, 1907, A., ii, 684.

hemicelluloses contained in the husks of the seeds of Cucurbita pepo, 1907, A., ii, 806.

· coloration of the particles of colloidal starch and of perfectly soluble starch with iodine and potassium iodide, 1909, A., i, 634.

soluble carbohydrates and hemicelluloses in the seeds of Cicer arietinum.

1909, A., ii, 754.

preparation of colloidal metals by means of acraldehyde, 1910, A., ii, 620.

Castoro, Nicola. See also Ernst Schulze. Castro, de. See Leo Ubbelohde.

Catel, Jules. See Alfred Guyot. Catford, J. P. See Robert Charles

Cowley. See Marcel Murat. Cathala.

Cathcart, Edward Provan, detection of bromine and iodine in urine, 1903, A., ii, 572.

glucosamine and chitose in the animal organism, 1903, A., ii, 741.

antitryptic action of serum, 1904, A., ii, 833.

formation of inactive arginine, 1905, A., i, 461.

inactive arginine, 1905, A., ii, 267.

proteolytic products of the splenic enzyme acting in an alkaline medium, 1905, A., ii, 404.

toxin of the Bacillus enteriditis of Gärtner, 1906, A., ii, 297. bacteria of "blown" tins of preserved

food, 1906, A., ii, 699.

reduction of methylene-blue by cow's milk, 1906, A., ii, 700.

Folin's method for the estimating of urea, 1907, A., ii, 142.

metabolism during starvation. I., 1907, A., ii, 633.

influence of carbohydrates and fats on protein metabolism, 1909, A., ii, 1032.

Catheart, Edward Provan, reflux from intestine to stomach, 1911, A., ii, 749.

Catheart, Edward Provan, and Charles Edward Fawsitt, metabolism during starvation. II. Inorganic, 1907, A., ii, 794.

Edward Provan, Cathcart, Laurence Kennaway, and John Beresford Leathes, origin of endogenous uric acid, 1908, A., ii, 715.

Catheart. Edward Provan, and John Beresford Leathes, absorption of proteins from the intestine, 1906, A., ii,

Catheart, Edward Provan, and Murray Ross Taylor, the influence of carbohydrate and fat on protein metabolism. II. The effect of phloridzin glycosuria, 1910, A., ii, 1084.

Cathcart, Edward Provan. See also Thomas Graham Brown, Francis James Charteris, and Diarmid Noël

Paton.

Catlett, George F. See Charles Baskerville.

Caton, Frederic William. See Frank Tutin.

Cats, A. See Willem Reinders.

Cattadori, Federico. See Giuseppe Plan-

Cattini, Giuseppe, methods for the detection and volumetric and gravimetric estimation of salicylic acid in wines, and its detection in cases of poisoning, 1910, A., ii, 1007.

Caubet, F., form of the practical iso-thermal in gaseous mixtures, 1903,

A., ii, 353.

liquefaction of gaseous mixtures, 1904, A., ii, 705.

Caudwell, Ben. See George Young. Causse, Henri [Eugène], the reaction of reduced crystal-violet, 1903, A., ii, 584.

separation and estimation of iron and phosphoric acid in water, 1904, A., ii, 93.

Cavalier, Jacques, silver and lead salts of alkyl dihydrogen phosphates, 1904, A., i, 365.

silver dihydrogen pyrophosphate, 1904,

A., ii, 658.

derivatives of pyrophosphoric acid,

1906, A., i, 394.

Cavalier, Jacques, and Artus, estimation of ammonia in potable waters, 1905, A., ii, 609.

Cavalier, Jacques, and Eugène Cornec, preparation of hypophosphoric acid, 1910, A., ii, 31.

Cavazza, Luigi Ermanno, estimation of tannins, 1909, A., ii, 276.

physiological microchemical and studies on tannin, 1910, A., ii, 233.

microchemical detection of tannins, 1910, A., ii, 244.

estimation of potassium. I., 1910, A., ii, 453.

microchemical examination of tannins and natural colouring matters, 1911, A., ii, 142.

Cavazzi, Alfredo, quantitative estimation of copper in commercial sulphate by means of alkali hypophosphites, 1911, A., ii, 1137.

Caven, Robert Martin, phosphoric amidines, 1903, T., 1045; P., 200.

complex ammonium antimonious hal-

oids, 1905, P., 187.

detection and estimation of chloride in presence of bromide and estimation of iodide, bromide, and chloride in mixed solution, 1909, A., ii, 612.

separation of metals of the tin group,

1910, P., 176.

Caven, Robert Martin, and Henry Julius Salomon Sand, the dissociation pressures of alkali bicarbonates. Part I. Sodium hydrogen carbonate 1911, T., 1359; P., 147.

Caw, William. See George Gerald Henderson.

Cayeux, Lucien, structure and probable origin of the magnetic iron ore of Dielette, Manche, 1906, A., ii, 368.

formation of an iron mineral by the decomposition of glauconite, 1906, A., ii, 368.

Cazenave, P., estimation of free and combined sulphurous acid in wines,

1910, A., ii, 544. Cazes, E. See Camille Matignon.

Ceccarelli, O. See Federico Giolitti and Mario Levi-Malvano.

Cecchetti, C. See Italo Bellucci.

Cecil, H. L., preparation of thromboplastic extracts (thromboplastin) from tissues, 1912, A., ii, 60.

Cederberg, H. See Alexander Tschirch. Cederberg, Ivar W., surface tension of solutions of salts in alcohol, 1911, A., ii, 189.

general relationship between heat of vaporisation, vapour pressure, and temperature, 1911, A., ii, 854.

[variation of vapour pressure with temperature], 1911, A., ii, 966.

Cederholm, Anna M. See Forris Jewett Moore and William Hultz Walker. Cedivoda, Franz. See Karl Zulkowski

Cegielskij, Roman, the boiling of electrolytes on the passage of an [electric] current, 1911, A., ii, 463.

See Eilhard Alfred Celichowski, K.

Mitscherlich.

Cenni, G. See Gino Gallo.

Centanni, Eugenio, the stimulating action of lipoids on the action of liver diastase, 1911, A., ii, 54.

Centnerszwer, Mieczyslaw, critical temperatures of solutions. I., II., and

III., 1904, A., ii, 158.

an application of Cailletet and Mathias' method for the determination of the critical volume, 1904, A., ii, 706.

critical temperatures of solutions. III. Solutions in methyl chloride, ethyl chloride, ethyl ether, and methyl alcohol, 1908, A., ii, 13.

critical volumes and density curves of solutions, 1909, A., ii, 974.

solubility of potassium iodide in methyl alcohol, 1910, A., ii, 500.

use of phosphorus solutions in gas

analysis, 1910, A., ii, 541. experiments on the inertness of oxygen towards phosphorus, 1911, A., ii, 201.

Centnerszwer, Mieczyslaw, and Kalnin, common critical curve for solutions in pentane, 1907, A., ii, 847.

Centnerszwer, Mieczyslaw, and Pakalneet, critical pressures of solutions, 1906, A., ii, 341.

Centnerszwer, Mieczyslaw, and A. Petrikaln, nature of the luminosity of phosphorus, 1912, A., ii, 709.

Centnerszwer, Mieczyslaw, and Johann Teletoff, solubility curves of some substances in sulphur dioxide near its critical point, 1903, A., ii, 716.

influence of temperature on the solubility of certain compounds in sulphur dioxide, 1904, A., ii, 321.

Centnerszwer, Mieczyslaw, and Zoppi, critical temperatures of solutions. II., 1906, A., ii, 272.

Centnerszwer, Mieczyslaw. See also Paul Walden.

Cerasoli, Tito. See Luigi Mascarelli. Cerero, Rafael, and Enrique Bayo, analysis of artificial pearls and rubies, 1911, A., ii, 824.

Cereser, O. See Ciro Ravenna.

Cermak, Paul, equilibrium point in the formation and decomposition of ozone by the action of the electrical discharge from points in oxygen, 1906, A., ii, 740.

Cermak, Paul, the Thomson effect and its variation with temperature in lead. mercury, tin, zinc, cadmium, and aluminium, 1911, A., ii, 177.

Cermak, Paul, and Hans Schmidt, thermoelectric forces in the transition from the solid to the liquid state of aggregation, 1911, A., ii, 1055.

Cermak, Paul. See also Heinrich Willy Schmidt.

Cernovodeanu, (Mlle.) P., and Victor Henri, physicochemical study of hæmolysis, 1905, A., ii, 465.

action of ultra-violet rays on the tetanus toxin, 1909, A., ii, 822. comparison of photochemical a

abiotic action of ultra-violet light, 1910, A., ii, 332.

Cerny, Carl, the occurrence of silicic acid in the organism, 1909, A., ii, 911. hypericin (hypericum red), 1911, A.,

i, 803. Cervello, Carlo, sodium phosphotungstate as a reagent for uric acid and other reducing substances, 1910, A.,

the influence of antipyretics on the proteins of blood-serum, 1910, A., ii, 515; 1911, A., ii, 409.

picrotoxinin and some of its derivatives, 1911, A., ii, 419.

Cervello, Carlo, and Corrado Varvaro, the oxidation relations of certain heavy metals, 1912, A., ii, 634.

Cervello, Vincenzo, action of iron and of heavy metals [as oxygen carriers],

1908, A., i, 1027. Cervello, Vincenzo, and Andrea Pitini, oxidisability of aliphatic aldehydes, especially formaldehyde, 1907, A., i, 823. Cervi, Guido, volumetric estimation of

lead, 1905, A., ii, 63. Cerza, A. See Sante de Grazia.

Cesaris, Marcello. See Giuseppe Oddo. Cesaris, Pietro, terpene and benzoic acid, 1907, A., i, 780.

Cesaris, Pietro de, the binary systems, CuCl-AgCl, CuCl-NaCl, CuCl-KCl, 1911, A., ii, 606.

binary system: cuprous bromidepotassium bromide, 1911, A., ii, 804. Cesaris, Pietro de. See also Italo Bellucci and Nicola Parravano.

Cesaro, Giuseppe, crystals of s-tetrachloroisopropylformal, 1905, A., i,

preparation of crystalline crocoite and wulfenite by the action of atmospheric carbon dioxide on alkaline solutions of the lead salts, 1906, A., ii, 28.

Cesáro, Giuseppe, native tellurium from Asia Minor, 1908, A., ii, 861.

hopeite, 1909, A., ii, 745.

crystalline form and composition of the hydrated magnesium carbonate prepared by Moressée; its relation to landsfordite, 1910, A., ii, 613.

artificial production of nesquehonite,

1911, A., ii, 209.

Cézar, Josef, estimation of phosphoric acid by titrating the ammonium phosphomolybdate precipitate, 1903, A., ii, 101.

Chablay, E., action of metal-ammonium compounds on halogen derivatives of

methane, 1905, A., i, 502.

action of metal-ammonium compounds on alcohols; general method for the preparation of alkyloxides, 1905, A., i, 502.

action of metal-ammonium compounds on polyatomic alcohols, 1905, A., i,

conditions under which the metalammonium compounds reduce halogen derivatives of the fatty hydrocarbons; preparation of olefines and paraffins, 1906, A., i, 130.

reduction of unsaturated primary alcohols of the fatty series by metalammonium compounds, 1906, A., i,

transformation of cinnamyl alcohol into phenylpropylene (allylbenzene) phenylpropyl alcohol by and metal-ammoniums, 1907, A., i, 53.

a new method for the estimation of halogens in organic compounds by means of metal-ammoniums, 1907,

A., ii, 195.

use of liquid ammonia in chemical reactions; alkyloxides, 1911, A., i,

metallic alkyloxides, 1912, A., i, 3. reduction of aliphatic amides and esters by the metal-ammonias, 1912, A., i, 244.

metallic glycoloxides, 1912, A., i,

Chablay, E. See also Pierre Genvresse. Chabrié, [Pierre] Camille, synthesis of an aromatic hydrocarbon derived from camphor, 1903, A., i, 245.

a new chloride of tantalum, 1907, A., ii, 477.

attainment of high temperatures in laboratory experiments, 1907, A., ii,

Chabrié, Camille, and A. Bouchonnet, action of selenyl chloride on mannitol, 1903, A., i, 307.

Chabrié, Camille and A. Bouchonnet, iridium sesquiselenide, 1904, A., ii,

indium and rubidium fluorides, 1905,

A., ii, 165.

Chabrie, Camille, and Ferdinand Levallois. ultramarines, 1906, A., ii. 676.

the gas observed when tantalite is attacked by potassium hydroxide, 1907, A., ii, 35.

Chace, Arthur F., and William John Gies, poisonous action of thorium, 1907, A., ii, 496.

Chace, Edward MacKay, detection of saccharin in wine, 1905, A., ii, 292.

estimation of citral in lemon oils and

extracts, 1906, A., ii, 906.

detection of small quantities of turpentine in lemon oil, 1908, A., ii, 908.

Chacon, Anibal, the cyclic molecule; a new hypothesis on benzene allotropy polymerism, 1911, A., 1008.

Chads, Dudley. See Vincent Edwards. Chadwick, James, absorption of y-rays by gases and light substances, 1912, A., ii, 515, 718.

the γ -rays excited by the β -rays of radium, 1912, A., ii, 1025.

Chadwick. James. See also Ernest Rutherford.

Chadwick, Samuel, John Edwin Ramsbottom, and David Leonard Chapman, the action of ultra-violet light on moist and dried mixtures of carbon monoxide and oxygen, 1905, P., 287.

the action of ultra-violet light on moist and dry carbon dioxide, 1906,

P., 23.

Chadwick, Samuel. See also David Leonard Chapman.

Chain, A. See J. Herrmann. Chalker, Walter Chapin. See Harry Ward Foote and Treat Baldwin Johnson.

Challenger, Frederick, and Frederic Stanley Kipping, organic derivatives of silicon. Part XII. Dibenzyl-ethylpropylsilicane and sulphonic acids derived from it, 1910, T., 142; P., 3.

organic derivatives of silicon. Part XIII. Optically active compounds containing one asymmetrie silicon group, 1910, T., 755; P., 65.

Challenger, Frederick. See also Frederic Stanley Kipping and Otto Wallach.

Challinor, R. W., approximate colorimetric estimation of cobalt and nickel in the presence of each other, 1908, A., ii, 988.

Chamberlain, Joseph Scudder, investigations on the properties of wheat

proteins, 1907, A., ii, 46.

feeding value of cereals as calculated from chemical analyses, 1909, A., ii,

further study of two of the products of the transformation of p-sulphamidobenzoic acid when heated to 220°, 1912, A., i, 354. Chamberlain, Joseph Scudder.

See also

Philip Bouvier Hawk.

Chambers, Helen, and Sidney Russ, the action of radium emanations on some of the main constituents of normal blood, 1911, A., ii, 809.

Chambers, Victor John, 3-nitrophthalyl chloride and its action with ammonia and with aromatic amines, 1903, A., i, 699.

action of phenols and alcohols on the chlorides of p-nitro-o-sulphobenzoi:

acid, 1904, A., i, 52.

Chambers, Victor John. See also Mar-

ston Taylor Bogert.

Chamot, Emile Monnin, and David Shepard Pratt, phenolsulphonic acid method for the estimation of nitrates in water. I. Composition of the reagent and of the reaction product, 1909, A., i, 641.

phenolsulphonic acid method for the estimation of nitrates in water. II. Composition of the yellow com-

pound, 1910, A., ii, 545.

Chamot, Emile Monnin, David Shepard Pratt, and Harry Westfall Redfield. the phenolsulphonic acid method for the estimation of nitrates in water. III. and IV. The chief sources of error in the method, 1911, A., ii,

Chance, Edwin M. See Abraham G. Blakeley.

Chancel, M. F., theory of bell-chamber process for electrolysis of alkali chlorides, 1909, A., ii, 235.

Chandler, E. E., ionisation constants of the secondary hydrogen ion dibasic acids, 1908, A., ii, 467.

modification of a previously described experiment on the migration of ions, 1912, A., ii, 548.

Chandler, R. H., allophane from Abbey Wood, Kent, 1909, A., ii, 493.

Chaney, Newcomb Kinney. See Frederick Daniel Chattaway.

Chang, Hsing Lang. See Emil Abderhalden.

Chanoz, M., effect of membranes in liquid chains, 1905, A., ii, 626.

asymmetry due to the passage of a continuous current through a chain of aqueous solutions of electrolytes with a common ion, 1909, A., ii, 292.

action of continuous current on symmetrical chains of aqueous solutions of electrolytes which have no common ion, 1909, A., ii, 464.

Chanschy-Herzenberg. See Josef Tam-

Chapin, Harold Canning. See Gregory Paul Baxter.

Chapin, William H., the nitroso-Bnaphthol method for the qualitative separation of nickel and cobalt, 1907. A., ii, 819.

haloid bases of tantalum, 1910, A., ii,

Chapin, William H., and Edgar Fahs Smith, the atomic weight of tantalum, 1911, A., ii, 899.

Chapin, William H. See also Edgar T.

Wherry.

Chapman, Alfred Chaston, essential oil of hops, 1903, T., 505; P., 72; discussion, P., 73.

a compound of dextrose with aluminium hydroxide, 1903, P., 74.

palladium-hydrogen as a reducing agent in quantitative analysis, 1905, A., ii, 58.

estimation of minute traces of arsenic; the insensitiveness of zinc, 1907,

A., ii, 718.

Jaffé's colorimetric method for the estimation of creatinine, 1909, A., ii, 948.

colorimetric estimation of hydrogen cyanide, 1910, A., ii, 1119.

Chapman, Alfred Chaston, and Herbert

Drake Law, reducing action of hyd. rogen, 1905, A., ii, 695.

reducing action of hydrogen. Estimation of traces of arsenic by the Marsh-Berzelius method, and the "insensitiveness" of zinc, 1906, A., ii, 196.

the reducing action of hydrogen; reduction of molybdic and vanadic

acids, 1907, A., ii, 696.

Chapman, Alfred Chaston, and Alfred Siebold, the application of adsorption to the detection and separation of certain dyes, 1912, A., ii, 1010.

Chapman, Alfred Chaston, and Percy Whitteridge, estimation of tartaric

acid, 1907, A., ii, 513.

Chapman, David Leonard, a difficulty in the theory of valency of W. Barlow and W. J. Pope, 1906, P., 320.

Chapman, David Leonard, and Charles Hutchens Burgess, cause of the period of chemical induction in the union of hydrogen and chlorine, 1905, A., ii, 236.

chlorine, 1905, A., ii, 697.

Chapman, David Leonard, Samuel Chadwick, and John Edwin Ramsbottom. the chemical changes induced in gases submitted to the action of ultra-violet light, 1907, T., 942; P., 136. Chapman, David Leonard, and Frank

Houghton Gee, the photochemical and thermal interaction of chlorine and carbon monoxide, 1911, T., 1726; P.,

Chapman, David Leonard, and Alfred Holt, jun., the synthesis of formaldehyde, 1905, T., 916; P., 171.

Chapman, David Leonard, and Herbert Edwin Jones, the homogeneous decomposition of ozone in the presence of oxygen and other gases, 1910, T., 2463; P., 294.

decomposition of dry ozone, 1911, T.,

1811; P., 224.

Chapman, David Leonard, and Patrick Sarsfield MacMahon, the interaction of hydrogen and chlorine, 1909, T., 135; P., 15.

the retarding effect of oxygen on the rate of interaction of chlorine and T., 959; hydrogen, 1909,

the influence of gaseous oxides of nitrogen on the rate of interaction of chlorine and hydrogen, 1909, T., 1717; P., 224.

the interaction of hydrogen and chlorine; the nature of photochemical inhibition, 1910, T., 845; P., 93.

the interaction of hydrogen and chlorine; the inhibitory effect of ozone and chlorine dioxide; preliminary note, 1910, P., 58.

Chapman, David Leonard, and Leonard Vodden, nitrogen chloride, 1909, T.,

138; P., 15.

Chapman, David Leonard. See also Charles Hutchens Burgess, Samuel Chadwick, and Herbert Edward Clarke.

Chapman, H. G., pancreatic secretion,

1905, A., ii, 838.

Chapman, H. G., and James Matthew Petrie, the hexone bases from white of egg, 1910, A., i, 82.

Chapman, H. G. See also David Arthur

Welsh.

Chapman, James Crosby, homogeneous Röntgen radiation from vapours, 1911, A., ii, 357.

the characteristic homogeneous Röntgen radiation from elements of high atomic weight, 1912, A., ii, 316.

fluorescent Köntgen radiation from elements of high atomic weight.

1912, A., ii, 518.

Chapman, James Crosby, and E. D. Guest, the intensity of secondary homogeneous Röntgen radiation from compounds, 1911, A., ii, 568.

Chapman, James Crosby, and Stephen H. Piper, on secondary homogeneous X-

radiation, 1910, A., ii, 567.

Chapman, S., kinetic theory of a gas constituted of spherically symmetrical

molecules, 1912, A., ii, 340. Chappel, E. J. See William Arthur

Harrison Naylor.

Chapus, A., analysis of an intestinal

gravel, 1905, A., ii, 272.

estimation of fatty matters in fæces, 1909, A., ii, 947.

Charabot, Eugène [Trophime], methyl methylanthranilate in the vegetable organism, 1903, A., i, 47.

Charabot, Eugène, and Alexandre Hébert, vegetation of odoriferous plants, 1903, A., ii, 172.

influence of the nature of external media on the state of hydration of plants, 1903, A., ii, 233.

influence of the nature of external media on vegetable acidity, 1903,

A., ii, 505.

influence of exterior media in the formation and evolution of odoriferous compounds in plants, 1903, A., ii, 607.

formation of terpenic compounds in chlorophyll organs, 1904, A., ii, 282.

the evolution of terpenoid compounds in the vegetable organism, 1904, A., ii, 365.

plant acidity, 1904, A., ii, 677.

successive conditions of vegetable matter, 1904, A., ii, 837.

consumption of odoriferous substances in etiolated plants, 1905, A., ii, 276.

consumption of odoriferous products during the maturation of the flower, 1905, A., ii, 850.

Charabot, Eugène, and Gustave Laloue, distribution of some organic substances in geraniums, 1903, A., ii, 568.

production and distribution of some organic substances in Citrus madurensis, 1904, A., ii, 142.

Charabot, Eugène, and Gustave Laloue, circulation of odoriferous compounds in plants, 1904, A., ii, 581.

distribution of some organic substances in orange flowers, 1904, A., ii, 634.

formation and distribution of the essential oil of an annual plant, 1905, A., ii, 112.

successive distributions of estragole and terpenic compounds among the different organs of an annual plant, 1905, A., ii, 549.

formation and distribution of terpenic compounds in Citrus aurantium,

1906, A., ii, 385.

formation and distribution of essential oil in a perennial plant, 1907, A.,

ii, 290

successive distributions of the terpenic compounds amongst the different organs of a living plant, 1907, A., ii, 290.

migration of odoriferous compounds [in plants], 1907, A., ii, 807.

essential oil of Magnolia kobus, 1908, A., i, 196.

essential oil of Tetranthera polyantha var. citrata, 1908, A., i, 279.

distribution of odoriferous principles in plants, 1907, A., ii, 714; 1908, A., ii, 774.

Charabot, Eugène, and Jacques Rocherolles, distillation, 1904, A., ii, 234.

Charabot, Eugène. See also Alexandre Hébert.

Charante. See Moll van Charante.

Charaux, Charles, occurrence and detection of chlorogenic acid in plants; extraction and yield of caffeic acid from plants, 1910, A., ii, 991.

occurrence of fraxin in Diervilla lutea,

1911, A., ii, 1023.

Charaux, Charles. See also J. Bougault. Chardet, Gaston, the nitrogenous substances present in bone superphosphate, 1910, A., ii, 652.

Chardin, D. A., relation between rotatory power and chemical constitution, 1908,

A., ii, 548, 912.

Chardin, D. A., and S. Sikorsky, relation between rotatory power and chemical constitution, 1907, A., ii, 830; 1908, A., ii, 470.

Charitschkoff, Konstantin Wasilevitsch, elementary composition of Russian naphthas and the basis for classifying them, 1903, A., i, 1.

analysis of combustible gas evolved in the Caspian Sea near the Gulf of

Baku, 1903, A., ii, 155.

Charitschkoff, Konstantin Wasilevitsch, combustion of methane and hydrogen by Winkler's method, 1903, A., ii, 186.

applicability of Dumas' method to the estimation of nitrogen in gaseous

mixtures, 1903, A., ii, 753.

carbonaceous substances accompanying the Caucasian naphtha deposits, 1904, A., ii, 180.

use of light petroleum and alcohol for the separation of oleic acid from stearic and other solid fatty acids, 1905, A., i, 405.

origin of naphtha, 1905, A., ii, 43. artificial naphtha, 1907, A., i, 269.

substituted mercurammonium compounds, 1907, A., i, 590.

separation of aromatic hydrocarbons by the fractional precipitation of their alcoholic solution, 1907, A., i, 597.

inorganic nitrogen, 1907. A., ii, 361. relation between the ignition temperature and the vapour pressure of inflammable liquids of low boiling points, 1908, A., ii, 255.

carbonaceous substances and bitumens,

1909, A., i, 39.

polynaphthenic acids. I. and II.,

1909, A., i, 154, 471.

oxidation of naphthene and benzene hydrocarbons by the action of air in presence of alkali, 1909, A., i, 896.

determination of the vapour density of mixed liquids, 1909, A., ii, 22.

simultaneous estimation of the residue and combined carbon dioxide in waters, 1909, A., ii, 701.

presence of ethylene linkings in benzene and its homologues, 1910, A.,

i, 104.

structure of naphthenic acids, 1910, A., i, 110.

new reagent for hydrogen peroxide, 1910, A., ii, 238.

detection of copper and cobalt by means of naphthenic acid, 1910, A., ii, 549.

formation of hydrogen peroxide, 1910,

A., ii, 1054.
a new reaction for ferrous oxide and
the separation of iron and aluminium,
1911, A., ii, 543.

asphalt theory of naphtha-formation: new work on the genesis of naphtha, 1912, A., i, 329.

antiseptic properties of creosote, 1912, A., ii, 476. Charitschkoff, Konstantin Wasilevitsch, natural analytical classification of metals based on the properties of their salts with naphthenic acid: reactions of these salts in nonaqueous solutions, 1912, A., ii, 489.

a new reaction for organic bases, 1912,

A., ii, 817.

Charitschkoff, Konstantin Wasilevitsch, and Salomon Ambardanoff, formation of hydrogen peroxide in the combustion of detonating gas, 1910, A., ii, 1055.

Charlton, H. W. See Frank Thomas Shutt.

Charnass, D., preparation, behaviour, and quantitative estimation of pure urobilin and of urobilinogen, 1909, A., i, 820.

the estimation of iron in blood, 1910,

A., ii, 657.

Charnass, D. See also Otto von Fürth. Charon, Ernest, and Edgar Dugoujon, cinnamylidene chloride, 1903, A., i.

chloroand bromo-cinnamylidene chlorides, 1903, A., i, 472.

phenylpropargylidene chloride. CPh:C·CHCl₂, 1903, A., i, 688. Charpentier, P. G., Sterigmatocystis nigra

and oxalic acid, 1905, A., ii, 749. Charpy, Georges, cementation of iron,

1903, A., ii, 430. action of carbon monoxide on iron and

its oxides, 1903, A., ii, 599.

equilibrium diagram of iron-carbon

alloys, 1906, A., ii, '31. identity of graphite and "temper" graphitic carbon in cast irons, 1908, A., ii, 37.

solubility of graphite in iron, 1908,

A., ii, 110.

alloys of iron and carbon, 1908, A., ii, formation of graphitic acid and the

definition of graphite, 1909, A., ii,

action of carbon monoxide on chromium, nickel, manganese, and their oxides and alloys, 1909, A., ii, 405.

separation of graphite from white cast iron heated under pressure, 1909, A., ii, 672.

Charpy, Georges, and S. Bonnerot. cementation of iron by solid carbon, 1910, A., ii, 215; 1911, A., ii, 1091. reduction of ferric oxide by solid

carbon, 1910, A., ii, 1072. the gas contained in steels, 1911,

A., ii, 609.

the permeability of iron to hydrogen, 1912, A., ii, 336.

Charpy, Georges, and Louis Grenet, the transformation temperatures of steels, 1904, A., ii, 821.

Charrier, G., derivatives of isonitroso-ketones, 1907, A., i, 829. action of heat on o-aminoazo-com-

pounds, 1910, A., i, 287.

Charrier, G., and G. Ferreri, action of phosphorus pentachloride on the azoxy-compounds, 1911, A., i, 1045. etherification of o-hydroxyazo-com-

pounds, 1912, A., i, 812.

Charrier, G. See also Giacomo Ponzio.

Charrin, Albert, autolysis of animal organs, 1904, A., ii, 501.
Charrin, Albert, and Emil Paul Goupil, ferments of the placenta, 1906, A., ii, 294.

absence of nutrition in the formation of Leduc's "artificial plants," 1907,

A., ii, 191.

Charrin, Albert, and Le Play, variations in toxicity of the intestinal contents; modifications of the blood, 1906, A., ii, 292.

Charrin, Albert, and Roché. [puerperal eclampsia], 1903, A., ii, 564.

Charron, A. T. See Frank Thomas Shutt.

Charteris, Francis James, metabolism during starvation, 1907, A., ii, 795.

Charteris, Francis James, and Edward Provan Cathcart, effect of intravenous injections of sodium cinnamate, 1904, A., ii, 832.

Charteris, Francis James. See also Ralph Stockman.

Charters, S. Barclay, the aluminium rectifier, 1905, A., ii, 225.

Chaspoul, and Jaubert de Beaujeu, the radioactivity of the waters of Val-les-Bains, 1912, A., ii, 12.

Chassagne, J., action of a-chloroacetoacetic esters on sodiocvanoacetic esters, 1907, A., i, 892.

Chassevant, Allyre, colloidal silver, 1904, A., ii, 122.

preparation and properties of pure colloidal silver, 1904, A., ii, 122.

Allyre, Chassevant, and Charles Garnier, toxicity of benzene and its homologues, 1904, A., ii, 66.

toxicity of hydroxyl derivatives of benzene, 1904, A., ii, 197.

Chassevant, Allyre, and Swigel Posternak, some properties of colloidal silver, 1903, A., ii, 478.

Chassin, S. See Rudolf Höber.

Chassy, Antoine, influence of pressure and of the form of the discharge on the production of ozone, 1906, A., ii, 663.

Chatelain, G. See Braconnier. Chatin, A. See Albert Desmoulières.

Chattaway, Frederick Daniel, derivatives of p-aminoacetophenone, 1903, P., 50.

isomeric change of dibenzanilide into benzoyl-o-amino- and benzoyl-p-amino-benzophenones, 1903, P., 57.

derivatives of o-aminobenzophenone and p-aminobenzophenone, 1903,

P., 106.

isomeric change of dipropionanilide into propionyl-p-aminopropiophenone, 1903, P., 124.

intramolecular rearrangement in derivatives of the aromatic aminoketones, 1904, T., 340; P., 44.

isomeric change of diacylanilides into acylaminoketones, 1904, T., 386;

P., 43

sulphonphenylchloroamides and sulphontolylchloroamides, 1904, T., 1181; P., 168.

dibenzoylchloroimide, 1904, P., 22.

nitrogen chlorides containing two halogen atoms attached to the nitrogen, 1904, P., 167.

sulphonchloroalkylamides, 1904, P.,

208.

nitrogen halogen derivatives of the sulphonamides, 1905, T., 145; P., 7.

nitrogen halogen derivatives of the aliphatic diamines, 1905, T., 381;

P., 61.

a contribution to the chemistry of o-benzoic sulphinide, 1905, T., 1882; P., 284.

the action of light on benzaldehydephenylhydrazone, 1906, T., 462; P., 36; discussion, P., 37.

the oxidation of hydrazines by free oxygen, 1907, T., 1323; P., 183.

the oxidation of aromatic hydrazines by metallic oxides, permanganates, and chromates, 1908, T., 270; P., 10.

the quantitative conversion of aromatic hydrazines into diazonium salts,

1908, T., 852; P., 74.

a new general method of preparing diazonium bromides, 1908, T., 958; P., 93.

the constitution of the diazonium perbromides, 1908, P., 172.

an alternative structure for the supposed stereoisomeric α-osazones, 1908, P., 175.

a synthesis of para-urazine from carbamide, 1909, T., 235; P., 10.

Chattaway, Frederick Daniel, the preparation of dichlorocarbamide, 1909, T., 464; P., 72.

the preparation and properties of the N-tribromo-substituted hydrazines (the diazonium perbromides), 1909, T., 862; P., 120.

the action of the halogens on aromatic hydrazines, 1909, T., 1065; P.,

147.

ammonium perhaloids, 1909, P., 163.

the action of chlorine on carbamide, whereby a dichlorocarbamide is produced, 1909, A., i, 90.

a simple method of preparing tetranitromethane, 1910, T., 2099; P.,

164; discussion, P., 164.

the transformation of ammonium cyanate into carbamide, 1911, P., 280; 1912, T., 170.

the oxidation and auto-reduction of hydrazines, 1911, A., i, 494.

Chattaway, Frederick Daniel, and Montague Aldridge, the auto-reduction of hydrazines, 1910, P., 325; 1911, T., 404.

Chattaway, Frederick Daniel, and Newcomb Kinney Chaney, the action of chlorine on phenylcarbamide, 1910, T., 292; P., 22.

Chattaway, Frederick Daniel, Charles
Lineus Cumming, and Bernurd
Howell Wilsdon, decomposition of
hydrazides and hydrazones by heat,

1911, T., 1950; P., 193.

Chattaway, Frederick Daniel, and William Henry Lewis, isomeric change of diacylanilides into acylaminoketones; transformation of the dihenzoyltoluidines into the isomeric benzoylaminomethylbenzophenones, 1904, T., 589; P., 60.

isomeric change of diacylanilides into acylaminoketones; transformation of dibenzoylaminobenzophenone into 1-benzoylamino-2:4-dibenzoylbenzene, 1904, T., 1663; P., 223.

the action of hypobromous acid on piperazine, 1905, T., 951; P., 183. halogen derivatives of substituted

oxamides, 1906, T., 155; P., 18.
Chattaway, Frederick Daniel, and Frederick Alfred Mason, halogen derivatives of malonanilide, ethyl malonanilate and malonanilic acid, 1910, T., 339;

Chattaway, Frederick Daniel, and James Montrose Duncan Olmsted, the action of aromatic amines on ethyl malonate, 1910, T., 938; P., 69. Chattaway, Frederick Daniel, and Alan Edulf Swinton, N-chloro-derivatives of benzylidene-diamides, 1912, T., 1206; P., 158.

Chattaway, Frederick Daniel, and John Mello Wadmore, derivatives of highly substituted anilines, 1904, T., 179;

P., 16.

Chattaway. Frederick Daniel, and Donald Frederick Sandys Wünsch. chlorine derivatives of substituted carbamides, 1909, T., 129; P., 11. polymorphic phthalylhydrazides, 1911,

T., 2253; P., 193. Chattaway, Frederick Daniel. See also

Ernst Cohen.

Chattock, Arthur Prince, non-leaking

glass tap, 1906, A., ii, 221.

Chattock, Arthur Prince, and Arthur Mannering Tyndall, changes of pressure which accompany point discharge through hydrogen containing oxygen and nitrogen, 1908, A., ii, 652.

Chauchard, A., and (Mlle.) B. Mazoné, action of ultra-violet light on amylase, invertase, and a mixture of these two

diastases, 1911, A., i, 758.

Chaudier, J., electro-optical properties of liquid mixtures, 1908, A., ii, 788.

Chaudier, J., and Edouard Chauvenet, radioactivity of halogen and oxyhalogen compounds of thorium, 1910, A., ii, 174.

Chaumat, Henri, electrolytic reduction of indigotin, 1908, A., i, 107.

Chaumont, L., the diffusion of radium emanation, 1909, A., ii, 781.

Chautard, Jean, and Paul Lemoine, origin of laterite, 1908, A., ii, 203.

Chautems, J. See H. Cantoni. Chauveau, [Jean Baptiste] Auguste, muscular contraction and energy, 1904, A., ii, 575.

superiority of the dispensation of energy in assimilation of protein nutriment, 1907, A., ii, 370.

Chanveau, Auguste, and Ch. Contejean, elimination of nitrogenous waste during renal excretion in the starving subject; relation of this elimination to that of water, the vehicle for urinary exereta; independence of the two phenomena, 1910, A., ii, 732.

Chauvenet, Edouard, thorium oxyfluoride and fluoride, 1908, A., ii, 597.

an alloy of thorium and nickel, 1908, A., ii, 858.

chlorides and oxychlorides of thorium, 1909, A., ii, 53.

anhydrous compounds of thorium with alkali chlorides, 1909, A., ii, 583.

Chauvenet, Edouard, hydrated compounds of thorium chloride with alkali chlorides, 1909, A., ii, 584.

hydrates of thorium chloride and bromide, 1909, A., ii, 741.

compounds of thorium chloride with ammonia, 1910, A., ii, 872.

a general method for the preparation of anhydrous chlorides, 1911, A., ii,

dissociation of the compound, ThCla,

18NH₃, 1911, A., ii, 586.

action of carbonyl chloride on natural and artificial sulphides, 1911, A., ii, 602.

thorium carbonates, 1911, A., ii, 806. hydrates of zirconium oxychloride, 1912, A., ii, 456.

zirconium oxychlorides, 1912, A., ii,

Chauvenet, Edouard. See also J. Chau-William Echsner dier and Coninck.

Chavan, P., effect of chemical manures on the composition of meadow hay,

1909, A., ii, 927.

Chavanne, Georges, bromoisopyromucic acid, 1903, A., i, 270.

esters of isopyromucic acid, 1904, A., i, 82.

isopyromucic acid, 1905, A., i, 77. action of oxidising agents on isopyromucic acid; dialdehydes of dibromomaleic and bromohydroxymaleic

acids, 1911, A., i, 736. ethylenic isomerism of acetylene di-

chloride, 1912, A., i, 330.

Chavanne, Georges, and (Mlle.) B. van Roelen, cyclohexanol, 1909, A., i, 21. Chavanne, Georges. See also Henri

Baubigny, Robert Lespieau, Henri Moissan, and Louis Jacques Simon.

Chavassieu, and Albert Morel, a colour reaction of reducing sugars with alkaline m-dinitrobenzene, 1907, A., ii,

Chazel, Arnold, monosubstitution products of diacylated p-phenylenediamines with different acid radicles. 1907, A., i, 793.

Chéladzé, (Mlle.) Nina. See Max Wunder.

Chella, Silvio, apparatus for measuring the absolute coefficient of internal friction of gases, 1905, A., ii, 629.

Chella, Silvio. See also Angelo Battelli.

Chelle, L. See Charles Blarez.

Chemische Fabrik auf Aktien (vorm. E. Schering), preparation of salicylic acid, 1903, A., i, 343.

Chemische Fabrik auf Aktien (vorm. E. Schering), preparation of camphenilideneacetone, 1903, A., i, 504.

preparation of methylenehippuric acid, 1904, A., i, 413; 1906, A., i, 499.

preparation of solid camphene, 1904, A., i, 680, 904, 1035.

acyl derivatives of alkyl ethers of rufigallol, 1904, A., i, 809.

m-nitromethylenehippuric acid, 1904, A., i, 889.

oxidation of isoborneol to camphor, 1905, A., i, 362.

methyleneoxyuvitic acid, 1905, A., i, 703.

preparation of camphor, 1905, A., i, 709.

preparation of camphor from borneol or isoborneol, 1906, A., i, 28, 194.

preparation of barbituric acid and its 5-alkyl derivatives, 1906, A., i, 893.

preparation of benzoylalkylaminoethanols [alkylaminoethyl benzoates], 1906, A., i, 952.

preparation of 2-imino-4:6-dioxymonoand -di-5-alkylpyrimidines, 1907, A., i, 253.

preparation of alkyl dialkylmalonamates, 1907, A., i, 902.

preparation of alkylaminohexyl benzoates, 1907, A., i, 924.

preparation of dimethylaminoisopropyl benzoate, 1908, A., i, 266.

preparation of 5:5-dialkylbarbituric acids from the corresponding dialkylmalonylguanidines, 1908, A., i, 370, 1017.

preparation of 3:4-dihydroxyphenylglyoxime and 3:4-dihydroxyphenylalkylglyoximes, 1908, A., i, 657.

[preparation of bases of the adrenaline series], 1908, A., i. 1004.

series], 1908, A., i, 1004. preparation of bornyl and isobornyl bromoisovalerates, 1909, A., i, 245.

preparation of arylalkyl-p-aminophenols, 1909, A., i, 914; 1910, A., i, 28.

preparation of cerium phenoxides, 1910, A., i, 164.

preparation of terpene alcohols from pinene hydrochloride, 1910, A., i, 399.

preparation of santalol and menthol ethers, 1912, A., i, 479.

preparation of 2-piperonylquinoline-4-carboxylic acid (piperonylcinchonic acid), 1912, A., i, 503.

preparation of aryl esters of 2-phenylquinoline-4-carboxylic acid, 1912, A., i, 582. Chemische Fabrik auf Aktien (vorm. E. Schering), preparation of glycols from dihalogen-butanes and their homologues, 1912, A., i. 743.

homologues, 1912, A., i, 743. preparation of 2-phenyl- and substituted 2-phenyl-6:6'-diquinolyl-4:4'dicarboxylic acids, their homologues and derivatives, 1912, A., i, 811.

preparation of compounds from 2phenylquinoline-4-carboxylic acid or its homologues with glycine, 1912, A., i, 1018.

Chemische Fabrik Coswig-Anhalt, preparation of a compound containing aluminium, boric acid, and active oxygen, 1911, A., ii, 984.

Chemische Fabrik Flörsheim, H. Noerdlinger, preparation of aldehydes, alcohols, and acids, 1906, A., i, 628.

Chemische Fabrik, vorm. Goldenberg, Geromont & Co., Goldenberg method for the estimation of tartaric acid in wine dregs, tartar, and other crude materials, 1908, A., ii, 287.

Chemische Fabrik Gedeon Richter, preparation of additive compounds of chloral with amides, 1911, A., i, 836.

Chemische Fabrik Griesheim-Elektron, preparation of 3-chloro-4-aminophenol, 1903, A., i, 817.

preparation of thionyl chloride, 1903, A., ii, 420.

preparation of alkali metals, 1903, A., ii, 646.

purification of aromatic aldehydes, 1904, A., i, 1021.

electrolytic preparation of metallic permanganates, 1904, A., ii, 127. [3'-chloro-4'-methylamino 4-hydroxy-

diphenylamine], 1906, A., i, 890. [condensation of the arylsulphonyl-anaphthylamines with p-aminophen-

ols], 1908, A., i, 209. azo-compounds from the o-aminophenols and 2:8-dihydroxynaphthalene-6sulphonic acid, 1908, A., i, 480.

preparation of dry calcium hypochlorite, 1908, A., ii, 280.

the removal of arsenic from liquids and gases, 1908, A., ii, 686.

[preparation of calcium hypochlorites], 1908, A., ii, 692.

separation of p- and m-nitro-o-anisidine, 1911, A., i, 125.

[preparation of dichlorodinitrobenzidine], 1911, A., i, 493.

[preparation of ψ -azimino-compounds], 1912, A., i, 144.

preparation of anthraquinone derivatives containing the ψ-azimino-ring, 1912, A., i, 588.

Chemische Fabrik Griesheim-Elektron, preparation of epichlorohydrin from dichlorohydrin, 1912, A., i, 744.

[preparation of anthraquinone derivatives], 1912, A., i, 1035.

Chemische Fabrik Grünau, Landshoff, & Meyer, preparation of alkali nitrites, 1903, A., ii, 426.

sulphur dyes for the phenols and their derivatives, 1904, A., i, 81.

preparation of concentrated formic acid, 1908, A., i, 598.

direct production of dry zinc hyposulphite, 1908, A., ii, 185.

preparation of aromatic nitro-compounds, 1909, A., i, 295.

Chemische Fabrik Grünau, Landshoff, & Meyer, Emil Franke, and Walter Kirchner, preparation of formic acid from alkali formates, 1912, A., i, 408.

Chemische Fabrik von Friedr. Heyden, acyl derivatives of phenylglycine-ocarboxylic acid esters, 1903, A., i, 487.

preparation of acetylquinine, 1903, A., i, 513.

derivatives of indoxylic acid, 1905, A., i, 647.

bismuth disalicylate, 1906, A., i, 665. preparation of guanyldiethylbarbituric acids, 1906, A., i, 894.

preparation of bismuth tanuate, 1906, A., i, 974.

preparation of the bornyl esters of the aromatic hydroxycarboxylic acids, 1907, A., i, 429.

preparation of double lactates containing antimony, 1907, A., ii, 888.

preparation of santalyl esters, 1907, A., i, 953.

separation of o- and p-guaiacolsulphonic acids, 1908, A., i, 161.

preparation of isobornyl esters of the fatty acids from pinene hydrochloride or hydrobromide, 1908, A., i, 351, 809.

the reduction products of sulphurous acid and their double compounds with aldehydes, 1909, A., i, 207.

bismuth salts of brominated catechols, 1909, A., i, 469.

[preparation of bornyl and menthyl sulphuric acids], 1909, A., i, 497.

preparation of alkyleneiminosulphonates, 1909, A., i, 704.

preparation of bromoacylsalicylic [o-bromoacyloxybenzoic] acids, 1909, A., i, 798.

preparation of disulphoacetaldehydesulphoxylates, 1909, A., i, 880. Chemische Fabrik von Friedr. Heyden, [preparation of colloidal arsenie], 1909, A., ii, 310.

preparation of o-ω-trichloroacetoxybenzoic acid, 1910, A., i, 37.

preparation of aromatic halogen-alkyloxycarboxylic acids, 1910, A., i, 37.

preparation of nitrogen derivatives of formaldehydesulphoxylic acid, 1910, A., i, 229.

preparation of nitrogen derivatives of aldehyde bisulphites, 1910, A., i, 229.

preparation of nitrogen derivatives of formaldehydesulphoxylates, 1910, A., i. 229.

preparation of tribromocatechol, 1910, A., i, 247.

preparation of iodoacylsalicylic (oiodoacyloxybenzoic) acids, 1910, A., i, 485.

preparation of alkyl- and aryl-oxyacylsalicyclic [o-aryloxyacyloxybenzoic] acids, 1910, A., i, 486.

preparation of diglycollyldisalicylic acid, 1911, A., i, 133.

Chemische Fabrik Ladenburg, separation of m- and p-cresols, 1904, A., i, 312.

preparation of carbonic acid esters, 1911, A., i, 438.

Chemische Fabrik vorm. Sandoz, [chloronitroaminophenols], 1904, A., i, 311.

[sulphonic acids of benzaldehyde], 1905, A., i, 141.

preparation of camphene, 1909, A., i, 247.

preparation of bromonaphthalene-1diazo-2-oxide-4-sulphonic acid, 1911, A., i, 1047.

Chemische Fabrik R. Scheuble & Co., 1:5-naphthylenediamine, 1912, A., i, 902.

Chemische Fabrik Uerdingen Lienau & Co., preparation of pinene hydrochloride, 1907, A., i, 328.
Chemische Fabrik vorm. Weiler-Ter-

Chemische Fabrik vorm. Weiler-Ter-Meer, diaminomethyldiphenylcarboxylic acid, 1904, A., i, 53.

azo-compounds from sulphonic acids of α-amino-β-naphthol, 1905, A., i,

yellow sulphur dye from nitro-amethylbenziminazole, 1905, A., i, 552.

Chemische Werke vorm. Dr. Heinrich Byk, preparation of amylamine, 1908, A., i, 395.

preparation of cholesteryl α-bromoisovalerate, 1910, A., i, 31. Chemische Werke vorm. Dr. Heinrich Byk, preparation of a soluble double compound of theophylline and piperazine, 1910, A., i, 81.

preparation of amino-aldehydes, 1910,

A., i, 322.

preparation of halogen-hydroxyalkylsubstituted xanthine bases, 1910, A., i, 766.

preparation of esters of allophanic acid, 1911, A., i, 118.

preparation of bromo-fatty acid derivatives of aminoaceto-p-phene-

tidines, 1911, A., i, 323.

preparation of readily soluble double compounds from dialkylaminodimethylphenylpyrazolone, caffeine, and aromatic acids, 1912, A., i, 516.

preparation of aluminium glycollate,

1912, A., i, 534.

preparation of readily soluble double compounds from aminoacylphenetidines, caffeine, and mineral acids, 1912, A., i, 580.

preparation of mineral acid esters of carbohydrates, the corresponding hydroxy-acids, and higher alcohols, 1912, A., i, 832.

preparation of calcium perborate, 1912,

A., ii, 1171.

Chemische Werke Schuster & Wilhemy, preparation of calcium antimony lactate, 1910, A., i, 217.

Chéneveau, C., refractive index of solu-

tions, 1904, A., ii, 641.

index of refraction of substances dissolved in non-aqueous solvents,

1906, A., ii, 509.

valency of the dissolved salt molecule deduced from the dispersive properties of the solution and from the theory of electrons, 1907, A., ii, 662.

optical properties of solutions and of dissolved substances. I. and II.,

1907, A., ii, 829, 920.

influence of temperature on the optical properties of dissolved substances, 1908, A., ii, 77.

specific refractive powers or optical constants of substances in very dilute solutions, 1910, A., ii. 365.

the viscosity of solutions, 1912, A., ii, 832.

Chéneveau, C. See also Charles Féry. Chenu, Jean, and Albert Morel, chemical researches on the thyroid and parathyroids, 1904, A., ii, 498.

Chenu, Jean. See also Maurice Doyon

and Henri Vittenet.

Chercheffsky, N., determination of the source of naphtha or its derivatives, 1910, A., ii, 660.

Chereau, F. See Louis Bouveault.

Chernoff, Lewis H. See Treat Baldwin Johnson.

Chertier, Georges. See Paul Nicolardot. Chesneau, Gabriel, the apparent diminution of the energy of a weak acid in the presence of one of its normal salts, 1904, A., ii, 390.

some causes of error in the estimation of phosphorus in cast-iron and steel,

1907, A., ii, 985.

technical assay of amorphous carbo-

rundum, 1908, A., ii, 323.

variations in the composition of ammonium phosphomolybdate; application to the estimation of phosphorus in iron, cast-iron, and steel, 1908, A., ii, 427.

analysis of columbites and tantalites,

1910, A., ii, 161.

analysis of monazite sands, 1911, A., ii, 935.

Chevalier, Jacques, spontaneous crystallisation of drops of solutions as spherulites, 1909, A., ii, 648.

Chevalier, Joseph, pharmacodynamic action of a new alkaloid contained in fresh valerian root, 1907, A., ii, 193.

influence of cultivation on the alkaloidcontent of certain Solanaceae, 1910, A., ii, 235.

variation in the amount of sparteine in common broom, 1910, A., ii, 534.

Pharmacodynamic investigations of Catha edalis, 1912, A., ii, 480.

Chevalier, Joseph. See also Alphonse Brissemoret.

Chevrotier, J. See Auguste Lumière.
Chiari, Eduard. See Rudolf Wegscheider.

Chiari, Richard, influence of narcotics of the fatty series on autolysis, 1909, A., ii, 597.

laxatives and the calcium of the intestine, 1910, A., ii, 1088.

changes in physical condition of colloids. XI. Imbibition by gelatin in acids and bases, 1911, A., i, 590.

study of autolysis by physico-chemical methods, 1911, A., ii, 307.

Chiari, Richard, and Alfred Fröhlich, changes in the excitability of the vegetative nervous system by removal of calcium, 1911, A., ii, 306. nerve excitability in oxalate poisoning, 1911, A., ii, 1018. Chiari, Richard, and Hans Januschke, inhibition of transudation and exudation by calcium salts, 1911, A., ii, 514. Chiarulli, G. See Luigi Bernardini.

Chiaves, Camilla. See Maurizio Padoa. Chick. (Miss) Frances, the supposed formation of dihydroxyacetone during fermentation and the action of animal charcoal and phenylmethylhydrazine on this substance, 1912, A., ii, 671.

Chick, (Miss) Frances, and Norman Thomas Mortimer Wilsmore, acetylketen: a polymeride of keten, 1908,

T., 946; P., 100.

some reactions of keten, 1908, P., 77. the polymerisation of keten: cyclobutan-1:3-dione ("acetylketen"), 1910, T., 1978; P., 217.

Chick, (Miss) Harriette, study of the process of nitrification with reference to the purification of sewage, 1906, A., ii, 245.

laws of disinfection, 1908, A., ii, 314. disinfection by chemical agencies and hot water, 1910, A., ii, 990.

Chick, (Miss) Harriette, and Charles James Martin, standardisation of disinfectants; emulsified disinfectants, 1909, A., ii, 171.

heat coagulation of proteins, 1910, A.,

i, 597; 1912, A., i, 519.

heat coagulation of proteins. II. The action of hot water on egg-albumin and the influence of acid and salts on reaction velocity, 1911, A., i, 822.

heat coagulation of proteins. III. The influence of alkali on reaction

velocity, 1912, A., i, 734.

heat coagulation of proteins. IV. The conditions controlling the agglutination of proteins already acted on by hot water, 1912, A., i, 922.

viscosity of casein sols, 1912, A., ii,

1042.

Chick, (Miss) Harriette. See also (Sir) William Ramsay.

See Bernard Farm-Chick. Oliver. borough Howard.

Chieffi, Generoso. See Emanuele Paternò

and Celso Ulpiani.

cashige, Masumi, oxymercuric perchlorates and the action of Chikashige, alcohol on mercury perchlorates, 1905, T., 822; P., 172.

carburetted water-gas in the Bunsen

burner, 1906, A., ii, 221.

bismuth-thallium alloys, 1907, A., ii,

copper-tellurium alloys, 1907, A., ii, 548.

Chikashigé, Masumi, metallographic and photochemical studies of the system sulphur-tellurium, 1911, A., ii, 978. the alloys of thallium and tellurium.

1912, A., ii, 1057.

Chikashigé. Masumi. and Hitoshi Matsumoto, defects of uncarburetted water-gas as fuel for laboratory use,

1904, A., ii, 254.

Chilesotti, Alberto, electrolytic reduction of acid solutions of molybdic anhydride; compounds of molybdenum trichloride. I. and II., 1903, A., ii, 730.

two complex salts of molybdenum,

1905, A., i, 177.

electrolytic reduction of molybdic acid in acid solutions, 1906, A., ii, 263, 365.

compounds of lead with nitrous acid, 1908, A., ii, 845, 948; 1909, A., ii,

Chilesotti, Alberto, and A. Rozzi, electrolytic estimation of molybdenum, 1905, A., ii, 484.

Chimienti, A. See G. Giuffrida.

Chininfabrik Braunschweig; Buchler & Co., alkine esters, 1904, A., i, 685. alkine esters of hydroxy-acids, 1905,

A., i, 367.

Chisolm, Robert Alexander, the respiratory exchange of mice bearing transplanted carcinoma, 1911, A., ii,

the size and the growth of the blood in tame rats, 1911, A., ii, 1107.

the influence on the blood of the rat of the presence of a transplanted sarcoma, 1911, A., ii, 1108.

the creatine content of muscle in malignant disease and other pathological conditions, 1912, A., ii, 787.

Chisolm, Robert Alexander. See also Arthur Edwin Boycott.

Alfred, pharmacology of Chistoni, diglycollosalicylic acid, 1911, A., ii, 314.

Chitrin. See G. Povarnin.

Chittenden, Russell Henry, physiological economy in nutrition, 1905, A., ii, 179.

Chittenden, Russell Henry, and Silas Palmer Beebe, effect of alcohol on uric acid excretion, 1903, A., ii, 562.

Chittock, C., migration constants of dilute solutions of hydrochloric acid, 1909, A., ii, 293.

Chlopin, Witalius G., formation of oxidising agents in air under the influence of ultra-violet light, 1911, A., ii 717. Chō, Shun-ichí. See Riko Majima.

Cheay, Eugène, action of heat on dry pancreatic extract, 1910, A., ii, 141. gastric proteolysis, 1910, A., ii, 516.

gastric proteolysis, 1910, A., ii, 510.
gastric and peptic digestion of fibrin;
variations of the ratio fibrin/hydrochloric acid solution, 1910, A., ii, 728.

influence and rôle of fatty matters in the catalytic activity of hepatic extracts, 1911, A., ii, 747.

Chocenský, Karl. See Josef Hanuš and Julius Stoklasa.

Chodat, Robert, specific action of peroxydases, 1906, A., i, 779.

oxydases. IV. Cresol-tyrosinase, a reagent for peptides, polypeptides, proteins, and proteolysis by microorganisms, 1912, A., ii, 399. oxydases. V. Behaviour of proteins

oxydases. V. Behaviour of proteins and their derivatives with the p-cresol-tyrosinase reagent, 1912,

A., ii, 611.

Chodat, Robert, and Alexis Bach, the function of peroxides in the chemistry of the living cell. III. Peroxides due to oxidising ferments, 1903, A., i, 219.

function of peroxides in the living cell. V. Resolution of so-called oxydases into oxygenases and peroxydases, 1903, A., i, 378.

function of peroxides in the living cell.
VII. Chemical nature of oxydases,

1904, A., i, 359.

oxidising ferments, 1904, A., i, 704.

Chodat, Robert, and J. Pasmanik, oxidising ferments. II. Distribution [phenomena] in the action of peroxydase in presence of catalase, 1907, A., i, 575.

oxidising ferments. III. A hypothesis as to the action of ferments, 1907,

A., i, 575.

Chodat, Robert, and W. Staub, oxidising ferments. I. The mode of action of tyrosinase, 1907, A., i, 574.
 oxidising ferments. IV. Specific

oxidising ferments. IV. Specific nature of tyrosinase and its action on the products of protein degradation, 1907, A., i, 882.

Chodat, Robert. See also Alexis Bach. Cholin, N., oxidation of indigo by potassium permanganate, 1905, A., i, 350

Chonin, G. W., new heptane: βδ-dimethylpentane, 1905, A., i, 729. βδ-dimethylpentane and its occurrence in Caucasian naphtha, 1909, A., i, 450.

Chonowsky, Bronislaw F., transformations of ricincleic acid, 1909, A., i, 760.

Chonowsky, Bronislaw F. See also Alexander M. Saytzeff.

Chorower, Ch. See Alfred Werner.

Chou, Tsan Quo, and William Henry Perkin, jun., experiments on the synthesis of the terpenes. Part XVII. d-Δ³-p-menthenol (8) and d-Δ³-880-1 p-menthadiene, 1911, T., 526; P., 57.

Chouchak, D., and Isidore Pouget, colorimetric estimation of nitrogen in soils; the Nessler test, 1908, A.,

ii, 223.

Chouchak, D. See also Isidore Pouget. Choudhuri, Kumud Nath: See Haridas Saha.

Chouriguine, alloys of platinum with aluminium, 1912, A., ii, 849.

Chowansky, Sergius. See Alexander M. Saytzeff.

Chowrenko, M. A., the reducing properties of yeast; hydrogenation of sulphur in alcoholic fermentation, 1912, A., ii, 972.

Chrétien, H. See J. Tribot.

Chrétien, Paul, compounds of complex cyanides with the amines of the fatty series, 1903, A., i, 155.

fatty series, 1903, A., i, 155. Prussian and Turnbull's blues; a new class of complex cyanides, 1903, A.,

i 885

compounds of hydroferrocyanic and sulphuric acids; sulpho-substitution in complex cyanides; hydroxyferrocyanides, 1905, A., i, 578. reduction of antimony selenide, 1906,

A., ii, 550.

Chrétien, Paul, and Joseph Guinchant, compounds of hydroferrocyanic acid with organic substances, 1903, A., i, 612.

heat of neutralisation of hydroferrocyanic acid; heat of formation of its compounds with ether and with acetone, 1903, A., ii, 589.

antimony sulphide and antimony,

1906, A., ii, 366.

Chrétien, Paul. See also Joseph Guinchant.

Chrisler, V. L., absorption of gases by the anode in glow discharge, 1909, A., ii, 961.

Christensen, Anders C., bromine derivatives of the cinchona alkaloids and the corresponding compounds containing less hydrogen, 1904, A., i, 184, 520.

dibromo-additive compounds of the cinchona alkaloids, 1905, A., i, 226. estimation of metallic iron in ferrum reductum, 1905, A., ii, 654.

Christensen, Anders C., compounds of the hydrochlorides of the alkaloids with the chlorides of the heavy metals and the corresponding bromine compounds, 1906, A., i, 875.

Christensen, Harald R., two new fluorescent denitrification bacteria, 1904,

A., ii, 277.

biological method for estimating alkali carbonates in soils, 1908, A., ii, 67. influence of humus on the decomposition of urea, 1910, A., ii, 738.

Christensen, P., estimation of phosphoric acid as phosphomolybdic acid, 1908,

A., ii, 895.

Christiaens, A., Aime Gérard, and C. Thomas, on the so-called thermosoluble protein of Bence-Jones, 1910, A., ii, 733.

Christiansen, Christian, origin of the fermentation of layers in solutions observed by A. Sinding-Larsen, 1906,

A., ii, 74.

Christiansen, Johanne, free and combined hydrochloric acid in stomach contents. I. Estimation of free hydrochloric acid in gastric juice, 1912, A., ii, 1187.

free and combined hydrochloric acid in stomach contents. II. Titrations of the products of peptic digestion,

1912, A., ii, 1187.

free and combined hydrochloric acid in stomach contents. III. titrations of pancreatin-erepsin di-gests and of amino-acids and polypeptides, 1912, A., ii, 1187.

free and combined hydrochloric acid in stomach contents. IV. The estimation of total hydrochloric acid in stomach contents, 1912, A., ii,

Christie, G. See Karl Burkheiser. Christie, William Alexander Kynoch. See Frederick Pearson Treadwell.

Christoff, A., absorption of carbon dioxide by aqueous salt solutions and binary liquid mixtures, 1905, A., ii, 806.

relation of absorption to surface tension, 1906, A., ii, 525.

non-electrolytic solution of mercury in water and other liquids, 1908, A., ii, 696.

dependence of absorption on surface tension, 1912, A., ii, 435.

Christomanos, Anastasios Karl, combustion of magnesium, 1903, A., ii, 546. indirect estimation of calcium and magnesium; the magnesites Greece, 1904, A., ii, 87.

Christomanos, Anastasios Karl, preparation of phosphorus tribromide, 1904. A., ii, 614, 728.

estimation of phosphorus in solutions,

1904, A., ii, 776.

solubility of phosphorus in ether and benzene, 1905, A., ii, 449.

test for oxygen, 1906, 896.

Christopher, Harold, a simple apparatus for sublimation in a vacuum, 1911, P., 236,

Christopher, Harold, and Thomas Percy Hilditch, molecular rotatory power in normal homologous series. Part II. The menthyl esters of the a-bromoaliphatic acids, 1911, P., 312; 1912, T., 202.

Christopher, Harold, and Samuel Smiles. the synthesis of derivatives of thioxanthone. Part IV. Synthesis from aromatic sulphinic acids, 1911, T., 2046; P., 265.

some reactions of \$\beta\$-naphthasulphonium-quinone, 1912, T., 710; P., 93.

Chrustaleff, A., estimation of urea in urine, 1907, A., ii, 142.

Chrystall, Edwin Rodney. See John Norman Collie.

Chrzaszoz, Tadeusz, amylase of ungerminated cereals and malt, 1910, A., ii, 994.

diastase, 1912, A., i, 402.

Chrzaszcz, Tadeusz. See also Leopold Adametz.

Chuard, Ernest, new method for combating mildew by means of copper oxychloride, 1910, A., ii, 443.

Chuard, Ernest, and Rudolf Mellet. variations in the proportion of nicotine in the different organs of the tobacco plant during growth, 1912, A., ii, 979.

Chuit, Philippe, chemically pure a- and 8-ionones, their separation, and hydrogen sulphite compounds, 1904, A., i, 258.

preparation of aromatic hydroxyaldehydes, 1907, A., i, 535.

Chuit, Philippe, and Fr. Bolsing, new coumarins and some of their derivatives, 1906, A., i, 185.

two homosalicylaldehydes derived from m-cresol, 1906, A., i, 282.

Chumanoff, S., equilibrium in the system: ZnSO₄-KOH-H₂O, 1912, A., ii, 31.

hydration of calcium oxide, 1912, A., ii, 349.

equilibrium in the systems CaX MeOH-H₂O, 1912, A., ii, 543.

Chumanoff, S., simple seal to vessel containing standard stannous chloride, 1912, A., ii, 680.

Churchill, Jesse Briggs. See Otto Wal-

lach.

Chwala, Augusto, a reaction of phenylcarbamine, 1907, A., ii, 825. evaluation of barium peroxide, 1908,

A., ii, 431.

Chwala, Augusto, and H. Colle, assay of the higher lead oxides and some new reactions of lead salts, 1911, A., ii,

Chwala, Augusto, and V. Macri, analysis of a mineral containing copper, bismuth, lead, silver, calcium, iron, and quartz, 1908, A., ii, 987.

Chwala, Augusto. See also Paul Fried-

länder.

Chwolles, Abraham, application of Kreis's reaction to preparations almonds, 1903, A., ii, 250.

Chwolles. Abraham. See also Werner

Cialdea, Umberto, electrolysis of acids and bases, 1909, A., ii, 484.

apparatus to demonstrate the different velocities of displacement of electrolytic ions, 1909, A., ii,

method of demonstrating the phenomenon of dialysis in a very short time, 1909, A., ii, 471.

Cialdea, Umberto. See also Luigi Fran-

Ciamician, Giacomo Luigi, the development of the chemistry of pyrrole in the last quarter-century, 1905, A.,

modern theories of double linkings and the constitutional formula of

pyrrole, 1906, A., i, 104.

chemistry in space, 1908, A., ii, 137.

chemical action of light, 1908, A., ii, 914.

molecular-theoretical considerations regarding electrolytic dissociation, 1909, A., ii, 965.

Ciamician, Giacomo Luigi, and Ciro Ravenna, behaviour of certain organic substances in plants, 1908, A., ii, 773.

synthesis of salicin by means of plants,

1909, A., ii, 604.

formation of glucosides by means of plants, 1910, A., ii, 234.

behaviour of benzyl alcohol in plants, 1911, A., ii, 643.

genesis of the alkaloids in plants, 1911, A., ii, 761.

Ciamician, Giacomo Luigi, and Paul G. Silber, chemical action of light, 1903, A., i, 39, 171, 562, 626; 1904, A., i, 161; 1905, A., i, 385; 1906, A., i, 10; 1907, A., i, 587; 1908, A., i, 277, 555; 1909, A., i, 306, 396; 1910, A., i, 299, 489, 496; 1911, A., i, 513, 647, 650.

action of hydrogen cyanide on aldehyde-ammonia, 1907, A., i, 19.

reduction of nitrobenzene by aliphatic alcohols in light, 1907, A., i, 119. a-amino- and imino-acids, 1907, A., i,

484.

chemical action of light. Autoxidations. I. and II., 1912, A., i, 174, 645.

chemical action of light XXIII. Behaviour of methyl ethyl ketone,

1912, A., i, 537.

Ciancarelli, Ugo. See Celso Ulpiani. Cibulka, J., estimation of combustible sulphur in graphite, 1910, A., ii,

Ciesielski, K., derivatives of p-xylyl

cyanide, 1907, A., i, 409.

Cigler, M. K., optical method for determining the relative hardness of contiguous structural elements of alloys, 1908, A., ii, 593.

Cihlar, M., synthetic isovaleraldehyde and its condensation products, 1904,

A., i, 370.

Cingolani, Masaniello, chemical equation of the fermentation of uric acid, 1904, A., ii, 139.

cerium selenates, 1908, A., ii, 385. denitrification, 1909, A., ii, 171.

Cingolani, Masaniello. See also Emanuele Paternò and Celso Ulpiani.

Cirelli, D. See Luigi Balbiano. Citron, Julius, and Karl Reicher, the

lipolytic powers of syphilitic sera, and the diagnostic value of lipolysis by sera, 1909, A., ii, 80.

Ciusa, Riccardo, action of phosphorus pentasulphide on benzophenoneoxime, 1904, A., i, 425.

action of bromine on \u00c4-cumene, 1906, A., i, 942.

chemical action of light, 1906, A., i,

formation and behaviour of thiobenzanilide, 1906, A., i, 953.

additive products formed by trinitrobenzene with aromatic substances containing the side-chain :CH:N:, 1906, A., i, 962.

action of hydroxylamine on ketones of the type CHR:CH:CH:CH:CO:R,

1907, A., i, 62.

Ciusa, Riccardo, action of light on oximes, 1907, A., i, 137.

observations on aldehydes, 1907, A.,

aromatic nitro derivatives, 1907, A., i, 874; 1911, A., i, 931; 1912, A., i,

action of nitrobenzene on aldehydephenylhydrazones in the light. 1908, A., i, 460.

basic properties of the hydrazones, 1909, A., i, 737.

nitro-derivatives, and nitro-hydra-

zones, 1912, A., i, 133. Ciusa, Riccardo, and Claudio Agostinelli, additive products of derivatives of trinitrobenzene with certain aromatic nitrogen compounds, 1906, A., i. 891; 1907, A., i, 553.

Ciusa, Riccardo, and Alessandro Bernardi, compounds of phenylhydrazine with phenols, 1909, A., i,

action of hydroxylamine on ketones of the type CHR:CH:CH:CH:CQ,

1910, A., i, 684.

Ciusa, Riccardo, and Riccardo Luzzatto. behaviour of hydroxylamine in the animal organism, 1908, A., ii, 876.

Ciusa, Riccardo, and Maurizio Padoa, limiting cases between polymorphism and isomerism, 1910, A., i, 196.

Ciusa, Riccardo, and Ugo Pestalozza, action of nitrogen peroxide on aldehydephenylhydrazones, A., i, 833.

relations between a-benzaldehydephenylhydrazone and other nitrogen compounds, 1909, A., i, 747;

1911, A., i, 678.

Ciusa, Riccardo, and Gino Scagliarini, strychnine and brucine, 1910, A., i, 583; 1911, A., i, 155, 1016; 1912,

A., i, 798.

Ciusa, Riccardo, and Alfredo Terni, action of hydroxylamine on ketones of the type CHR:CH:CH:CH:CO. R, 1908, A., i, 762.

action of hydroxylamine on ketones of the type R.CH:CH:CH:

COPh, 1911, A., i, 918.

Ciusa, Riccardo, and Luigi Vecchiotti, hydrazones, 1911, A., i, 810.

additive products of derivatives of trinitrobenzene with some nitrogenous aromatic substances, A., i, 33.

additive products of trinitrobenzene: derivatives with certain aromatic nitrogen compounds, 1912, A., i, 755.

Ciusa, Riccardo, See also Gaetano Minunni and Giuseppe Plancher. Civetta, Angelo. See Oreste Prandi.

Claassen, H., the solubility of lime in solutions of sucrose, 1911, A., i, 606.

Claassen, Oswald, estimation of ammonia in ammonium chloride, 1909, A., ii, 935.

rapid estimation of nitrogen, 1911,

A., ii, 1027.

new method for the estimation of sugars in potatoes, 1912, A., ii, 813.

Claasz, Max, ortho-substituted sulphinic acids, 1911, A., i, 436.

diazonium sulphinates, 1911, A., i,

sulphazone dyes, 1912, A., i, 389. "thionylindigo," 1902, A., i, 513.

reduction of disulphides by dextrose; preparation of mercaptans, 1912, A., i, 851.

Clacher, William, fat extraction appar-

atus, 1910, A., ii, 908.
Clack, Basil W., coefficient of diffusion, 1909, A., ii, 125.

Claessen, Conrad, preparation of tetranitromethane, 1907, A., i, 885. purification of glycerol dinitrate, 1909, A., i, 869.

Claessens, F., ψ -butylethylene glycol, 1909, A., i, 127.

a new isomeride of pinacolin, 1909, A., i, 698.

Claisen, Ludwig, mechanism of the ethyl acetoacetate syntheses, 1905, A., i, 258,

acetalation of aldehydes and ketones, 1907, A., i, 940.

5-methylisooxazole, 1909, A., i. 185. preparation of 5-methylisooxazole from the acetals of tetrolaldehyde, 1911, A., i, 491.

Claisen, Ludwig, and Otto Eisleb, rearrangement of allyl ethers of phenols into C-allylphenols, 1912, A., i, 965. Claisen, Ludwig, Reinhard Feyerabend,

Rudolf Schulze, and Richard Gärtner, syntheses with sodamide, 1905, A., i, 286.

Claisen, Ludwig, Emil Haase, and Alfred Behre, transformation of acetophenone O-benzoate into dibenzoylmethane, 1904, A., i, 67.

Claisen, Ludwig, Walter Peltz, Karl Streitwolf, and Paul Thomaschewsky, propargylaldehyde [propiolaldehyde] and phenylpropargylaldehyde [phenylpropiolaldehyde], 1904, A., i, 14.

See Treat Clapp, Samuel Hopkins. Baldwin Johnson, Thomas Osborne, and Henry Lord Wheeler.

Clar, Karl. See Hermann Standinger. Clarens, estimation of nitrates, 1910, A., ii, 752.

Clarens. See also André Job.

Clark, Alfred, the clinical application of ergotamine (tyramine), 1910, A., ii, 985.

Clark, Ernest Dunbar, properties of Lintner's soluble starch, 1910, A., i,

544; 1912, A., i, 240.

Clark, Ernest Dunbar. See also Carl Lucus Alsberg, Fred J. Seaver, and Henry Clapp Sherman.

Clark, Friend Ebenezer. See Clarence McCheyne Gordon and Ira Remsen.

Clark, George Herbert, amylolytic action of urine, 1905, A., ii, 540.

Clark, John, obituary notice of, 1908, T.,

2275.

Clark, Robert H., rates of the reactions in solutions containing potassium

bromate, potassium iodide, and hydrochloric acid, 1907, A., ii, 77. new type of catalysis; acceleration by chromic acid of the reaction between bromic and hydriodic acids, 1907,

A., ii, 609.
mechanism of the acetoacetic ester
synthesis. I. The condensation of

acetone with oxalic ester, 1908, A., i, 124.

Clark, Robert H. See also Arthur

Hantzsch and Martin Andre Rosanoff. Clark, W. See Richard Lorenz.

Clark, William Mansfield. See Harmon Northrop Morse.

Clarke, (Miss) B. May, determination of some heats of mixture, 1905, A., ii, 303.
 Clarke, (Miss) B. May. See also Emil

Bose.

Clarke, Charles Hugh, and Francis Ernest Francis, a-amino-a-phenylacetamide and some of its derivatives, 1911, T., 319, P., 22.

method for the preparation of derivatives of a-cyanoacrylic acids, 1911,

A., i, 205.

some derivatives of triacetonamine, 1912, A., i, 721.

Clarke, Elisha Davis. See Henry Augustus Torrey.

Clarke, Frank Wigglesworth, a thermochemical constant, 1903, A., ii, 8.

a pseudo-serpentine from Stevens County, Washington, 1904, A., ii, 51.

mineral analyses, 1904, A., ii, 415. analyses of rocks, 1904, A., ii, 669. action of silver nitrate and thallous nitrate on certain natural silicates, 1905, A., ii, 707. Clarke, Frank Wigglesworth, composition of the red clay, 1907, A., ii, 972. Gibbs memorial lecture, 1909, T., 1299; P., 171.

chemical stability, 1912, A., ii, 928. Clarke, Frank Wigglesworth, and Charles K. Leith, composition of glauconite and greenalite, 1904, A., ii, 134.

Clarke, Frank Wigglesworth, and George Steiger, action of ammonium chloride on silicates, 1903, A., ii, 380.

californite, 1905, A., ii, 725.

Clarke, George, jun., and Shrish Chandra Banerjee, a glucoside from Tephrosia purpurea, 1909, P., 16; 1910, T., 1833; P., 213.

Clarke, George, jun. See also Frederic Stanley Kipping and William Jackson

Pope.

Clarke, Herbert Edmund, and Herbert Lister Bowman, the Dokáchi meteoric

stone, 1911, A., ii, 616.

Clarke, Herbert Edmund, and David Leonard Chapman, the measurement of a homogeneous chemical change in a gas; (the thermal decomposition of ozone), 1908, T., 1638; P., 190.

Clarke, Herbert Edmund. See also

Herbert Lister Bowman.

Clarke, Hans Thacher, the relation between reactivity and chemical constitution of certain halogen compounds, 1910, T., 416; P., 26.

the relation between residual affinity and chemical constitution. Part II. Certain compounds of nitrogen, 1911, T., 1927; P., 243.

4-alkyl-1:4-thiazans, 1912, T., 1583;

P., 218.

the relation between residual affinity and chemical constitution. Part III. Some heterocyclic compounds, 1912, T., 1788; P., 220.

T., 1788; P., 220.
Clarke, Hans Thacher, and Samuel Smiles, diethoxythioxan; a relation between the refractive power and chemical activity of some sulphur compounds, 1909, T., 992; P., 145; discussion, P., 146.

synthesis of derivatives of thioxanthone. Part III. 1:4-Dihydroxythio-xanthone, 1911, T., 1533; P., 212.

Clarke, Latham, preparation of certain amines, 1905, A., i, 427.

a new octane [δ-methylheptane], 1907, A., i, 169.

derivatives of dihydroanthracene, 1908, A., i, 330.

diethylisopropylmethane [β-methyl-γ-ethylpentane], 1908, A., i, 493.

Clarke, Latham, methylethylisobutylmethane [88-dimethylhexane], 1908, A., i, 593.

isooctane [8-methylheptane], 1909,

A., i, 125.

y-methylheptane, 1909, A., i, 349.

dissobutyl or Be-dimethylhexane, 1909, A., i, 350.

By-dimethylhexane, 1911, A., i, 345. 8-methyloctane, 1912, A., i, 405.

combustion of volatile organic liquids, 1912, A., ii, 602.

Clarke, Latham, and Sydney A. Beggs, βδ-dimethylheptane, 1912, A., i, 150. Be-dimethylheptane, 1912, A., i, 150.

Clarke, Latham, and Paul Whittier Carleton, action of magnesium ethyl bromide on anthraquinone, 1912, A., i, 29.

Clarke, Latham, and Gustavus J. Esselen, jun., formation of benzaldehyde and 2:4:6-tribromoaniline from 3:5dibromo-4-aminobenzhydrol by the action of bromine, 1911, A., i, 725.

Clarke, Latham, and Charles Loring Jackson, rosocyanin, 1908, A., i, 670. Clarke, Latham, and Webster Newton

Jones, ββγ-trimethylpentane, 1912, A., i, 150.

Clarke, Latham, and Richard Harkness Patch, splitting of aminoarylcarbinols by the action of bromine, 1912, A., i,

Clarke, Latham, and Emile Raymond Riegel, y-ethylhexane, 1912, A., i, 405.

Clarke, Latham, and Randolph Norris Shreve, isohexane and a new dodecane, 1906, A., i, 473.

Clarke, Latham. See also Charles Loring Jackson.

Clarke, Mary Eva. See Joseph Hoeing Kastle.

Clarke, (Miss) Rosalind, phenyl mesaconates, 1908, A., i, 335.

Clarke, (Miss) Rosalind. See also Alfred Senier.

Clarke, Robert William, estimation of dissolved oxygen absorbed by sewage effluents containing nitrites and of nitrites in sewage effluents and water, 1911, A., ii, 928.

Clarke, Reginald William Lane, the action of phosphorus pentachloride on some unsaturated compounds, 1910,

T., 890; P., 96.

Clarke, Reginald William Lane, and Arthur Lapworth, reactions involving the addition of hydrogen cyanide to carbon compounds. Part VI. The action of potassium cyanide on pulegone, 1906, T., 1869; P., 285.

Clarke, Reginald William Lane, and Arthur Lapworth, an extension of the benzoin synthesis, 1907, T., 694 : P., 90.

cyanocarone, 1909, P., 307; 1910, T.,

Clarke, Reginald William Lane, Arthur Lapworth, and Elkan Wechsler, condensation of ketones containing the group CH2 CO CH: with esters in presence of sodium ethoxide, 1907, P., 294; 1908, T., 30. Clarke, Reginald William Lane.

also George Barger.

Clarke, S. G. See Frederick Ibbotson. Clarke, Thomas Wood, and William Holdsworth Hurtley, sulphohæmoglobin, 1907, A., i, 992. Clarke, Thomas Wood. See

See also Archi-

bald Edward Garrod.

Classen, Alexander, standardisation of permanganate, 1903, A., ii, 759. electrolytic analysis, 1908, A., ii, 226,

432, 529.

Claude, Georges, the extraction of oxygen by the partial liquefaction of air with reflux action, 1904, A., ii, 23.

application of the partial liquefaction of air with reflux action to the complete separation of air into pure oxygen and pure nitrogen, 1906, A., ii, 16.

the liquefaction of air by expansion with performance of external work,

1906, A., ii, 17, 884.

composition of atmospheric air, 1909, A., ii, 565.

preparation of argon, 1910, A., ii, 1061.

luminescent tubes of neon, 1911, A., ii, 602.

industrial preparation of pure nitrogen, 1911, A., ii, 1084.

volatilisation of electrodes in a tube of neon, 1911, A., ii, 1087.

Claude, Georges, and René J. Lévy, production of high vacua by means of liquid air, 1906, A., ii, 347.

Claude, H., and A. Baudouin, effects of certain pituitary extracts, 1912, A., ii, 189.

Claudet, Frederic Just, obituary notice of, 1907, T., 660.

Claus, Reinhold. See Richard Anschütz. Claus, Richard, and Gustav Embden, pancreas and glycolysis, 1905, A., ii, 179, 404.

Clausen, H., manurial experiments on rye with different forms of nitrogen, 1903, A., ii, 174.

Clausen, H., ammonia or sodium nitrate? 1904, A., ii, 586.

fruit tree manures, 1905, A., ii, 478. specific action of phosphoric acid on oat plants grown in black moor soil, 1905, A., ii, 607.

manurial trials with sodium nitrate and ammonium sulphate, 1908, A.,

ii. 981.

Clausen, Heinrich, influence of temperature on the density and electrical conductivity of aqueous salt solutions, 1912, A., ii, 119.

Clauser, Robert, catechin, 1903, A., i, 270. Clauser, Robert, and Georg Schweitzer, estimation of the nitroso-group, 1903,

A., ii, 180.

Clausmann, Paul, action of ozone on carbon monoxide, 1910, A., ii, 608. estimation of bromine in presence of chlorides and iodides, 1911, A., ii, 329.

Clausmann, Paul. See also Armand

Gautier.

Claussner, Paul, Thiele's xylene-oxidation and terephthalaldehyde-green, 1905, A., i, 791.

Claussner, Paul. See also Alfred Wohl. Clavari, Ettore. See Italo Bellucci.

Clay, J. See Heike Kamerlingh Onnes. Clayton, Arthur, the residual affinity of the coumarins and thiocoumarins as shown by their additive compounds, 1908, T., 524; P., 26.

the coumarin condensation, 1908, T.,

2016; P., 229.

the colour and constitution of the amino-coumarins, 1910, T., 1350; P., 169.

the action of alkalis on certain derivatives of coumarin, 1910, T., 1388; P., 166.

the constitution of coumarinic acid, 1910, T., 2102; P., 230.

notes on new commarin derivatives, 1911, P., 245.

Clayton, Arthur, and William Godden. the thio-analogues of coumarin and its derivatives, 1912, T., 210; P., 6.

See also Gilbert Clayton, Arthur. Thomas Morgan.

Clayton, Edwy Godwin, discoloured rain, 1903, P., 101; discussion, P., 103. further experiments with phosphorus

sesquisulphide, 1903, P., 231. the characteristics and chemical com-

position of some early matches, 1911, P., 229.

Clayton Aniline Co., Ltd., preparation of a blue sulphur dye, 1903, A., i, 778.

Clayton Aniline Co., Ltd., preparation of p-nitroaniline, 1904, A., i, 393.

Clayton Aniline Co., Ltd. See also Charles Weizmann.

Cleaverley, (Miss) Louisa. See Albert Ernest Dunstan.

Clemens, Paul. See Albert Edinger and Emil Fromm.

Clément, E., action of formic acid on the muscular system, 1904, A., ii, 430.

action of formic acid on tremors, 1905, A., ii, 408.

Clement, John Kay, formation of ozone at high temperatures, 1904, A., ii, 479.

Clement, John Kay. See also Eugene Thomas Allen and Arthur Louis Day. Clement, Louis. See Paul Nicolardot. Clemm, Hans. See Theodor Curtius.

Clemmensen, Erik, and Arnold H. C. Heitman, ureides and cyanamides of the dialkylglycollic acids, 1908, A., i, 771.

ureides and cyanamides of the hydroxy-fatty acids. II., 1909, A.,

methylenedisalicylic acid [methanedisalicylic acid] and its reaction with bromine and iodine, 1911, A., i,

Clerici, Enrico, viscosity of the liquids used for the mechanical separation of minerals, 1911, A., ii, 257.

Cleve, Per Theodor, memorial lecture on (Thorpe), 1906, T., 1301; P., 169.

Clewer, Hubert William Bentley. See Frank Tutin.

Clibbons, Douglas Arthur, and Francis Ernest Francis, the catalytic decomposition of nitrosotriacetonamine by alkalis, 1912, T., 2358; P., 291.

Clinch, John Aldous. See Wilhelm Biltz.

Clo, J. H., effect of temperature on the ionisation of a gas, 1911, A., ii, 355.

Cloez, Charles, solubility of gypsum in solutions of sodium chloride, 1903, A., ii, 291.

plaster of Paris. I. Dehydration of gypsum, 1903, A., ii, 292. plaster of Paris. II. "Setting," 1903,

A., ii, 292.

Cloetta, Max, behaviour of atropine in various animals, 1908, A., ii, 1061.

the behaviour of antimony preparations in the body and the "accustoming" to the same, 1911, A., ii, 419.

Cloetta, Max, and H. F. Fischer, the behaviour of digitoxin in the organism, 1906, A., ii, 474.

Closson, Oliver Eugene, elimination of creatinine, 1906, A., ii, 471.

Closson, Oliver Eugene. See also Lafayette Benedict Mendel and Frank Pell

Underhill.

Cloud. Thomas Charles, estimation of minute quantities of arsenic in copper ores and metallurgical products, 1904, A., ii, 515.

estimation of minute quantities of bismuth in copper and copper ores,

1904, A., ii, 518.

Clough, George William, condensation of benzophenone chloride with a- and Bnaphthols, 1906, T., 771; P., 109.

Clough, George William. See also Alex-

ander McKenzie.

Clous, William Thomas, hydrogen sulphide generator, 1909, A., ii, 137. action of water containing carbon di-

oxide on iron, 1911, A., ii, 206.

Clover, Alphonso Morton, existence of hydrogen tetroxide, 1903, A., ii, 417. addition of iodine and potassium iodide to organic compounds containing the carbonyl group, 1904, A., i, 322. the terpene oils of Manila elemi, 1907,

A., i, 542.

Clover, Alphonso Morton, and Alexis Charles Houghton, action of hydrogen peroxide on anhydrides and the formation of organic acid, peroxides, and per-acids, 1904, A., i, 707.

Clover, Alphonso Morton, and Harry Clary Jones, conductivities, dissociations, and temperature-coefficients of conductivity between 35° and 80° of solutions of a number of salts and organic acids, 1910, A., ii, 256.

Clover, Alphonso Morton, and George Fletcher Richmond, hydrolysis organic peroxides and per-acids, 1903,

A., i, 396.

Clowes, Ernest Seabury. See John

Charles Olsen.

Clowes, Frank, and John William Henry Biggs, solubility of atmospheric oxygen in sea-water and in water of different degrees of salinity, 1904, A., ii, 392.

Clowes, George Henry Alexander, experiments on urine, 1903, A., ii, 562.

quantitative estimation of phosphates in stomach contents, 1903, A., ii,

the theory of indicators and its bearing on the analysis of physiological solutions by means of volumetric methods, 1905, A., ii, 56.

Clowes, George Henry Alexander, and W. S. Frisbie, potassium and calcium in mouse tumours, 1905, A., ii, 743.

Coates, Charles Edward, the series $C_n H_{2n-2}$ in Louisiana petroleum, 1906, A., i, 329.

Coates, Charles Edward, and Alfred Best. hydrocarbons in Louisiana petroleum, 1904, A., ii, 45; 1905, A., ii, 833.

Coates, Joseph Edward, lighter constituents of air, 1907, A., ii, 257.

Coates, Joseph Edward. See also Fritz Haber, John Kenneth Harold Inglis, and Kennedy Joseph Previté Orton.

Cobb, Bayard G., phenomena observed during the electrolysis of concentrated sulphuric acid, 1904, A., ii,

724.

influence of high potential discharge on amorphous gold, 1909, A., ii, 489. Cobb, John William, the formation of

silicates, glasses and glazes, 1909, P., 165.

the influence of impurities on the corrosion of iron, 1911, A., ii, 1092.

Cobb, Philip Howard, further investigations of the two chlorides of o-sulphobenzoic acid, 1906, A., i, 499. addition of hydrogen cyanide to un-

saturated compounds, 1911, A., i,

Cobb, Philip Howard, and George Prescott Fuller, further investigation of certain derivatives of o-sulphobenzoic acid, 1911, A., i, 637.

Cobb, Philip Howard. See also Arthur

Michael.

Cobb, Percy W., action of pepsin, 1905, A., ii, 466.

A., ii, 981.

carbohydrate metabolism in partially deparcreated dogs, 1905, A., ii, 540. Cobb, Victor. See Gregory Paul Baxter. Cobellis, Fabrizio. See Arnaldo Piutti. Cobenzl, A., some apparatus and methods for the photochemical laboratory, 1912,

Coblentz, Virgil, and Otto B. May, [volumetric estimation of] phosphoric acid, 1908, A., ii, 428. reduced iron, 1909, A., ii, 704.

Coblentz, William Weber, infra-red reflection spectra, 1908, A., ii, 338. selective reflection and molecular

weight of minerals, 1909, A., ii, 281. Cobliner, Jesaiah. See Alfred Einhorn. Cobliner, S., antitrypsin, 1910, A., ii, 623.

Coca. See Emil von Dungern.

Cocheret, Daniel Hermann. See Frans Antoon Hubert Schreinemakers.

Cochin, G. See Géza Austerweil.

Cochran, Carlos Bingham, estimation of fat in [milk, condensed milk, and malted] infant and invalid foods, 1905, A., ii, 618.

225

Cochran, Carlos Bingham, inversion of sucrose by acid mercuric nitrate, 1907, A., ii, 586.

Cock, G., fused salt hydrates as solvents freezing-point determinations,

1909, A., ii, 18.

Cockburn, Thomas, and John W. Black, estimation of quinine as acid citrate in certain organic liquids, 1911, A., ii, 944.

Cockburn, Thomas, A. D. Gardiner, and John W. Black, gravimetric separation of zinc and nickel, 1912, A., ii, 1096.

Cocking, T. Tusting, contamination of zinc and its compounds with lead, 1906, A., ii, 754.

Cocksedge, Herbert Edwin, tellurium dicyanide, 1908, T., 2175; P., 269.

boron thiocyanate, 1908, T., 2177; P., 270,

Coebergh, J. H. M., occurrence of tin in canned vegetables, 1912, A., ii,

Coehn, Alfred, electrochemical behaviour of radium, 1904, A., ii, 334.

liquid crystals, 1905, A., ii, 14.

electrical phenomena accompanying the decomposition of ammonium, 1906, A., ii, 725.

ammonium amalgam, 1907, A., ii,

683.

optical perceptibility and electrical migration of dissolved molecules, 1909, A., ii, 841.

photochemical equilibria. IV. Photochemical equilibrium of

vapour, 1910, A., ii, 373.

Coehn, Alfred, and Hans Becker, photo-chemical equilibria. III. Photochemical equilibrium of carbonyl chloride, 1910, A., ii, 173.

photochemistry of sulphuric acid, 1910,

A., ii, 248.

Coehn, Alfred, and Moritz Gläser, formation of metal oxides. I. The behaviour of cobalt and nickel solutions at the anode, 1903, A., ii, 80.

Coehn, Alfred, and Gustav Grote, action of light on water vapour and electro-

lytic gas, 1912, A., ii, 1118.

Coehn, Alfred, and Carl Ludwig Jacobsen, electrochemical behaviour of gold and its passivity, 1907, A., ii, 926.

Coehn, Alfred, and Stephan Jahn, electrolytic reduction of canbon dioxide. 1904, A., ii, 614.

Coehn, Alfred, and Wilhelm Kettembeil. electrolytic separation of metals of the alkaline earths, 1904, A., ii, 168.

Coehn, Alfred, and Yūkichi Osaka, formation of metal oxides. II. Anodic oxidation of metals and electrolytic development of oxygen, 1903, A., ii, 261.

Coehn, Alfred, and Alexandra Wassiljewa, photochemical equilibrium of hydrogen chloride, 1909, A., ii, 846.

Coert, J. H. See Oskar Baudisch.

Coffetti, Giulio, relations between the nature and properties of solvents and their ionising capacity; electrical conductivity and its temperature coefficients in organic solvents, 1903, A., ii, 404.

new method of estimating cuprous oxide in copper, 1909, A., ii, 349.

Coffetti, Giulio, and Fritz Foerster. cathode potentials necessary for the electrolytic deposition of certain metals from solutions of their sulphates, 1905, A., ii, 796.

Coffetti, Giulio, and Gaetano Maderna, estimation of the composition of nitrating mixtures, 1907, A., ii, 812.

Coffetti, Giulio. See also Fritz Foerster

and Gactano Maderna.

Coffignier, Charles, analysis of lithopone. 1903, A., ii, 44.

estimation of Prussian blue, 1904, A.,

African copals, 1905, A., i, 224.

action of phenols and naphthalene on copals, 1906, A., i, 870.

American copals, 1907, A., i, 67. solubility of "half-hard" African copals, 1908, A., i, 39.

Manila and Pontiariae copals, 1908, A., i, 436.

solubility of Kauri copal, 1909, A., i,

properties of Dammar resins, 1911, A., i, 550.

Coffin, Fletcher Barker. See Gregory Paul Baxter.

Cohen, Ernst [Julius], physico-chemical researches on tin, 1904, A., ii, 567; 1908, A., ii, 858; 1909, A., ii, 1021. electrolytic estimation of antimony,

1908, A., ii, 636. thermodynamics of normal cells, 1911,

A., ii, 180.

calculation of electromotive force from thermal effects, 1911, A., ii, 180.

Cohen, Ernst, and Cornelis Adriaan Lobry de Bruyn, conductive power of hydrazine and of substances dissolved therein,

1903, A., ii, 405.

Cohen, Ernst, Frederick Daniel Chattaway, and W. Tombrock, thermodynamics of normal cells. III., 1907, A., ii, 838.

Cohen, Ernst, Edward Collins, and Theodorus Strengers, so-called explosive antimony. II., 1905, A., ii, 170.

Cohen, Ernst, and J. W. Commelin, osmotic researches. I., 1908, A., ii, 811.

Cohen, Ernst, and P. J. H. van Ginneken, zinc amalgams and the Clark element, 1911, A., ii, 14.

Cohen, Ernst, and Eugen Goldschmidt, physico-chemical researches on tin.

VI., 1905, A., ii, 168.

Cohen, Ernst, and Katsuji Inouye, metastability of the metallic world, 1909, A., ii, 1008.

zinc amalgams, 1910, A., ii, 37.

behaviour of white phosphorus at low temperatures, 1910, A., ii, 406.

a supposed allotrope of lead, 1910, A., ii, 614.

piezochemical studies. VI., 1910, A., ii, 1029.

Cohen, Ernst, Katsuji Inouve, and C. Euwen, piezochemical studies. The transition element and its ap-

plications, 1910, A., ii, 1029. piezochemical studies. VII. Influence of pressure on solubility, 1911, A.,

Cohen, Ernst, and J. F. Kröner, allotropy of tellurium, 1910, A., ii, 199.

Cohen, Ernst, and Hugo Rudolph Kruyt, E.M.F. of the cadmium normal element at 0°. I., 1909, A., ii, 113.

thermodynamics of standard cells,

1910, A., ii, 178.

improved form of the cadmium normal

cell, 1910, A., ii, 259.

Cohen, Ernst, and J. Olie, jun., so-called amorphous antimony, 1908, A., ii, 198.

so-called amorphous bismuth, 1908, A., ii, 199.

dynamic allotropy of phosphorus, 1909, A., ii, 998.

atomic volume of allotropic modifications at very low temperatures, 1910, A., ii, 102.

Cohen, Ernst, and Wilhelm Eduard Ringer, so-called explosive antimony,

1904, A., ii, 345.

Cohen, Ernst, and L. R. Sinnige, piezochemical studies, 1909, A., ii, 291, 641, 796, 857, 981.

Cohen, Ernst, and Theodorus Strengers, atomic weight of antimony, 1903, A., ii, 432.

so-called explosive antimony. 1905, A., ii, 532.

physico-chemical researches on "explosive" platinum metals, 1908, A., ii, 299.

Cohen, Ernst, and Theodorus Strengers, the dynamic theory of a reversible chemical reaction, 1908, A., ii, 824,

Cohen, Ernst, and W. Tombrock, electromotive force of zinc amalgams, 1909.

A., ii, 786.

Cohen, Ernst. See also J. W. Commelin. Cohen, Emil Wilhelm, meteoric iron from Rafriiti, Switzerland, 1903, A., ii, 491.

meteoric iron from Cuernavaca, Mexico,

1903, A., ii, 491.

meteoric iron from N'Goureyma, Soudan, 1904, A., ii, 53.

meteoric irons of Ranchito [Bacubirito] and Casas Grandes, 1904, A., ii, 494.

Cohen, Emil Wilhelm. See also Aristides

Brezina.

Cohen, Hermann. See Carl Hell.

Cohen, Julius Berend, the relation of position isomerism to optical activity. Part IX. The rotation of the menthyl esters of the isomeric fluoro- and iodobenzoic acids and of the halogen derivatives of the fatty acids, 1911, T., 1058; P., 123.

Cohen, Julius Berend, and Henry Percy Armes, the relation of position isomerism to optical activity. IV. The rotation of the menthyl esters of the isomeric nitrobenzoic acids, 1905.

T., 1190; P., 218.

the relation of position isomerism to optical activity. VI. The rotation of the menthyl esters of the isomeric chloronitrobenzoic acids, 1906, T., 454; P., 74.

the relation of position isomerism to optical activity. VII. The rotation of the menthyl esters of the three isometric dinitrobenzoic acids, 1906,

T., 1479; P., 241.

Cohen, Julius Berend, and Hugh Garner Bennett, studies in chlorination. The chlorination of the isomeric chloronitrobenzenes, 1905, T., 320; P., 80.

Cohen, Julius Berend, and Samuel Henry Clifford Briggs, the rotation of the menthyl esters of the isomeric chlorobenzoic acids, 1903, T., 1213; P., 207.

Cohen, Julius Berend, and William Ernest Cross, the mechanism of bromination of acylamino-compounds: preliminary notice, 1907, P., 148.

bromination, 1908, A., i, 413.

Cohen, Julius Berend, and Henry Drysdale Dakin, the constitution of the products of nitration of aceto-mtoluidide, 1903, T., 331.

Cohen, Julius Berend, and Henry Drysdale Dakin, the chlorination of the trichlorotoluenes in presence of the aluminium-mercury couple. constitution of the tetrachlorotoluenes. Part V., 1904, T., 1274; P.,

the properties of 2:3:4:5-tetrachlorotoluene. A correction, 1906, T., 1453; P., 241.

Cohen. Julius Berend. Harry Medforth Dawson, John Reginald Blockey, and Arnold Woodmansey, the chlorination of toluene, 1910, T., 1623; P., 205.

Cohen, Julius Berend, Harry Medforth Dawson, and Percy Field Crosland, studies in chlorination. II. The action of chlorine on boiling toluene. Preliminary notice, 1905, T., 1034;

P., 211.

Cohen, Julius Berend, and Harold Ward Dudley, the relation of position isomerism to optical activity. Part VIII. The rotation of the menthyl esters of the alkyloxy- and alkylamino-derivatives of benzoic acid, 1910, T., 1732; P., 209.

Cohen, Julius Berend, and Cornelius Philip Finn, paraffins from a Yorkshire coal seam, 1912, A., ii, 264.

Cohen, Julius Berend, and John Gatecliff, the basic properties of oxygen; compounds of the ethers with nitric

acid, 1904, P., 194.

Cohen, Julius Berend, and Percival Hartley, studies in chlorination. III. The progressive chlorination of benzene in presence of the aluminiummercury couple, 1905, T., 1360; P.,

Cohen, Julius Berend, and Henry James Hodsman, the influence of substitution in the nucleus on the rate of oxidation on the side-chain. III. The oxidation of the nitro- and chloronitro-derivatives of toluene, 1907, T., 970; P., 152.

Cohen, Julius Berend, and Douglas McCandlish, the mechanism of the hydrogen sulphide reduction of nitrocompounds, 1905, T., 1257; P.,

222.

Cohen, Julius Berend, and Joseph Marshall, the reduction of 2:6dinitrotoluene with hydrogen sulphide, 1904, T., 527; P., 63.

the constitution of the amidines; a new method for determining molecular symmetry, 1910, T., 328; P., 24.

Cohen, Julius Berend, and James Miller, the influence of substitution in the nucleus on the rate of oxidation of the side-chain. I. Oxidation of the mono- and di-chlorotoluenes, 1904, T., 174; P., 11.

the influence of substitution in the nucleus on the rate of oxidation of the side-chain. II. Oxidation of the halogen derivatives of toluene,

1904, T., 1622; P., 219.

Cohen, Julius Berend, and Thomas Stewart Patterson, Marckwald's asymmetric synthesis of active valeric acid,

1904, A., i, 366.

Cohen, Julius Berend, and Henry Stanley Raper, the relation of positionisomerism to optical activity. II. The rotation of the menthyl esters of the isomeric chlorobromobenzoic acids, 1904, T., 1262; P., 179.

the relation of position-isomerism to optical activity. III. The rotation of the menthyl esters of the isomeric iodobenzoic acids, 1904, T., 1271;

P., 179.

Cohen, Julius Berend, and Israel Hyman Zortman, the relation of positionisomerism to optical activity. Part V. The rotation of the menthyl esters of the isomeric dibromobenzoic acids, 1905, P., 306; 1907, T., 47. Cohen, Julius Berend. See also William

Ernest Cross, Percival Hartley, and

Henry Stanley Raper.

Cohen, Lillian. See George Bell Frankforter and Everhard Percy Harding.

Cohen, Lionel, discrepancy between the results obtained by manuring, etc., in pots and in the field, 1911, A., ii, 763. Cohen. Lionel. See also Frederick

Bickell Guthrie.

Cohen, Louis J., some new double phosphates of iron (ferric) and aluminium, 1907, A., ii, 552.

new double phosphates of chromium, 1907, A., ii, 780.

Cohen, Louis J. See also Henry Clapp Sherman.

Cohen, Nardus Henri, lupeol, 1907, A., i, 211; 1908, A., i, 882.

a- and β-amyrins from bresk, 1907, A., i, 230.

B-amyrin acetate from balata, 1907, A., i, 715.

phytosterols from balata, 1908, A., i, 883.

phytosterols from South African "rubber," 1908, A., i, 884.

estimation of the total alkaloids in cinchona barks, 1908, A., ii, 996.

Cohen, Nardus Henri, phytosterol from South African rubber, 1909, A., i, 26.

fat from the seed of Erythrina hypaphorus subumbrans, 1909, A., ii, 925.

Cohen, Nardus Henri. See also J. E. Quintus Bosz and Pieter van Romburgh.

Cohen, Salomon S., and Stanislaus von Kostanecki, 7:8:2'-trihydroxyflavonol, 1904, A., i, 683.

Cohen, Wilhelm. See Paul Jannasch.

Cohn. See Lassar-Cohn.

Cohn, Georg, 8-hydroxyquinoline, 1911, A., i, 567.

esters of boric acid, 1911, A., i, 640. diguanides, 1911, A., i, 928.

Cohn, Gotthilf, physiological effect of manganese and experiments on the influence of manganese and iron on peptic digestion, 1903, A., ii, 166.

Cohn, L. See Alfred Werner. Cohn, Max. See Alexander Ellinger.

Cohn, Max. See Alexander Ellinger.
 Cohn, Michael, preparation of crystallised proteins, 1905, A., i, 103.

Cohn, Michael. See also Harry Lief-

mann.

Cohn, Paul, and Albert Blau, substituted benzaldehydes; 2-chloro-5-nitrobenzaldehyde and o-dimethylaminobenzaldehyde, 1904, A., i, 674.

Cohn, Paul, and Paul Friedländer, glycerol derivatives of aromatic bases,

1904, A., i, 866.

Cohn, Paul, and Robert Plohn, condensation of epichlorohydrin with phenols,

1907, A., i, 605. Cohn, Paul, and Ludwig Springer, derivatives of p- and o-aminobenzaldehydes,

1903, A., i, 492.

Cohn, Paul. See also Paul Friedlander. Cohn, Robert, decolorisation of a faintly alkaline solution of phenolphthalein by alcohol, 1906, A., i, 853.

hydrolysis of sodium palmitate, 1906, A., ii, 58; 1907, A., ii, 409.

plastic calcium, fluoride, 1911, A., ii, 724.

lecithin, 1911, A., ii, 779.

Cohnheim, Otto, combustion of the muscular carbohydrate and the influence of the pancreas on it. I., 1903, A., ii. 738.

combustion of carbohydrates. II. The active substance of the pancreas,

1904, A., ii, 675.

combustion of carbohydrates. III., 1905, A., ii, 267.

protein-katabolism, 1905, A., ii, 839. glycolysis. IV., 1906, A., ii, 292. erepsin, 1906, A., ii, 294.

Cohnheim, Otto, the cleavage of foodprotein in the intestine, 1906, A., ii, 871.

behaviour of hippuric acid to erepsin, 1907, A., i, 996.

protein digestion. II., 1907, A., ii, 487.

the work of the intestinal muscle, 1908, A., ii, 209.

protein absorption, 1909, A., ii, 414; 1912, A., ii, 182.

a respiration apparatus for isolated organs and small animals, 1910, A., ii, 1079.

gaseous metabolism of animals with plain and striated musculature, 1912, A., ii, 178.

physiology of the kidney secretion, 1912, A., ii, 959.

Cohnheim, Otto, and Ph. Klee, physiology of the pancreas, 1912, A., ii, 660.

Cohnheim, Otto, Gustav Kreglinger, and G. Kreglinger, physiology of water and sodium chloride, 1910, A., ii, 138.

Cohnheim, Otto, G. Kreglinger, L. Topler, and O. H. Weber, the physiology of water and salt, 1912, A., ii, 572.

Cohnheim, Otto, and F. Makita, absorption of protein, 1909, A., ii, 818.

Cohnheim, Otto, and Georg Modrakowski, the action of morphine and opium preparations (pantopon) on the digestive canal, 1911, A., ii, 516.

Cohnheim, Otto, and Dimitri Pletneff, the gaseous metabolism of the musculature of the small intestine, 1910,

A., ii, 1079.

the gaseous metabolism of the stomach musculature, 1910, A., ii, 1079.

the gaseous metabolism of the musculature of stomach and intestine during insufficient oxygen supply and under the influence of barium chloride, 1910, A., ii, 1079.

the amount of erepsin in blood-free organs, 1910, A., ii, 1087.

Cohnheim, Otto, and Franz Soetheer, the gastric juice of newly-born animals, 1903, A., ii, 438.

Cohnheim, Otto, and J. von Uexküll, the duration of contraction of plain muscle, 1912, A., ii, 183.

Cohnheim, Otto. See also Robert Baumstark.

Cohoe, Benson Ambrose. See Lewellys Franklin Barker.

Colacicchi, U., action of magnesium phenyl bromide on heptaldehyde, 1911, A., i, 199. Colacicchi, U., action of sulphuryl chloride on s-dimethylpyrrole, 1911, A., i, 224.

action of aldehydes on pyrrole deriva-

tives, 1911, A., i, 1030.

action of aldehydes on pyrrole substances; pyrogenetic decomposition of derivatives of dipyrrylmethane, 1912, A., i, 491.

syntheses of phyllopyrrole, 1912, A.,

i, 646.

new pyrogenic transposition in the pyrrole group: relative stability to heat of isomeric derivatives, 1912, A., i, 647.

Colacicchi, U., and C. Bertoni, action of sodium alkyloxides on esters of pyrrolecarboxylic acids, 1912, A., i,

647, 1016.

the action of aldehydes on pyrrole compounds, 1912, A., i, 653.

Colacicchi, U. See also Giuseppe Plancher.

Colani, A., binary uranium compounds, 1903, A., ii, 652.

preparation of binary metallic compounds by means of aluminium powder, 1905, A., ii, 525.

uranous compounds, 1907, A., ii, 878. thorium phosphates, 1909, A., ii, 742.

Sydney William, physiological action of somnoform and ethyl bromide, 1903, A., ii, 502.

influence of electrolytes on enzymes. II. On invertin, 1904, A., i, 128.

influence of electrolytes on amylolytic ferments, 1904, A., i, 131.

colour reactions of proteins, 1904, A., ii. 103.

Cole, Sydney William. See also Frederick Gowland Hopkins.

Colefax, Arthur, the action of potassium sulphite on potassium tetrathionate in aqueous solution, 1907, P., 207; 1908, T., 798.

Coleman, Charles John, the effect of certain drugs and toxins on blood coagulation, 1907, A., ii, 367.

Coleman, Leslie C., nitrification, 1908, A., ii, 315.

Coleschi, Lorenzo, calcium metabolism in lactating women after use of mineral waters containing calcium hydrogen carbonate, 1911, A., ii, 507.

Colgate, Reginald Thomas, and Ernest Harry Rodd, morphological studies of benzene derivatives. Part II. Sulphonic derivatives of the 1:4-di-derivatives of benzene containing halogens, 1910, T., 1585; P., 139.

Colin, A. See Maurice Prud'homme.

Colin, H., and J. de Rufz, absorption of barium by plants, 1910, A., ii, 533. Colin, H., and A. Sénéchal, catalytic

action of ferric thiocyanate, 1911, A., i, 530.

catalytic oxidation of phenols in presence of iron salts, 1911, A., ii, 795. action of acids on the catalytic oxida-

tion of phenols by ferric salts, 1911,

A., ii, 872.

is iron a catalyst in the oxidation of phenols by the peroxydase of horseradish? 1912, A., ii, 289.

Colle, H. See Augusto Chwala.

Colles, William Morris, jun., aldehydrol and the formation of hydrates of compounds containing a carbonyl group, 1906, T., 1246; P., 207.

Collet, Léon W., and Gabriel W. Lee, chemical composition of glauconite,

1906, A., ii, 370.

Collett, E., and Moritz Eckardt, estimation of molybdenum in molybdenite,

1909, A., ii, 941. Colley, Andrej Robertović, dispersion in the electric spectra of benzene, toluene, and acetone, 1908, A., ii, 909.

Collie, John Norman, effect of mercury vapour on the spectrum of helium,

1903, A., ii, 49.

the action of acetyl chloride on the sodium salt of diacetylacetone, and the constitution of pyrone compounds, 1904, T., 971; P., 158. a method for the rapid ultimate

analysis of organic compounds, 1904,

T., 1111; P., 174.

note on methyl fluoride, 1904, T., 1317; P., 180.

syntheses by means of the silent electric discharge, 1905; T., 1540; P., 201; discussion, P., 202.

derivatives of the multiple keten group, 1907, T., 1806; P., 230; discussion, P., 231.

curious property of neon, 1909, A., ii,

Collie, John Norman, and Edwin Rodney Chrystall, the production of orcinol derivatives from the sodium salt of ethyl acetoacetate by the action of heat, 1907, T., 1802; P., 231.

Collie, John Norman, and Thomas Percy Hilditch, an isomeric change of dehydroacetic acid, 1907, T., 787; P., 92.

Collie, John Norman. See also Edward Charles Cyril Baly and (Sir) William

Ramsay.
Collier, V. See Charles Glover Barkla.
Henry See Henry Collier, William Henry. See Henry Russell Ellis.

Collin, Eugène, microscopic examination of starch and detection of rice starch in wheat starch, 1906, A., ii, 905.

analysis of sulphur used for agricultural purposes, 1910, A., ii, 543.

Collingridge, Frank. See (Sir) William

Ramsay.

Collingwood, Bertram James, estimation of chloroform vapour by a tonometric method, 1905, A., ii, 121.

absorption of chloroform in later stages of auæsthesia, 1905, A., ii, 408.

blood coagulation and calcium ions, 1909, A., ii, 681.

reversed activity of tissue extract made at high temperatures, 1910,

A., ii, 139.

Collingwood, Bertram James, and H. L. F. Buswell, chloroform apnea, 1907, A., ii, 639.

tension of carbon dioxide in alveolar air during exercise, 1908, A., ii, 49. tension of carbon dioxide in alveolar air during chloroform narcosis, 1908,

A., ii, 49. Collingwood, Bertram James. See also

Augustus Désiré Waller.

Colling, Edward. See Ernst Cohen.

Collins, Hawksworth, observations and deductions obtained from a consideration of the numbers given for the atomic weights of the elements by the International Committee (1905) which lead to a rational determination of the constitution and structure of each element, 1908, A., ii, 170.
Collins, Henry F., wollastonite [and

garnet] from Mexico, 1904, A., ii, 134. Collins, Katharine R. See Robert Banks

Gibson.

Collins, Sydney . Hoare, Scheibler's apparatus for the estimation of carbon dioxide in carbonates; an improved construction and use for accurate analysis, 1906, A., ii, 630.

a combined governor and gauge for maintaining a regular flow of gas; a thermostat with delicate adjustment and long range, 1912, A., ii, 548.

a water-sealed constant pressure hydrogen gas generator, 1912, A., ii, 548. rate of evolution of hydrocyanic acid

from linseed under digestive conditions, 1912, A., ii, 586.

Collins, Stanley Winter, the "nitron" method for the estimation of nitric

acid, 1907, A., ii, 907.

separation of arsenic from antimony and other metals with some applications in toxicological work, 1912, A., ii, 684.

Collison, R. C., estimation of lecithin, 1912, A., ii, 498.

estimation of inorganic phosphorus in plant substances, 1912, A., ii, 865.

Collitt, Bernard, decinormal solution of otassium permanganate, 1909, A., ii, 96.

Collmann, Fritz. See Otto Wallach.

Collot, Louis, diffusion of barium and strontium in sedimentary rocks, 1906, A., ii, 39.

Colman, Harold Govett, analysis of ferro-

cyanides, 1910, A., ii, 761. Colman, James. See Siegmund Gabriel. Colombo, Luigi, crystallised rhodonite from S. Marcel (Valle d'Aosta), 1904, A., ii, 571.

scheelite from Traversella, 1906, A.,

crystallographic observations on certain minerals of Brorso and Traversella, 1907, A., ii, 103.

apophyllite from Traversella, 1907,

A., ii, 705.

aloisiite: a new hydrosilicate from the tufa of Fort Portal (Uganda), 1908, A., ii, 956.

relations between density and crystallographic constants in certain groups of substances, 1909, A., ii, 560, 798.

minerals from Ruwenzori, 1910, A.,

ii, 967.

a garnet containing iron and chromium from Praborna (St. Marcel), 1910, A., ii, 968.

rocks and minerals from Beaume, Piedmont, 1912, A., ii, 568.

Colombano, Amedeo, etherification of hydroxyazo-compounds by means of methyl sulphate, 1907, A., i, 1091.

esterification of azo-derivatives of hydroxy-acids by means of methyl

sulphate, 1907, A., i, 1091.

solanin from the seeds and flowers of Solanum tuberosum, 1908, A., i, 99. solanidine from Solanum tuberosum. II., 1912, A., i, 798.

Colombano, Amedeo, and Battista Leonardi, azo-derivatives of guaiacol

1908, A., i, 68.

Colombano, Amedeo. See also Giuseppe Oddo.

Colonna, Ettore, chemical composition of ash from Mont Pelée (Martinique), 1904, A., ii, 53.

metallic formates and acetates, 1905, A., i, 852.

Colonna, Ettore. See also Clemente Montemartini.

Colson, [Jules] Albert, compounds of plumbic acid with organic acids, 1903, A., i, 396, 456.

new plumbic derivatives; preparation; thermochemical study, 1903, A., i,

the displacement of the sulphuric acid of alkali hydrogen sulphates by water, 1903, A., ii, 289.

action of chlorine on barium acetate,

1904, A., i. 3. acetates of the alkaline earths, 1904, A., i, 134. action of chlorine on anhydrous ace-

tates, 1904, A., i, 469. application of Blondlot's rays to chemistry, 1904, A., ii, 377.

origin of the Blondlot rays disengaged during chemical reactions, 1904, A.,

use of n-rays in chemistry, 1904, A.,

ii, 532.

the constitution of dissolved salts, 1904, A., ii, 648.

the complexity of dissolved sulphates, 1905, A., ii, 34.

existence of a normal green chromic sulphate, 1905, A., ii, 94.

cryoscopy of the sulphates, 1905, A., ii. 255.

application of Watt's principle to the dissociation of the carbonates of lead and silver, 1905, A., ii, 304.

a variable velocity reaction of green chromic sulphate, 1905, A., ii, 460.

a chromium sulphate in which the acid is in two states of combination,

1905, A., ii, 592. variations of basicity in chromium salts, 1905, A., ii, 639.

limiting states of some dissolved chromic salts, 1906, A., ii, 74.

constitution of chromic sulphates,

1906, A., ii, 233.

a chromium sulphate in which the acid is entirely masked, and the equilibrium of chromic solutions, 1907, A., ii, 177.

condensed chromic sulphates, 1907, A., ii, 177.

a singular state of matter observed with a dissolved chromic salt, 1907, A., ii, 267.

ionisation of chromic sulphates, 1907,

A., ii, 356.

isomerism of chromium sulphates and the "masked state," 1907, A., ii,

discontinuities observed in the molecular conductivities of the dissolved chromic sulphates, 1907, A., ii, 780. Colson, [Jules] Albert, constitution of complexes, 1907, A., ii, 877.

semicatalysis: oxidation of hydrocarbons by air in the presence of phosphorus, 1908, A., i, 435.

non-existence of a common solvent for white and red phosphorus, 1908, A., ii, 35.

the green chromium sulphates, 1908,

A., ii, 45.

transformation of solutions of white phosphorus into red phosphorus, 1908, A., ii, 176.

the essentially chemical causes of the allotropic transformation of phosphorus dissolved in oil of turpentine, 1908, A., ii, 273.

method of production of olefines by decomposition of esters, 1909, A.,

preponderance of temperature in direct decompositions; case of benzoic and salicylic esters, 1909, A., i, 302.

impossibility of judging of relative stabilities of corresponding compounds of silver and lead from thermochemical data, 1909, A., ii, 400.

the conditions necessary for direct reactions, and the direction of the electric current produced when metals are attacked by sulphur, 1909, A., ii, 548.

reduction of sodium sulphate by

carbon, 1910, A., ii, 34.

van't Hoff's hypothesis and the dissolved molecule, 1911, A., ii, 710. the theory of solution and heats of

dissolution, 1911, A., ii, 1066.

the theory of solutions, 1911, A., ii, 1071.

chromic sulphates and ions, 1911, A., ii, 1096.

the dissolecule and van't Hoff's formula, 1912, A., ii, 25.

solution and dissolecules, 1912, A., ii,

theory of dissolutions compared with experience (case of nitrogen peroxide), 1912, A., ii, 238.

procedure in observing the dissociation of nitrogen peroxide, 1912, A., ii,

peculiarities in certain verifications in physical chemistry, 1912, A., ii, 436.

necessity for revising the law of mass action and of homogeneous equilibrium, 1912, A., ii, 631.

dissociation without change of volume, and the law of mass action, 1912, A., ii, 632.

Colson, [Jules] Albert, the existence of four inactive tartaric acids: the law of mass action with reference to the work of Darzens and of Le Chatelier, 1912, A., ii, 714.

the law of mass action; its contradictory verifications and defence by Le Chatelier, 1912, A.,

ii, 1151.

Colver-Glauert, Edward, and Siegfried Hilpert, the magnetic properties of some nickel steels, 1911, A., 1057.

Colver-Glauert, Edward. See also Sieg-

fried Hilpert.

Colwell, Hector A., catalytic oxidation of guaiacum resin by copper, 1910, A., i, 54.

Colwell, Hector A., and Sidney Russ. conversion of starch into dextrin by

X-rays, 1912, A., i, 608.
Colwell, Rachel H., and Henry Clapp Sherman, peptonisation in raw and pasteurised milk, 1908, 972.

Comanducci, Ezio, new reaction of formic

acid, 1904, A., ii, 845. solubility of uric acid in silicic acid, in sodium metasilicate, and in dis-

tilled water, 1906, A., i, 405. index of oxidation of milk, 1906, A.,

ii, 636.

anilide of isosuccinic acid, 1907, A., i. 409.

action of Grignard's reagent on cinchonicine, 1907, A., i, 1068.

new reaction for formic acid, 1907, A., ii, 311.

action of magnesium phenyl bromide on styrene, 1909, A., i, 544.

influence of the silent electric discharge on certain mixtures of gases and vapours, 1909, A., ii, 477.

action of chlorine and ammonia on

quinine, 1910, A., i, 581.

constitution of cinchonicine (cinchotoxine). II. Derivatives and salts of ethyl-, phenyl-, and a-naphthylcinchotoxol, 1910, A., i, 582.

constitution of cinchonicine (cinchotoxine). III. Chloroethylchlorophenyl-cinchotoxile, 1910, A.,

estimation of the alkali carbonates and of the metals of the alkaline earths in potable and mineral waters, 1910, A., ii, 1111.

thalleioquinine, 1911, A., i, 317.

caution as to testing for "saccharin" in sweetened foods and beverages, 1911, A., ii, 80.

Comanducci, Ezio, and M. Arena, analysis of the ash which fell in Naples on the night of April 4-5th. 1906, 1906, A., ii, 864.

action of n-propyl chloride on ethyl-

amine, 1908, A., i, 138.

Comanducci, Ezio, and Onofrio D'Onghia, Hofmann's iodomethylation of cinchotoxine. I. Constitution of Freund and Rosenstein's dimethylcinchonine, 1910, A., i, 276.

Comanducci, Ezio, and R. Lobello. action of ethyl isosuccinate on aniline, p-toluidine, and p-aminophenol, 1905,

A., i, 271.

Comanducci, Ezio, and F. Marcello, bromo-derivatives of p-hydroxybenzoic

acid, 1903, A., i, 485.

Comanducci, Ezio, and Nicola Melone, constitution of cinchonicine (cinchotoxine). I. Action of organo-magnesium haloids on einchonicine; R-cinchotoxols, 1909, A., i, 409.

Comanducci, Ezio, and Luigi Pescitelli, nitro- and amino-propiophenones.

1906, A., i, 965.

thioquinine and thiocinchonine, 1906,

A., i, 977.

analysis of the ash which fell in Naples on the night of October 2nd, 1904, 1906, A., ii, 177.

Combes, Raoul, preparation and purification of hydroxyanthraquinone and hydroxynaphthaquinone derivatives and especially of juglone and emodin, 1907, A., i, 839.

biochemical investigations on the development of anthocyanin in plants, 1909, A., ii, 426.

formation of anthocyanic pigments,

1911, A., ii, 1125.

Combes, Raoul. See also Alphonse Brissemoret.

Comella, Matteo. See Ernesto Puxeddu. Comère, Joseph, action of arsenates on the growth of algae, 1910, A., ii, 437.

Comesatti, Giuseppe, action of iodine and its compounds on adrenaline, 1909, A., i, 735.

detection of adrenaline in blood-serum, 1909, A., ii, 628.

Cominotti, Luigi, pentoses in the urine of men and animals; utilisation of pentoses in the animal organism, 1909, A., ii, 1039.

Commandeur. See Charles Porcher. Commelin, J. W., and Ernst Cohen, the electromotive force of the Daniell cell, 1903, A., ii, 585.

Commelin, J. W. See also Ernst Cohen.

Compagnie Morana, thio-compounds prepared from ketones and aldehydes,

1906, A., i, 23. Compagno, I., constitution of halogenated compounds of 3-hydroxy-ypyrone [pyromeconic acid], 1908, A., i, 280.

separation and estimation of antimony in white bearing metal, 1912, A., ii,

810.

Compton, Arthur. See Gabriel Bertrand, Albert Frouin, and Alfred Senier. Compton, Karl T. See Owen Willans

Richardson.

Comstock, Daniel Frost, indestructibility of matter and the absence of exact relations among the atomic weights, 1908, A., ii, 477.

Comtesse, Alfred. See Albin Haller

and Josef Tambor.

Condelli, Sebastiano, resolution of racemic acid by means of Aspergillus niger, 1904, A., i, 798.

Condò-Vissicchio, G., Sicilian

1909, A., i, 318. Condrea, C. See Lothar Wöhler.

Conduché, A., a new reaction of aldehydes, and the isomerism of their

oximes, 1905, A., i, 288.

a new reaction of aldehydes; action of isohydroxycarbamide on benzaldehyde, and properties of benzylidenecarbamidoxime; action water on benzylidenecarbamidoxime, 1906, A., i, 593.

hydroxycarbamides and carbamidoximes. I. and II., 1908, A., i,

12, 154.

molecular refractions of some carbamidoximes, 1908, A., i, 156.

Conduché, A. See also Louis Jacques Simon.

Cone, Lee Holt, and C. P. Long, monohalogen derivatives of triphenylcarbinol chloride [triphenylchloromethane], 1906, A., i, 424.

Cone, Lee Holt, and Charles S. Robinson, chlorination with phosphorus

pentachloride, 1907, A., i, 504. Cone, Lee Holt, and C. J. West, condensation of p-dibromobenzene with xanthone; quinocarbonium 1911, A., i, 805.

Cone, Lee Holt. See also Emil Fischer

and Moses Gomberg.

Coninck. See Œchsner de Coninck. Conner, Ray B. See William Maurice

Dehn. Connerade, Edmund. See Jakob Meisen-

Conno, E. de. See Arnaldo Piutti.

Conno, G. de. See Luigi Balbiano. Connolly, E. L. See William Crowell Brav.

Connstein, Wilhelm, Emil Hover, and H. Wartenburg, fermentative fat-hydrolysis, 1903, A., i, 218.

Conrad, Max, iminobarbituric and barbituric acids, 1905, A., i, 751.

hydurilic acid, 1907, A., i, 985. Conrad, Max, and Karl Hock, formaldehyde derivatives of urethanes,

1903, A., i, 607. Conrad, Max, and Arnold Schulze, derivatives of oximinocyanoacetic acid,

1909, A., i, 211. malonamide derivatives, 1909, A., i.

213.

Conrad, Max, and Arthur Zart, iminodialkylmalonylalkyl- and iminodialkylmalonylphenyl-carbamides, 1905, A., i, 752.

cyanodialkylacetylcarbamides and the amides of substituted malonic and cyanoacetic acids, 1905, A., i, 754.

derivatives of 3-hydroxy-1-phenyl-5pyrazolone, 1906, A., i, 608.

Conradson, Pontus H., saponification of compounded oils, 1904, A., ii, 598.

Conrat, F., variations in the density of anisaldazine at the clearing temperature, 1909, A., i, 307.

Conrat, F. See also Emil Bose.

Conroy, James Terence, action of sulphuric acid on platinum, 1903, A., ii,

Consonno, Fortunato, halogenated nitroderivatives of benzophenone, 1904, A., i, 676.

Consortium für Elektrochemische Industrie, preparation of acetylene tetrachloride, 1905, A., i, 110.

electrolytic preparation of sodium, 1905, A., ii, 819.

electrolytic production of ammonium persulphate, 1908, A., ii, 690.

[production of hydrogen peroxide from persulphuric acid], 1908, A., ii,

preparation of chloroacetyl chloride from dichlorovinyl ether, 1910, A., i, 650.

Consortium für Elektrochemische Industrie, and Georges Imbert, preparation of chlorohydroxy-acids and their glycerides, 1909, A., i, 875.

Consortium für Elektrochemische Industrie, and Erich Müller, electrolytic preparation of persulphates, 1905, A., ii, 83. electrolytic production of sodium per-

sulphate, 1906, A., ii, 749.

Consortium für Elektrochemische Industrie. See also Georges Imbert.

Constam, Emil Joseph, Parr's method of determining the heat of combustion of coal, 1908, A., ii, 734.

Constam, Emil Joseph, and John White, physico-chemical investigations in the pyridine series, 1903, A., i, 276.

Constant, and Henri Pélabon, a filamentous variety of carbon, 1904, A., ii, 28. Constantino, Antonio. See Luigi Mas-

carelli.

Contaldi, Andrea. See Gino Abati.

Contardi, Angelo, new method of extracting a phosphated compound (phytin) from plants, 1909, A., i. 203.

synthesis of the phospho-organic acid of the seeds of plants (Posternak's anhydroxymethylene-diphosphoric acid), 1910, A., i, 157.

phosphoric esters of some polyhydric alcohols and carbohydrates, 1910,

A., i, 609.

inositol hexaphosphate, 1912, A., i,

action of concentrated phosphoric acid on glycerol. II., 1912, A., i, 743. Contardi, Angelo. See also Giuseppe

Bruni and Wilhelm Körner.

Contejean, Ch. See Auguste Chauveau. Conti, Carlo, application of the reaction of potassium cyanide with copper salts in alkaline solution to the estimation of dextrose, 1907, A., ii, 822.

detection of coal-tar colours in wine by means of the reaction between iodine and tannin, 1909, A., ii, 711.

Contino, A., amount of manganese in some Italian soils, 1911, A., ii, 649. Conzetti, Alfred. See Traugott Sand-

meyer.

Cook, Alfred Newton, derivatives of phenyl ether. V., 1903, A., i, 337. properties of phenyl ether, 1904, A., i, 400.

aluminium phenoxide, 1906, A., i, 495. m-tolyl ether and derivatives, 1907, A., i, 126.

phenyl ether and some of its derivatives, 1910, A., i, 731; 1911, A., i,

Cook, Alfred Newton, and Charles F. Eberly, derivatives of phenyl ether. III., 1903, A., i, 250.

Cook, Alfred Newton, and Guy G. Frary, derivatives of phenyl ether. IV.,

1903, A., i, 163. Cook, C. W. See Frank R. van Horn and Edward Henry Kraus,

Cook, Ellen Parmelee, See Marston Taylor Bogert.

Cook, Frank. See Arthur Frederick Hertz and Marcus Seymour Pembrey. Cook, Frank C., composition of gorgonian

corals, 1904, A., ii, 675,

effect of salts on the frog's heart, 1909, A., ii, 500.

estimation of creatinine, 1909, A., ii, 526.

factors which influence the estimation of creatinine, 1909, A., ii, 709.

Cook, Frank C., and T. C. Trescot, modification of the tannin-salt method for separating proteoses and peptones, 1907, A., ii, 659.

Cook, Frank C. See also Willard Dell Bigelow and Joseph Arthur Le Clerc.

Cook, S. S. See (Hon.) Charles Algernon Parsons.

Cook, Taylor, See Gilbert Thomas Morgan.

Cooke, Elizabeth, and Silas Palmer Beebe. autolysis of liver tissue as affected by thyroid administration, 1911, A., ii,

Cooke, Hereward Lester, penetrating radiation from the earth's surface,

1904, A., ii, 6. Cooke, Hereward Lester. See also Owen Willans Richardson.

Cooke, Robert A., and E. E. Gorslin, estimation of B-hydroxybutyric acid in urine, 1911, A., ii, 1140.

Cooke, William Ternent, the reduction of hydrazoic acid, 1903, P., 213.

the action of water and dilute caustic soda solutions on crystalline and amorphous arsenic, 1903, P., 243. chemical behaviour of argon and helium, 1906, A, ii, 539

Cooke, William Ternent. See also William Henry Bragg, Douglas Mawson, and Edward Henry Rennie.

Cooksey, Charlton D., corpuscular rays different metals produced in Röntgen rays, 1907, A., ii, 837.

Cooksey, Thomas, volumetric estimation of sulphuric acid, 1908, A., ii,

estimation of iron, alumina, and phosphoric acid in presence of each other, 1908, A., ii, 987. Coolidge, William David. See Arthur

Amos Noyes.

Coomara-Swamy, Ananda K., [blue apatite] in the Tiree marble, 1904, A., ii, 181.

[Ceylonese minerals], 1904, A., ii, 745. Coomára-Swámy, Ananda K. See also George Thurland Prior.

Cooper, Charles. See Hubert Frank Coward.

Cooper, Evelyn Ashley, the relations of phenol and m-cresol to proteins; the mechanism of disinfection, 1912, A., ii, 1199.

Cooper, Evelyn Ashley. See also Gilbert

Thomas Morgan.

Cooper, Hermon C., T. S. Fuller, and A. Albert Klein, artificial crystallisation of barium sulphate, 1911, A., ii, 726.

Cooper, Hermon C., Edward Henry Kraus, and A. Albert Klein, lead II. Optical and thermal silicates. analysis of the system PbO-SiO2, 1912, A., ii, 452.

Cooper, Hermon C., L. I. Shaw, and Nathaniel Edward Loomis, two lead

silicates, 1909, A., ii, 1009.

Cooper, Hermon C. See also Edward Henry Kraus and Arthur Amos Noyes. Cooper, Leonard Harry. See William

Joseph Dibdin.

Cooper, William Francis, and Walter Harold Nuttall, some reactions of w-bromomethylfurfuraldehyde, 1911, T., 1193; P., 134.

furan-2:5-dialdehyde, 1912, T., 1074;

P., 139.

Coops, Gerrit Hendrik, \$\beta\$-isomalic acid, 1904, A., i, 851.

estimation of humic acids in soils,

1907, A., ii, 590.

formulæ of aluminium salts and of the corresponding compounds of other metals, 1910, A., ii, 506.

formulæ of aluminium salts, 1911,

A., ii, 116.

Coos, Nils, selenodilactylic acids, 1903, A., i, 66.

Coote, Arthur Herbert. See William Richard Eaton Hodgkinson.

Copaux, Hippolyte, oxidation of the acetates of cobalt and manganese by chlorine, 1903, A., i, 309.

analysis of cobalt compounds, 1903, A., ii, 454.

physical properties of pure cobalt and pure nickel, 1905, A., ii, 254.

crystallographic description of alkali cobaltioxalates, 1906, A., i, 623. cobalt and nickel, 1906, A., ii, 91.

chemistry and crystallography of the silicomolybdates, 1906, A., ii, 170. two remarkable cases of isomorphism,

1906, A., ii, 549. structure of optically active cubic sodium chlorate, 1907, A., ii, 344. preparation of silicotungstic acids,

1908, A., ii, 197.

Copaux, Hippolyte, potassium silver silicomolybdate, 1908, A., ii, 379.

borotungstic acids, 1909, A., ii, 148, nature of the metatungstates and the existence of rotatory power in crystals of potassium metatungstate, 1909, A., ii, 318.

complex tungstates: borotungstates and metatungstates, 1909, A., ii.

dissimilarity in properties of dextroand lævo-rotatory forms of potassium silicotungstate, and, in general, of optically active crystals, 1910, A., ii,

the constitution of the metatungstates. 1911, A., ii, 402; 1912, A., ii, 454.

Copaux, Hippolyte, and G. Boiteau, estimation of boron, 1909, A., ii, 345. Copaux, Hippolyte. See also Edouard Defacqz.

Copeman, Sydney Arthur Monckton, and Henry Wilson Hake, hydrochloric acid

in cancer, 1906, A., ii, 875.

Coppadoro, Angelo, action of bromine on m-hydroxybenzoic acid, 1903, A., i, 257.

electrolysis with alternating currents. I. Electrolysis of alkali chlorides, 1906, A., ii, 214.

electrolysis of alkali chlorides with alternating currents. II., 1906, A., ii, 849.

electrolytic applications of alternating

currents, 1907, A., ii, 224.

electrolytic formation of peroxygenated compounds of tin, 1908, A., ii, 596.

utilisation of electrolytic chlorine for the simultaneous production hydrochloric and sulphuric acids, 1910, A., ii, 197.

equilibrium in the ternary system: barium nitrate, sodium nitrate, and

water, 1912, A., ii, 441.

Coppadoro, Angelo. See also Giacomo Carrara and Bartolo Lino Vanzetti.

Coppalle, A., use of litharge in dry lead assaying, 1904, A., ii, 88. a simple extractor, 1904, A., ii, 511.

analysis of lithopones, 1907, A., ii, Coppenrath, Ernst. See Josef König.

Coppet, Louis Casimir de, molecular depression of the freezing point of water produced by some very concentrated saline solutions, 1905, A.,

superfusion and supersaturation, 1907, A., ii, 335.

Coppetti, Victor, See José G. Guglielmetti.

Coppin, Noël Guilbert Stevenson, the effects of purine derivatives and other organic compounds on growth and cell-division in plants, 1912, A., ii, 1202.

Coppin, Noël Guilbert Stevenson. See also Arthur Walsh Titherley.

Coppock, John Bridgeford, solubility of bisulphite compounds of aldehydes and ketones, 1907, A., i, 1009.

Coppola, A. See E. Oliveri-Mandalà. Corbino, O. M., thermal constants of tungsten at high temperatures, 1912, A., ii, 327.

specific heat of tungsten at high temperatures, 1912, A., ii, 531.

Cordier [von Löwenhaupt], Victor, probable stereoisomerism of nitrogen in guanidine picrate, 1906, A., i, 486. modification of Hüfner's method for

the volumetric estimation of nitro-

gen, 1908, A., ii, 983.

action of bromine and sodium hydroxide on carbamide and guanidine derivatives. I., 1912, A., i, 684.

Corelli, Octavian. See Adolf Grün.
Coriat, Isidor H., cerebrospinal fluid,
1904, A., ii, 63.

production of choline from lecithin and brain tissue, 1905, A., ii, 47.

Corlette, Cyril E., starch digestion in infants, 1905, A., ii, 466.

Corliss, H. P. See Charles Lathrop Parsons.

Corminboouf, H., estimation of oxide of iron in pyrolusites, 1905, A., ii, 286.

detection of bromine in the presence of much iodine, 1905, A., ii, 416.

estimation of iodine in aristols [iodised thymols], 1906, A., ii, 122.

estimation of nickel, 1906, A., ii, 198.

assay of officinal potassium bromide, 1906, A., ii, 395.

estimation of iodine in the crude

article, 1907, A., ii, 810. estimation of tannin by means of iodine, 1907, A., ii, 994.

analysis of amblygonite, 1910, A., ii, 897.

estimation of glycyrrhizic acid in commercial ammonium glycyrrhizates, 1912, A., ii, 306.

analysis of sodium arsenate, 1912, A., ii, 684.

detection of chlorides in the presence of thiocyanates, 1912, A., ii, 1091.

Cormimboeuf, H., and L. Grosman, estimation of metallic iron in reduced iron, 1906, A., ii, 54.

Cormimboeuf, H., and L. Grosman, differentiation of the two pharmaceutical benzoic acids, 1906, A., ii, 636; 1907, A., ii, 138.

Cornalba, G., detection of boric acid in

butter, 1912, A., ii, 1094.

Cornec, Eugène, cryoscopy of neutralisation of certain acids, 1909, A., ii, 972.

formula of hypophosphoric acid. I. and II., 1910, A., ii, 121.

cryoscopy of certain mineral acids and phenols, 1911, A., ii, 853.

Cornec, Eugène. See also Jacques Cavalier.

Cornish, (Miss) Elfreida Constance Victoria, density of soap solutions, 1911, A., i, 348.

Cornish, (Miss) Elfreida Constance Victoria. See also James William McBain.

Cornu, Felix, zeophyllite from Radzoin, Bohemia, 1905, A., ii, 465.

acid and alkaline reaction of minerals, especially silicates, 1906, A., ii, 770.

reaction for distinguishing dolomite and calcite, 1906, A., ii, 804.

minerals of the "micaceous zeolite" group, 1907, A., ii, 483.

[synthesis of huantajayite and covellite; recent formation of pyrrhotite; blue rock-salt], 1908, A., ii, 396.

composition of artificial magnesite stone, 1908, A., ii, 590.

attempt to produce dichroism by pressure in silver haloids, 1908, A., ii, 647.

crystallised iron from a foundry at Teschen, Austria, 1908, A., ii, 949.

the reversible alteration of cryolite, 1908, A., ii, 955.

hydrogels in the mineral kiugdom, 1909, A., ii, 222.

hydrogels of the mineral kingdom in the groups of the elements, sulphides and haloids, 1909, A., ii, 409.

minerals of the magnesite deposits of Veitsch, Styria, 1909, A., ii, 410.

Cornu, Felix, and C. Schuster, weathering of natrolite in phonolites, 1907, A., ii, 887.

Cornu, Felix. See also Cornelio Doelter.
Corper, Harry John, chemistry of the dog's spleen, 1912, A., ii, 274.

estimation of cholesterol by Ritter's method; influence of autolysis on cholesterol, 1912, A., ii, 302.

a modification of Ritter's method for the estimation of cholesterol, 1912, A., ii, 871. Corper, Harry John. See also Harry Gideon Wells.

Corr. E. See Samuel Avery.

Corradi, Remo, action of sodium hypobromite on carbamide and on ammonium salts, 1906, A., ii, 505. modification of Kjeldahl's process for estimating nitrogen in foods, 1908, A., ii, 130.

Correal. See Ubeda y Correal.

Corridi, Lamberto, products containing absorbed iodine, 1911, A., ii, 1083.

Corridi, Mario. See Pietro Falciola.
Corse, W. M. See James Flack Norris.
Corsini, Andrea, modification of the
methyl-violet process in the estimation
of free mineral acids, 1906, A., ii,
704.

Corso, G. See Luigi Bernardini.

Corson, H. P. See Charles Lathrop

Parsons.

Corvazier, H., application of electrolytic conduction to the analysis of mixtures of sulphuric and nitric acids, 1912, A., ii, 1092.

Costa, Tullio, attempt to prove the existence of chromic acids by means of the electrical conductivity, 1906, A.,

ii, 617.

Costachescu, N., gases present in rocksalt and in the mud volcanoes of Roumania, 1906, A., ii, 618.

fluorine salts of vanadium, 1910, A.,

ii, 618.

a secondary heptane in Roumanian petroleum, 1911, A., i, 101.

fluorides of cobalt and nickel, 1911,

A., ii, 729.

complex chromium fluorides. III., 1912, A., i, 493.

Costachescu, N., and Th. Apostoi, the formation of complex compounds in solution, 1912, A., ii, 528.

Costăchescu, N., and G. Spacu, complex iron salts, 1912, A., i, 494.

Costachescu, N. See also Petru Poni. Costachescu, W. See Alfred Werner.

Costantino, A., the relationship between the higher fatty acids and unsaponifiable substances during different stages in the development of the organism, 1911, A., ii, 627.

the potassium, sodium, and chlorine content of plain and striated muscles from various animals, 1912, A., ii,

67.

the chemistry of muscular tissue. II.

The content of striated and plain muscular tissue of mammals in organic and inorganic phosphorus, 1912, A., ii, 961.

Costantino, A., muscle chemistry. IV. The sulphur of the smooth, striped, and cardiac muscle, also of muscle proteins in mammals, 1912, A., ii, 1078.

Costantino, A. See also Giuseppe Buglia.

Costanzo, Giovanni, sodium emanation, 1909, A., if, 8.

Costanzo, Giovanni, and Carlo Negro, ionisation phenomena produced by snow, 1908, A., ii, 551.

ionisation phenomena caused by rain-

water, 1909, A., ii, 110.

Coste, John Henry, a drying oven, 1912, A., ii, 678.

Coste, Maurice, electrical conductivity of selenium, 1905, A., ii, 794.

transformations of selenium, 1909, A., ii, 995.

metallography of the gold-tellurium system, 1911, A., ii, 405.

Costes, G., estimation of caffeine [in coffee], 1912, A., ii, 1012.

Cosyns, G., composition of volcanic asla collected at Ottajano, Vesuvius, on April 14th, 1906, 1907, A., ii, 104.
Cosyns, G. See also Henri Wuyts.

Cotte, Jules, tyrosinase in Suberites domuncula, 1903, A., ii, 309, manganese and iron in sponges, 1903,

A., ii, 311.

Cotton, A., resolution of racemic substances prepared by chemical synthesis; effect of circularly-polarised light, 1909, A., ii, 278.

Cotton, A., and Henri Mouton, new magneto-optical properties of colloidal solutions of ferric hydroxide,

1906, A., ii, 146.

a new optical property (magnetic double refraction) of certain noncolloidal organic liquids, 1907, A., ii, 727.

magnetic and electric double refraction of nitrobenzene; variation with wave-length, 1908, A., ii, 745.

orientation of crystals by the magnetic field; importance of optical properties of mixed liquids from the point of view of crystalline symmetry, 1908, A., ii, 757.

variation of the magnetic double refraction of aromatic compounds with temperature; supercooled substances and substances in the vitreous con-

dition, 1909, A., ii, 773.

magnetic and electrical double refraction of aromatic liquids and the theory of molecular orientation, 1910, A., ii, 368. Cotton, A., and Henri Mouton, absolute measurement of magnetic double refraction of nitrobenzene, A., ii, 4.

magnetic double refraction and chemical constitution, 1912, A., ii, 426.

new substances showing magnetic double refraction; molecular and atomic anisotropism, 1912, A., ii,

Cotton, A., Henri Mouton, and Pierre Weiss, magnetic double refraction of organic liquids, 1908, A., ii, 2.

Cotton, A., and Pierre Weiss, relation of the charge to the mass of the electron; comparison of the values deduced from the Zeeman effect and from recent measurements with cathode rays, 1909, A., ii, 113.

Cotton, S., crystalline colouring matter

from urine, 1903, A., i, 217.

Cottrell, Frederick Gardner, steady current ("reststrom") in galvanic polarisation regarded as a diffusion problem, 1903, A., ii, 258.

crystalline habit, 1906, A., ii, 220. electrically-heated microscope slide, 1912, A., ii, 1160.

Cotty, André, specific heat of water, 1911, A., ii, 964.

Couchet, Charles, and G. Némirowsky, electrolysis of fused sodium nitrate, 1907, A., ii, 345.

Couchet, Charles, R. C. Schlosser, and Louis Duparc, electrolysis of potassium nitrate, 1906, A., ii, 749.

See also Francis Couchet, Charles.

Pearce.

Coulaud, V. See Léon Grimbert.

Couleru, M., electrolytic production of alkali chlorates and perchlorates, 1908, A., ii, 689.

Coulin, Pierre, preparation of ψ -ionone hydrate, 1903, A., i, 837.

homologues of ψ -ionone hydrate, 1904. A., i, 678.

the isolation of ψ -ionone hydrate and an isomeride, 1906, A., i, 869.

preparation of citral hydrate, 1908, A., i, 999.

[isolation of an isomeride of citral hydrate], 1908, A., i, 1000.

[the condensation of ketones and citral hydrate], 1908, A., i, 1000.

Coulthard, Albert. See John Cannell

Couman, Douglas H. B., a simple mechanical shaker, 1909, A., ii, 990.

Couperot, E., loss of nitrates and of hydrogen cyanide during the dessication of plants, 1909, A., ii, 257.

Coupin. Henri, assimilation of Steriamatocystis nigra, 1903, A., ii, 446.

assimilation of alcohols and aldehydes by Steriamatocystis nigra, 1904. A.. ii. 280.

action of some alkaloids on pollen.

1906, A., ii, 384.

influence of different volatile substances on higher vegetation, 1911, A., ii, 65.

comparative toxicity of essential oils towards higher vegetation, 1911, A., ii, 326.

Courant, Etienne, and Stanislaus von Kostanecki, o-hydroxyfurfurylideneacetophenones, 1907, A., i, 75.

Couraud, Réné, cryogenine and its elimination, 1904, A., ii, 360.

Courémenos, A. See Albin Haller.

Couriet, H., and Jean Meunier, action of an incandescent electric conductor on the surrounding gas, 1908, A., ii,

Courmont, Jules, Th. Nogier, and A. Rochaix, chemical effect of quartz mercury lamp on water, 1909, A., ii,

does water sterilised by ultra-violet light contain hydrogen peroxide? sterilising power of hydrogen peroxide, 1910, A., ii, 641.

Court, G. See Amé Pictet.

Courtauld, Richard Minton. See John Edward Purvis.

Courtauld, Stephen Lewis. See Edward Frankland Armstrong and Robert John Caldwell.

Courtet, H., salts from the region of Lake Chad, 1905, A., ii, 173.

Courtin, L. See A. Astruc.

Courtman, Harold Reuben. See James Charles Philip.

Courtot, Alfred Pierre, dehydration of β-hydroxy-β-alkylpivalie. esters, 1906, A., i, 230, 396, 554.

action of alkali carbonates on By-dibromo-aa-dimethyl acids, 1906, A., i, 788, 925.

Courtot, Alfred Pierre. See also Edmond Emile Blaise.

Courtot, Charles, active principle of iodotannin solutions, 1912, A., i, 889. Courtot, Charles. See also Victor Grig-

Cousens, R. Lewis, a radioactive substance discovered in the Transvaal and experiments connected therewith, 1905, A., ii, 787.

Cousin, Henri, action of chlorine and of bromine on the mononitroveratroles,

1903, A., i, 166.

Cousin, Henri, preparation of aristol and its derivatives, 1903, A., i, 166.

fatty acids of egg-lecithin, 1903, A., i, 675.

fatty acids of brain lecithin, 1906, A., i, 330.

the fatty acids of kephalin, 1906, A., i. 725.

nitrogen bases formed in the decomposition of kephalin, 1907, A., i, 378. action of chlorine on dithymol, 1908, A., i, 337.

action of hydriodic acid and of iodine on dimethylaminoantipyrine (pyramidone), 1909, A., i, 190.

action of bromine and chlorine on dehydrodicarvacrol, 1912, A., i, 254.

Cousin, Henri, and Henri Hérissey, oxidation of thymol by the oxidising ferment of mushrooms, 1908, A., i, 84.

preparation of dithymol; action of bromine on dithymol, 1908, A., i, 162.

oxidation of eugenol by the oxidising ferment of mushrooms; formation of dehydrodieugenol, 1908, A., i, 729. oxidation of isoeugenol; dehydrodi-

isoeugenol, 1908, A., i, 783. dehydrodicarvacrol, 1910, A., i, 476. oxidation of a p-thymol; dehydrodi-

p-thymol, 1912, A., i, 695.

Cousins, Herbert Henry, and Harold

Sankey Hammond, estimation of available phosphoric acid and potash in

soils, 1903, A., ii, 693.

Coutelle, Carl, formation of ethyl sodiodicarboxyglutaconate from ethyl ma-

lonate, sodium ethoxide, and chloro-

form, 1906, A., i, 139.

Conturier, François, stability of \(\beta\)-ketonic aldehydes, 1910, A., i, 299.

condensation of pinacolin with esters,

1910, A,, i, 362.

catalytic dehydration of sec.- and tert.pinacolyl alcohols, 1911, A., i, 939.

Couturier, François, and Léon Meunier, action of magnesium amalgam on acetone, 1905, A., i, 326.

Conturier, François, and G. Vignon, new B-ketonic aldehydes, 1905, A., i, 570.

Couvert, H. See Jacob Böeseken. Couyat, J., red porphyry [porfido rosso antico], 1909, A., ii, 64.

eruptive rocks of Jebel Dokhan, Red Sea, 1909, A., ii, 65.

Egyptian minerals, 1909; A., ii, 813. a meteorite of the Hedjaz (Arabia), 1912, A., ii, 1183.

Couzens, Edward Gordon. See Gilbert Thomas Morgan. Covelli, Ercole, a new reaction for chloral, 1907, A., ii, 405.

diazo-reaction of atoxyl, 1908, A., ii, 1000.

abrastol, 1909, A., ii, 452.

non-reducibility of arsenic acid in alkaline solution; method of detecting arsenites in arsenates, 1909, A., ii, 830.

electrolytic detection of arsenious oxide in presence of arsenic acid, 1909,

A., ii, 1052.

reaction distinguishing between the organic derivatives of arsenious acid and those of arsenic acid, 1910, A., ii, 1012.

Cow, Douglas, reactions of surviving arteries, 1911, A., ii, 413.

diuresis, 1912, A., ii, 1080.

Cowap, Matthewman Dalton. See Ludwig Mond.

Coward, Hubert Frank, Charles Cooper, and Christopher Henry Warburton, the ignition of electrolytic gas by the electric discharge, 1912, T., 2278; P., 268.

Coward, Hubert Frank. See also William Arthur Bone and Harold Baily Dixon.

Cowie, Thomas Field. See Alexander Crum Brown.

Cowie, William Beaverly, and William Dickson, assay of pepsin by the biuret reaction, 1906, A., ii, 316.

Cowles, Horace W., jun., estimation of malic acid in food products, 1908, A.,

ii, 904.

Cowley, Robert Charles, and J. P. Catford, estimation of arsenie, 1905, A., ii, 117.

Cowper, Alfred Dennys, and Gustav Tammann, alteration of compressibility with the softening of an amorphous substance, 1910, A., ii, 20.

Cox, Alvin Joseph, basic mercury salts,

1904, A., ii, 563.

chromates of mercury, bismuth, and lead, 1906, A., ii, 757.

Philippine firewood, 1911, A., ii, 762. Cox, Alvin Joseph. See also Richard Abegg and John Maxson Stillmann.

Cox, Irving J. See William Albert
Noyes.

Crabtree, John Ickering, and Arthur Lapworth, the properties of a-bromonaphthalene, 1912, P., 264.

Crafts, James Mason, catalysis of sulph-

onic acids, 1907, A., ii, 855.

Craig, Thomas J. I., volumetric estimation of free acid and basic alumina in aluminium salts, 1911, A., ii, 335.

Cram, Marshall Perley, determination of melting points with the aid of the microscope, 1912, A., ii, 829.

Cram, Marshall Perley, and Philip W. Meserve, persistence of strychnine in

a corpse, 1911, A., ii, 315.

Marshall Perley. See Joseph Elliott Gilpin and John Bishop

Cramer, Carl. See Richard Willstätter. Wilhelm, protagon, choline, and neurine, 1904, A., i, 462.

assimilation of protein introduced parenterally, 1908, A., ii, 709.

a comparison between the properties of protagon and the properties of a mixture of phosphatides and cerebrosides, 1910, A., i, 296.

inactivation of adrenaline in vitro and

in vivo, 1911, A., ii, 754.

Cramer, Wilhelm, and A. R. Bearn, effect of heat on enzyme activity, 1906, A., i, 780.

Cramer, Wilhelm, and James Lochhead. chemistry of the placenta, 1906, A.,

ii, 781.

Cramer, Wilhelm, and Harold Pringle, biochemistry of growth. I. total nitrogen metabolism of rats bearing malignant new growths, 1910, A., ii, 635.

biochemistry of growth. II. Distribution of nitrogenous substances in tumour and somatic tissues, 1910,

A., ii, 635.

Cramer, Wilhelm, and R. A. Wilson,

protagon, 1908, A., i, 234.

Cramer, Wilhelm. See also A. B. Bearn, Henry O. Feiss, R. A. Krause, A. C. Lochhead, James Lochhead, Harold Pringle, and Swale Vincent. Cramer, William Bronson. See Treat

See Treat

Baldwin Johnson.

Crampe, E. See Ernst Laqueur.

Crampton, Charles Albert, renovated butter, 1903, A., ii, 516.

Crampton, Charles Albert, and Frank Darius Simons, detection of palm oil when used as a colouring matter in oils and fats, 1905, A., ii, 362.

Crampton, Charles Albert. See also

Arthur L. Sullivan.

Crane, Jasper E., and Clarence M. Joyce, analysis of camphor, 1907, A., ii, 514.

new cellulose derivatives of low nitrogen contents, 1910, A., i, 364.

Crato, E., estimation of lead in tinplate as lead chloride, 1912, A., ii,

Craveri, Mario. See Franz Sachs.

Craw, J. Andersen, physical chemistry of the toxin-antitoxin reaction, with special reference to the neutralisation of lysin by antilysin, 1905, A., ii, 747.

filtration of crystalloids and colloids gelatin, 1906, through A., 11,

276.

grain of filters and growth of bacteria through them, 1908, A., ii, 314.

Craw, J. Andersen, and George Dean, estimation of free diphtheria toxin. with reference to the relations between lethal doses, lethal times, and loss of weight in guinea pigs, 1907, A., ii,

Craw, J. Andersen. See also William

Bulloch.

Crawford, Gilbert. See William Albert

Crawley, J. T., fixation of phosphoric acid in the soil, 1903, A., ii, 325.

Crawley, J. T., and R. A. Duncan, fixation of ammonia and potash by Hawaiian soils, 1903, A., ii, 235.

Creeth, Norman Allen, and Jocelyn Field Thorpe, the action of bromine on β-hydrindone, 1908, T., 1507; P.,

Creeth, Norman Allen. See also Wil-

liam Henry Perkin, jun.

Creighton, Henry Jermain Maude, the Grignard synthesis; action of magnesium phenyl bromide on camphor, 1909, A., i, 169.

a few chemical changes induced by radium; new method for the detection of amygdalin, 1909, A., ii,

behaviour of solutions of hydriodic acid in light in the presence of oxygen, 1909, A., ii, 225.

solid solution: the retention of aluminium by barium sulphate precipit-

ates, 1909, A., ii, 668.

behaviour of iron salts, in the presence of albumins and other organic substances, towards certain reagents, 1912, A., i, 1040.

optical activation of racemic bromocamphorcarboxylic acid by means of catalysts; specificity of catalysts, 1912, A., ii, 927.

measurements of the electrical conductivity of acetophenone solutions of certain organic bases and acids, 1912, A., ii, 1125.

Creighton, Henry Jermain Maude, and Arthur Stanley Mackenzie, influence of radium on the decomposition of hydriodic acid, 1908, A., ii, 450.

Creighton, Henry Jermain Maude. See also Alexander Findlay and David Fraser Harris.

Cremer, Friedrich, absorption spectrum of toluene in the ultra-violet, 1912,

A., ii, 405.

Cremer, Max, and R. W. Seuffert, phlorin, a product of the hydrolysis of phloridzin, 1912, A., i, 885.

Crémieu, Victor. See Jacques Danne.

Crendiropoulo, Milton, and (Miss) Cornelia Bonte Sheldon Amos, agglutination of vibrios, 1904, A., ii, 363.

Crendiropoulo, Milton. See also Marc

Armand Ruffer.

Crenshaw, J. L., reduction of zinc by mercury and the electromotive force of zinc amalgams, 1910, A., ii, 258.

Crenshaw, J. L. See also Eugene

Thomas Allen.

Crépieux, Pierre. See Frédéric Reverdin. Crespolani, Eli, condition in which iodine occurs in the urine after ingestion of iodides and iodates, 1909, A., ii, 79.

Crestani, Giuseppe. See Tullio Gnesotto.

Crété, L. See A. Goris.

Crétien. See Georges Arth.

Crewdson, (Miss) Mary Sumner. See James Frederick Spencer.

Crewe, Philip Henry, estimation of ferrous carbonate, 1907, A., ii, 817. Creydt, Bodo. See Franz Lehmann.

Cribb, Cecil Howard, Dutch cheese,

1906, A., ii, 404.

Cribb, Cecil Howard, and Francis William Frederick Arnaud, the action of slightly alkaline waters on iron, 1905, A., ii, 589.

approximate estimation of boric acid,

1906, A., ii, 394.

Crichton, David Cowan, electrolysis of potassium ethyl dipropylmalonate, 1906, T., 929; P., 162.
 hydrates of some quaternary bases,

1907, T., 1793; P., 236.

Cripps, Richard Stafford. See Hubert

Sutton Patterson.

Criquebeuf, Gaston. See René Duchemin.

Crismer, Léon, physical constants,

critical solution temperature, and osmotic pressure, 1903, A., ii, 10. determination of the densities of

alcohols by means of their critical temperatures of solutions, 1907, A., ii, 134.

Crispo, D., new reaction for the production of sodium carbonate, 1908, A., ii, 840.

Cristofoletti, U. See Alexander Tschirch.

Crites, B. O., estimation of vanadium in steel and iron, 1912, A., ii, 391.

Crittenden, A. L. See Anton Julius Carlson.

Croad, Robin B. See James Watson Agnew.

Crochetelle. See Eloi de Stæcklin.

Crocker, James Codrington, the velocity
of hydrolysis of aliphatic amides, 1907,
 T., 593; P., 63.

Crocker, James Codrington, and Frank Harold Lowe, picryl derivatives of urethanes and thiourethanes, 1904, T., 646; P., 92.

the velocity of hydrolysis of the aliphatic amides by alkali, 1907,

T., 952; P., 135.

Crocker, James Codrington, and Frank Matthews, the picraminobenzoic acids and their salts, 1911, T., 301; P., 22.

Croftan, Alfred Carena, changes in uric acid in animals and men, 1908, A., ii, 307.

the rôle of the small intestine in glycogen formation, 1909, A., ii, 328

Crofton, William Mervyn, antibacterial

sera, 1905, A., ii, 747.

Crofts, James Murray. See Robert Selby Morrell.

Crofutt, Edward Francis. See Yandell Henderson.

Crohn, Burrill B. See Fred S. Weingarten.

Crommelin, C. A., isotherms of monatomic gases and of their binary mixtures. IV. Preparation of argon. V. Vapour pressures above — 140°, critical temperature, and critical pressure of argon, 1910, A., ii, 709.

isotherms of monatomic gases and of their binary mixtures. VI. Coexisting liquid and vapour densities of argon; calculation of the critical density of argon, 1911, A., ii, 202.

Crommelin, C. A. See also Heike Kamerlingh Onnes.

Crompton, Holland, atomic energy of gases, 1907, A., ii, 607.

the possible limit of molecular magni-

tude, 1912, P., 193.

Crompton, Holland, and (Mrs.) Eva Richardis Cyriax, 4-chloroacenaphthene, 1908, P., 241.

Crompton, Holland, and (Miss) Muriel Kate Harrison, iodoacenaphthene,

1910, P., 226.

Crompton, Holland, and (Miss) Wilhelmina Rebecca Smythe, the products of the oxidation of chloroacenaphthene with chromic acid, 1912, P., 194.

Crompton. Holland, and (Miss) Maggie Walker, the reduction of nitroacenaphthene, 1911, P., 165.

monohalogen derivatives of acenaphthene, 1912, T., 958; P., 127.

Crone, Gustav von der, action of phosphoric acid on higher plants and a new nutritive solution, 1906, A., ii,

Croner, Fritz, detection of traces of manganese in presence of iron in well waters, 1905, A., ii, 611.

oxidation of aromatic amines by means of manganese salt with formation of dyes, 1907, A., i, 948.

Croner, Fritz. See also Emil Knoevena-

gel.

Cronheim, Walter, nutritive value of protein decomposition products. I.. 1905, A., ii, 99.

importance of vegetable organisms for the oxygen supply of water, 1906,

A., ii, 191.

estimation of [dissolved] oxygen in water, 1907, A., ii, 985.

the detection of hydrofluoric acid in presence of fluorides, 1910, A., ii, 154.

Cronheim, Walter, and E. Giesecke, pond feeding experiments at Hellendorf and Geeste in 1903, 1905, A., ii, 649.

Cronheim, Walter, and Erich Müller, mineral metabolism in healthy and rachitic children, 1908, A., ii, 405.

Crook, Thomas, occurrence of ankerite in coal, 1912, A., ii, 565,

Crook, Thomas, and George S. Blake, carnotite and an associated mineral complex from South Australia, 1910, A., ii, 308.

Crook, Thomas, and S. J. Johnstone, striiverite from the federated Malay

States, 1912, A., ii, 566. Crook, Thomas, and Bernard Mouat Jones, geikielite and the ferro-magnesian titanates, 1906, A., ii, 459.

Crookes, Samuel Irwin. See George Young.

Crookes, (Sir) William, emanations of radium, 1903, A., ii, 461. ultra-violet spectrum of radium, 1904,

A., ii, 3. action of radium emanations on

diamond, 1904, A., ii, 692. ultra-violet spectrum of gadolinium, 1905, A., ii, 250.

europium and its ultra-violet spectrum,

1905, A., ii, 392.

phosphorescent spectra of So and europium, 1905, A., ii, 783.

Crookes, (Sir) William, some phosphorescence spectra indicating the existence of new elements, 1906, A., ii,

effect of calcium in developing the phosphorescence of some rare earths, 1906, A., ii, 360.

ultra-violet spectrum of ytterbium, 1906, A., ii, 713. the production of helium from radium.

1906, A., ii, 717.

scandium, 1908, A., ii, 695; 1909, A., · ii, 44; 1910, A., ii, 714.

use of iridium crucibles in chemical operations, 1908, A., ii, 702.

spectrum of boron, 1912, A., 110.

devitrification of silica glass, 1912, A., ii, 551.

volatility of metals of the platinum group, 1912, A., ii, 563.

Crose. See Della Crose.

Crosland, Percy Field. See Julius Berend Cohen and Arthur George Green.

Cross, Charles Frederick, mercerised cellulose, 1911, A., i, 114.

Cross, Charles Frederick, and Edward John Bevan, hydrocellulose, 1904, T., 691; P., 90.

constitution of cellulose, 1904, A., i, 652; 1905, A., i, 119.

cellulose hydrates, 1909, A., i, 290. molecular and solution volumes of colloidal carbohydrates, 1909, A., i, 555.

the interaction of formic acid and cellulose, 1911, T., 1450; P., 149.

estimation of cellulose in woods and spinning fibres, 1912, A., ii, 1105.

Cross, Charles Frederick, Edward John Bevan, and William Bacon, chloroamine reactions; methylenechloro-amine, 1910, T., 2404; P., 248.

Cross, Charles Frederick, Edward John Bevan, and John Frederick Briggs. acetosulphates of cellulose, 1905, A., i, 512, 862.

interaction of alkali starch and carbon disulphide; xanthogenic esters of starch, 1907, T., 612; P., 90.

colour reactions of lignocellulose, 1907. A., i, 750.

chloroamine reaction of the proteins. 1908, A., i, 374.

Cross, Charles Frederick, Edward John Bevan, and John Traquair, acetyl derivatives of starch and cellulose, 1905, A., i, 511.

Cross, R. J. See Stewart Woodford Young.

Cross, William Ernest, formation of acetic and formic acids by the hydrolysis of substances containing

lignin, 1910, A., i, 457.

Cross, William Ernest, and Julius
Berend Cohen, the use of pyridine bases as halogen carriers, 1908, P.,

Cross, William Ernest, and Bernhard Tollens, behaviour of pentoses in fermenting mixtures, 1912, A., ii, 78.

Cross, William Ernest, See also Julius

Berend Cohen.

Crossley, Arthur William, 3:5-dichloro-1:1:2-trimethyl- \(\Delta^{2:4}\)-dihydrobenzene .-a correction, 1903, P., 227.

aromatic compounds obtained from the hydroaromatic series. Part I. The action of bromine on 3:5-dichloro-1:1-dimethyl-\Delta^2:4-dihydrobenzene, 1904, T., 264; P., 21. \$\Delta^{1:3}\$-dihydrobenzene, 1904, T., 1403;

P., 160.

Crossley, Arthur William, and Charles Gilling, hydroaromatic ketones; preliminary note, 1908, P., 130.

hydroaromatic ketones. Part I. Synthesis of trimethylcyclohexenone (isophorone) and some homologues, 1908, P., 281; 1909, T., 19.

note on the preparation of trimethylcyclohexenone (isophorone) from ethyl malonate and chlorodimethylcyclohexenone, 1909, P., 96.

action of ethyl cyanoacetate on 5chloro-1:1-dimethyl-A4-cyclohexen-3-one, 1910, T., 518; P., 53.

synthesis of 1:1:3-trimethyleyclohexene (cyclogeraniolene), 1910, T., 2218; P., 252.

Crossley, Arthur William, and Paul Haas, the action of phosphorus haloids on dihydroresorcins. Part II. Di-hydroresorcin, 1903, T., 494; P., 75.

Crossley, Arthur William, and Charles Herbert Hampshire, nitrotetramethyldiphenyl; preliminary note, 1909, P., 162

6-nitro-3:4:3':4'-tetramethyldiphenyl,

1911, T., 721; P., 90.

Crossley, Arthur William, and James Stuart Hills, aromatic compounds obtained from the hydroaromatic series. Part II. The action of phosphorus pentachloride on trimethyldihydro-resorcin, 1906, T., 875; P., 144.

Crossley, Arthur William, and Henry Rondel Le Sueur, action of phosphorus haloids on dihydroresorcins. Part I. Dimethyldihydroresorcin, 1903, T. 110.

Crossley, Arthur William, and Henry Rondel Le Sueur, hydrocarbons of the cyclohexadiene series, 1903, A., i, 804.

Crossley, Arthur William, and George Francis Morrell, derivatives of o-xylene. Part II. Dinitro-o-xylidines,

1911, T., 2345; P., 307.

Crossley, Arthur William, and (Miss) Nora Renouf, synthesis of 1:1-dimethylhexahydrobenzene, 1904, P., 242.

synthesis of 1:1-dimethylhexahydrobenzene and of 1:1-dimethyl- Δ^3 tetrahydrobenzene, 1905, T., 1487; P., 209.

the supposed identity of dihydrolaurolene and of dihydroisolaurolene with 1:1-dimethylhexahydrobenzene, 1905, P., 303; 1906, T., 26.

separation of aa- and BB-dimethyladipic acids, 1906, T., 1552; P., 252.

action of alcoholic potassium hydroxide on 3-bromo-1:1-dimethylhexahydrobenzene, 1906, T., 1556; P., 253.

action of reducing agents on 5-chloro-3-keto-1:1-dimethyl-A4-tetrahydrobenzene, 1906, P., 302; 1907, T., 63.

substituted dihydrobenzenes. Part II. 1:1-Dimethyl-\(\Delta^{2:4}\)-dihydrobenzene and 1:1-dimethyl- \(\Delta^{2:5}\)-dihydrobenzene, 1908, T., 629; P., 59.

nitro-derivatives of ortho-xylene, 1908,

P., 58; 1909, T., 202; P., 26. substituted dihydrobenzenes. Part III. so-called 1:1-dimethyl- \Delta^2:5cyclohexadiene of Harries and Antoni, 1909, T., 930; P., 145.

hydroaromatic ketones. Part II. 1:1:2-Trimethylcyclohexan-3-one,

T., 1101; P., 137.

acyl derivatives of the dihydroresorcins. Part. I. The action of hydroxylamine and of phenylhydrazine on C-acetyldimethyl- and C-acetyltrimethyl-dihydroresorcins, 1912, T., 1524; P., 223.

Crossley, Arthur William, and Sydney Smith, bromoxylenols obtained from dimethyldihydroresorcin, preliminary

note, 1912, P., 382.

Crossley, Arthur William, and (Miss) Gertrude Holland Wren. 3:5-dichloro-o-phthalic acid, 1910, T., 98; P., 8.

derivatives of o-xylene. Part I. 3-Nitro-o-xylene and 3:6-dinitroo-xylene, 1911, T., 2341; P., 307.

Crothers, David. See Henry Edward Armstrong.

Crotogino, Fritz. See H. Nissenson.

Crouzel. Ed., estimation of tannic acid, 1903, A., ii, 113.

new reaction for iron in copper, 1904, A., ii, 783.

detection of biliary pigments in urine, 1912, A., ii, 400.

new reagent for testing Bordeaux mixture, 1912, A., ii, 1213.

Crowe, S. J., excretion of hexamethylenetetramine in bile and pancreatic juice, 1908, A., ii, 410.

Crowther, Charles, and Arthur G. Ruston, variation in the composition of cows' milk with advance of lactation,

1911, A., ii, 510.

Crowther, Horace Leslie, and Hamilton McCombie, the formation of tetrahydro-oxazoles from a-hydroxy-8anilino-aß-diphenylethane and homologues, 1912, P., 315.

Crowther, J. Arnold, coefficient of absorption of β-rays from uranium, 1906,

A., ii, 720.

* secondary Röntgen radiation from gases and vapours, 1907, A., ii, 922.

scattering of B-rays from uranium by matter, 1908, A., ii, 247.

relative ionisation produced by Röntgen rays in different gases, 1909, A., ii,

passage of Röntgen rays through gases and vapours, 1909, A., ii, 365.

secondary Röntgen radiation from air and ethyl bromide, 1909, A., ii, 535. effect of temperature on ionisation,

1909, A., ii, 636. the transmission of \(\beta\)-rays, 1910, A., ii,

the scattering of homogeneous B-rays and the number of electrons in an atom, 1910, A., ii, 918.

the scattered Röntgen radiation from

different radiators, 1912, A., ii, 7. Croze, F., extension of band spectrum of nitrogen in extreme red and infrared. 1910. A., ii. 368.

extreme red and infra-red band spectra of carbonated gases, 1910, A., ii,

670.

second spectrum of hydrogen in the extreme red, 1911, A., ii, 558.

the negative pole spectrum of oxygen, 1911, A., ii, 1041.

the Zeeman phenomenon in the spectra of hydrogen and nitrogen, 1912, A., ii, 613.

Crozier, William. See George Frederic White.

Crozier, W. J. See Charles Baskerville. Cruess, W. See Walter Charles Blasdale. Cruickshank, John, lecithin and other lipoids extracted from tissues fixed with formaldehyde, 1912, A., ii, 961.

Cruickshank. John, See also Carl

Hamilton Browning.

Cruikshanks, George S., and Alexander Schwyzer, semicyclic 1:5-diketones prepare I by the addition of 3-methylcyclohexanone to phenyl p-methoxystyryl ketone and distyryl ketone, 1912, A., i, 784.

Cruser. See Dyke-Cruser.

Crymble, Cecil Reginald, the relation between the absorption spectra of metallic ions and their valency, 1911. P., 68, 328; 1912, T., 266. Crymble, Cecil Reginald, Kenneth Ross,

and Samuel Smiles, the two sulphides of \$-naphthol, 1912, T., 1146; P.,

162.

Crymble, Cecil Reginald, Alfred Walter Stewart, and Robert Wright, absorption spectra. I. Saturated iodine compounds, 1910, A., ii, 470.

absorption spectra. II. The colour of azobenzene, 1910, A., ii, 470.

absorption spectra. III. Spectra of motoisomerides, 1910, A., ii, 470.

Crymble, Cecil Reginald, Alfred Walter Stewart, Robert Wright, and William Gerald Glendinning, the influence of conjugated linkings on general absorptive power. Part I. The absorption spectra of some benzene derivatives, 1911, T, 451; P., 46.

Crymble, Cecil Reginald, Alfred Walter Stewart, Robert Wright, and (Miss) Florence Williamson Rea, the influence of conjugated linkings on general absorptive power. Part II. Some open-chain and cyclic compounds, 1911, T., 1262; P., 153.

Cserhati, Alexander, action of potassium manure on barley, 1907, A., ii, 645. Cserna, Stephan. See Camilla Rudi.

Csókás, J. See Franz Tangl. Csonka, F. von. See F. Edelstein. Cucchiaroni, A. See Rosario Spallino. Cuffaro, A. See Giorgio Errera. Cuisinier, L. See Frédéric Reverdin.

Cukier, St. See Josef Tambor.

Cullis, Winifred C., secretion by the frog's kidney, 1906, A., ii, 468. urinary secretion in the frog, 1908, A., ii, 518.

Cullis, Winifred C. See also Thomas

Gregor Brodie.

Cullum, Myrtis Louisc. See John Ircdelle Dillard Hinds.

Culver, Llora R. See James Flack Norris.

Cummer, Frederick W. See Frederick

Levy Dunlap.

Cumming, Alexander Charles, the formation of urea by the direct hydrolysis of lead cyanate, 1903, T., 1391; P., 274; discussion, P., 274.

coorongite, a South Australian elater-

ite, 1903, A., ii, 433.

affinity constants of amphoteric electrolytes. II. Methyl derivatives of oand m-aminobenzoic acids, 1906, A., ii, 734.

malacone, a silicate of zirconium, 1908, T., 350; P., 28. electrochemistry of lead, 1908, A.,

ii, 248.

strong electrolytes, 1908, A., ii, 253.

a method for the measurement of vapour pressures, 1909, T., 1772; P., 237.

the isolation of stable salt hydrates. with special reference to the stable hydrates of sodium carbonate, 1910, T., 593; P., 57.

gas washing bottles with very slight resistance to the passage of a gas,

1910, A., ii, 841.

efflorescence of washing soda crystals,

1911, A., ii, 111.

a perforated silica plate for excluding flame gases from a crucible during ignition, 1912, A., ii, 598.

thermostats and devices used in connexion with thermostats, 1912, A.,

ii, 828.

Cumming, Alexander Charles, and Alexander Gemmell, the preparation and properties of basic copper nitrate and the hydrates of copper nitrate, 1912, A., ii, 556.

Cumming, Alexander Charles, and David Orme Masson, volumetric estimation

of cyanates, 1906, A., ii, 505.

Cumming, Alexander Charles, and E. W. Hamilton Smith, the reduction of ferric iron (1) by sulphurous acid and (2) by zinc dust, 1912, A., ii, 606.

Cumming, Alexander Charles. See also Charles William Blyth Normand.

Cumming, Charles Linæus. See Frederick Daniel Chattaway.

Cummins, S. Lyle, the anti-bactericidal action of the bile salts, 1911, A., ii, 1123.

Cuniasse, L., detection of oil of wormwood, 1907, A., ii, 413.

Cuniasse, L. See also Sanglé-Ferrière. Cunningham, John Arthur, and Satish Chandra Mukerji, electrical condition of gases in the nascent state, 1909, A., ii, 289.

Cunningham, (Miss) Mary, and Charles Dorée, the action of ozone on cellu-

lose, 1912, T., 497; P., 38.

Cunningham, (Miss) Mary, and Frederick Mollwo Perkin, studies on the cobaltinitrites, 1908, P., 212; 1909, T., 1562; 1910, P., 142.

Cuno, Ernst, solutions in mixtures of alcohol and water, 1908, A., ii, 160;

1909, A., ii, 301.

Cuntze, Adolf. See Theophile Fischer. Curie, (Mme.) Marie (née Sklodowska), researches on radioactive substances, 1903, A., ii, 622; 1904, A., if, 154.

diminution of the radioactivity of polonium with time, 1906, A., ii,

time constant of polonium, 1906, A., ii, 323.

action of gravity on the deposition of induced radioactivity, 1907, A., ii,

atomic weight of radium, 1907, A., ii,

condensation of water vapour in the presence of radium emanation, 1908, A., ii, 7.

formation of mists in presence of radium emanation, 1908, A., ii, 797.

the measurement of the constant of the radium emanation, 1910, A., ii, 374.

estimation of radium by measurement of the disengaged emanation, 1910, A., ii, 476.

the distribution of the intervals of emission of the a-particles of polon-

ium, 1911, A., ii, 1047.

the variation of the activity of some radioactive substances with time, 1911, A., ii, 1047.

Curie, (Mme.) Marie, and André Debierne, polonium, 1910, A., ii,

metallic radium, 1910, A., ii, 816.

Curie, (Mme.): Marie, and (Mlle.) Ellen Gleditsch, action of radium emanation on solutions of copper salts, 1908, A., ii, 793.

Curie, Pierre, constancy of time characteristic of the disappearance of radioactivity induced by radium in a closed space, 1903, A., ii, 50.

induced radioactivity and the emanation of radium, 1903, A., ii, 255. recent researches on radioactivity,

1904, A., ii, 377.

Curie, Pierre, and Jacques Danne, disappearance of radioactivity induced on solid substances by the action of radium, 1903, A., ii, 255.

Curie, Pierre, and Jacques Danne, emanation of radium and its coefficient of diffusion into air, 1903, A., ii, 462.

law of disappearance of induced radioactivity after heating the active

substance, 1904, A., ii. 806.

Curie, Pierre, and Albert Laborde, heat spontaneously developed by salts of radium, 1903, A., ii, 346.

radioactivity of the gases evolved from the waters of thermal springs, 1904, A., ii, 461; 1906, A., ii, 515.

Curie, Pierre. See also Charles Bouchard and (Sir) James Dewar.

Currie, James, celadonite from the

- Færöes, 1908, A., ii, 704. Currie, James N., the optional forms of lactic acid produced by pure cultures of Bacillus bulgaricus, 1911, A., ii, 1018.
- Curry, Bert Edwin, electrolytic corrosion of the bronzes, 1906, A., ii, 756.

electrolytic precipitation of bronzes, 1906, A., ii, 862.

constitution of the aluminium bronzes. 1907, A., ii, 872.

zinc alloys, 1909, A., ii, 1006.

- Curry, Bert Edwin, and Todd O. Smith, estimation of soluble arsenic in commercial lead arsenates, 1912, A., ii, 994,
- Curry, Bert Edwin, and Samuel Hamilton Woods, tensile strengths of the copper-aluminium alloys, 1907, A., ii, 873.

Curry, Bert Edwin. See also Hector Russell Carveth.

Curtel, Georges, use of nitrates for the characterisation of wines from sugar, 1903, A., ii, 247.

Curtis, Ferdinand, and Paul Lemoult, affinity of colouring matters for conjunctive tissues. 1905, A., ii, 600.

Curtis, Robert William. See Frank Austin Gooch.

Curtiss, Richard Sidney, acid derivative of ethyl anilinomalonate, 1903, A., i, 162.

substituted derivatives of ethyl anilinomalonate, 1903, A., i, 754.

preparation of ethyl mesoxalate, 1905, A., i, 507.

amine derivatives of mesoxalic esters, 1906, A., i, 339.

reaction of nitrous anhydride with ethyl malonate, 1906, A., i, 480.

Curtiss, Richard Sidney, Harry S. Hill, and R. H. Lewis, keto-ester additive roducts with arylamines and alcohols, 1911, A., i, 366.

Curtiss, Richard Sidney, Alfred R. Koch, and E. J. Bartells, action of hydrazine on ethyl mesoxalate, 1909. A., i, 212.

Curtiss, Richard Sidney, and John A. Kostalek, 4-acid esters in the mesoxalic ester synthesis, 1911, A., i, 518.

Curtiss, Richard Sidney, and F. Grace C. Spencer, action of alcohols, acids, and amines on methyl oxomalonate, 1909, A., i, 763.

methyl phenyliminomalonate and its

reactions, 1911, A., i, 540.

Curtiss, Richard Sidney, and Earle K. Stracham, condensations in the mesoxalic ester series, 1911, A., i. 353.

Curtiss, Richard Sidney, and Paul T. Tarnowski, methyl mesoxalate and some of its reactions, 1908, A., i, 760.

Curtius, Theodor, the spontaneous decomposition of glycine ethyl ester, 1904, A., i, 477

condensations with amino-acids. 1904, A., i, 833.

of cholie acid into conversion cholamine, 1906, A., i, 400.

action of hydrazine hydrate on nitrocompounds. I., 1907, A., i, 969.

hydrolytic degradation of triazo-acids, triazo-acid-azoimides, and triazourethanes (formation of triazoalkyl-

amines), 1912, A., i, 428. Curtius, Theodor, and Alfred Benrath, benzoylpentaglycylaminoacetic acid,

1904, A., i, 499.

Curtius, Theodor, and August Bockmühl, 5-hydroxy-1:2:3-triazole, 1910, A., i,

the formation of triazomethylurethane from triazoacetic acid, 1912, A., i, 425.

rtius, Theodor, Ernst Boetzelen. Georg Detoros, Rudolf Glaser, Leo Curtius. Frank Guttmann, Ernst Haager, Gustav Küppers, Hermann Pauli, Ley Francis Potter, Josef Schmittmann, and Karl Traumann, reduction of aromatic aldazines, 1912, A., i, 505.

Curtius, Theodor, Hermann F. Bollenbach, and Hans Clemm, action of hydrazine hydrate on nitro-compounds. III. Action of hydrazine hydrate on 2:4-dinitrobenzoic acid, 1907, A., i, 1078.

Curtius, Theodor, and Thomas Callan, diazoacetylglycylglycinehydrazide,

1910, A., i, 787.

transformation of diazohydrazides into monohalogen hydrazides and azoimides, 1910, A., i, 788,

Curtius, Theodor, and Hans Curtius, condensations with amino-acids. VI. Formation of compounds of aspartic acid by means of hippurylazoimide, 1904, A., i, 884.

Curtius, Theodor, and August Darapsky, action of nitrous acid on polyglycine esters. I. Ethyl diazoacetylamino-

acetate, 1906, A., i, 403.

Curtius, Theodor, August Darapsky, and August Bockmühl, action of hydrazine on diazoacetamide and on ethyl diazoacetate, 1908, A., i, 144.

Curtius, Theodor, August Darapsky, and Ernst Müller, pseudodiazoacetamide, 1906, A., i, 939; 1907, A., i, 21; 1909, A., i, 848.

1:2:4:5-tetrazine, 1907, A., i, 262.

so-called trisbisdiazomethanetetracarboxylic acid and the related bisdiazomethane, 1907, A., i, 359.

1-amino-1:3:4-triazole-2:5-dicarboxylic

acid, 1907, A., i, 450.

notes on Bülow's papers: "so-called dihydrotetrazines," and "decomposition products of acylhydrazones of esters of 1:3-keto-carboxylic acids," 1907, A., i, 451.

hydrolysis of 1:2:4:5-tetrazine-3:6dicarboxylic acid, 1907, A., i, 451. methyl ester and hydrazide of nitro-

soiminoacetic acid, 1908, A., i, 145. so-ealled ethyl isodiazoacetate, 1908,

A., i, 923.

products of the transformation of ethyl diazoacetate under the influence of alkalis, 1908, A., i, 924.

Curtius, Theodor, and Hans Franzen, the hydrazide and azoimide of α - and β -triazopropionic acids, 1912, A., i, 426.

Curtius, Theodor, and Hartwig Franzen, presence of formaldehyde in plants, 1912, A., ii, 797.

chemical constituents of green plants.

I. Leaf aldehydes, 1912, A., ii, 797.

chemical constituents of green plants.

II. The volatile acids of hornbeam leaves, 1912, A., ii, 978.

chemical constituents of green plants. IV. Further volatile aldehydes of hornbeam leaves, 1912, A., ii, 978.

v. Volatile alcohols of hornbeam

leaves, 1912, A., ii, 979.

Curtius, Theodor, Hartwig Franzen,
Reinhold Korte, Fritz Mayer, and
Hermann Wewer, reduction of
aromatic aldazines, 1912, A., i, 307.
Curtius, Theodor, and Wilhelm Giulini,

Curtius, Theodor, and Wilhelm Giulini, the hydrazide and azoimide of γtriazobutyric acid, 1912, A., i, 427. Curtius, Theodor, and Heinrich Gockel, action of hydrazine hydrate on ethyl bromosuccinate, 1911, A., i, 401.

Curtius, Theodor, and Otto Gumlich, condensations with amino-acids. VII. Formation of derivatives of β-amino-α-hydroxypropionic acid and of β-aminobutyric acid by means of hippurylazoimide, 1904, A., i, 886.

Curtius, Theodor, and Friedrich Hartmann, the hydrazide and azoimide of triazosuccinic acid, 1912, A., i, 427.

Curtius, Theodor, and Alfred Hoesch, action of hydrazine hydrate on nitro-compounds. IV. 4-Nitro- and 4-amino-phthalylhydrazides, 1907, A., i, 1079.

Curtius, Theodor, and Ludwig Hussong, action of hydrazine hydrate on ethyl chloroacetate, 1911, A., i, 400.

Curtius, Theodor, and Richard Kastner, action of hydrazine hydrate on ortho-

diketones, 1911, A., i, 324.

Curtius, Theodor, and Karl Kof, reduction of the ketonehydrazines and ketazines of tetramethyldi-p-aminobenzophenone and fluorenone, 1912, A., i, 732.

Curtius, Theodor, and Emil Lambotte, condensations with amino-acids. IV. Action of hippurazoimide on α-alanine,

1904, A., i, 835.

Curtius, Theodor, and Wolfgang Lenhard, condensations with amino-acids. IX. The action of acylazoimides on carbamide and of phenylcarbamic azoimide on glycine, 1904, A., i, 888.

Curtius, Theodor, and Leo Levy, condensations with amino-acids. III. Formation of glycyl compounds by means of hippurazoimide, 1904, A., i, 833.

Curtius, Theodor, and Charles Florent van der Linden, condensations with amino-acidis. V. Combination of alanine and glycine by means of benzoylalanineazide, 1904, A., 1, 888.

Curtius, Theodor, and Max Mayer, action of hydrazine hydrate on nitrocompounds. V. Action of hydrazine hydrate on 2:4-dinitrophenylhydrazine, 1908, A., i, 53.

Curtius, Theodor, Heinrich Melsbach, and Johannes Rissom, action of alkalis on aromatic acid hydrazides, 1910, A.,

i, 508.

A., i, 887.

Curtius, Theodor, and Ernst Müller, diazo-fatty esters, 1904, A., i, 481. condensations with amino-acids. VIII. Hippuryl-y-aminobutyric acid and hippuryl-B-phenyl-a-alanine, 1904, Curtius, Theodor, and Adolf Riedel, action of hydrazine hydrate on nitrocompounds. II. Action of hydrazine hydrate on ethyl 3:5-dinitrobenzoate, 1907, A., i, 970.

Curtius, Theodor, and Eugen Rimele, action of hydrazine hydrate on ethyl bisdiazoacetate, 1908, A., i, 921.

Curtius, Theodor, Franz Schneiders, and Gustav Sprenger, the reduction of aromatic aldazines, 1912, A., i, 137.

Curtius, Theodor, and James Thompson, action of nitrous acid on polyglycine esters. II. Ethyl diazoacetylglycylaminoacetate, 1906, A., i, 403.

action of nitrous acid on polyglycine esters. III. Action of ammonia on ethyl diazoacetylglycine and ethyl diazoacetylglycylglycine, 1906, A., i, 404.

action of ammonia on ethyl diazoacetylglycine (isodiazoacetylaminoacetic acid), 1906, A., i, 940.

formation of 5-triazolone and of 5triazolone derivatives from diazo-

aliphatic acids, 1907, A., i, 95. Curtius, Theodor, and Ernst Welde, ammonium salt of 5-hydroxy-1:2:3triazole-1-acetamide (1:2:3-triazole-5-one-1-acetamide), 1907, A., i, 449.

diazoacetylglycinehydrazide and 5hydroxy-1:2:3-triazole-1-acetylhydrazide, 1910, A., i, 786.

4-dibromo-1:2:3-triazol-5-one-1-aceta-

mide, 1911, A., i, 167.

Curtius, Theodor, and Richard Wüstenfeld, condensations with amino-acids. II. Formation of glycyl compounds by means of hippurazoimide, 1904, A., i. 833.

Curtman, Louis J., some new double

arsenates, 1910, A., ii, 508.

Curtman, Louis J., and Harry Dubin, influence of non-volatile organic matter and certain acids on the precipitation of the ammonium sulphide group of metals, 1912, A., ii, 1212.

Curtman, Louis J., and Edward M. Frankel, study of the factors influencing the systematic qualitative estimation of barium, 1911, A., ii,

method for the systematic qualitative detection of barium and strontium,

1912, A., ii, 1211.

Curtman, Louis J., and P. Rothberg, efficiency of borax bead tests for nickel and cobalt, 1911, A., ii, 336.

application of the "glow reaction" to the qualitative detection of the platinum metals, 1911, A., ii, 661.

Curyel, G., effect of improving grapes on their composition, 1906, A., ii, 46.

Cushing, Harvey, and Emil Goetsch, the secretion of the infundibular lobe of the pituitary body and its presence in cerebrospinal fluid, 1910, A., ii, 1089.

Cushing, Harvey. See also Emil Goetsch.

Cushman, Allerton Seward, cause of the cementing value of rock powders and the plasticity of clays, 1903, A., ii, 474.

the estimation of oxygen in iron and

steel, 1912, A., ii, 88.

Cushman, Allerton Seward, and Prevost Hubbard, extraction of potassium from felspathic rock, 1908, A., ii, 586.

Cushny, Arthur Robertson, saline diuresis, 1903, A., ii, 91.

physiological action of optical isomerides, 1903, A., ii, 564.

physiological action of atropine and the hyoscyamines, 1904, A., ii, 66.

secretion of acid by the kidney, 1904, A., ii, 576.

action of drugs on the uterus, 1907, A., ii, 112.

[physiological] action of optical iso-III. Adrenaline, 1908, merides.

A., ii, 720. action of oxidising salts, 1908, A., ii,

1049.

physiological action of optical] isomerides of adrenaline, 1909, A., ii, 420.

irregularities of the mammalian heart under aconitine, 1910, A., ii, 224. exhalation of drugs by the lungs, 1910,

A., ii, 525.

[physiological] action of atropine, pilocarpine, and physostigmine, 1910, A., ii, 1095.

action of senecio alkaloids and the causation of hepatic cirrhosis in

cattle, 1911, A., ii, 912.

Cushny, Arthur Robertson, and A. Roy Peebles, action of optical isomerides. II. Hyoscines, 1905, A., ii, 545.

Cushny, Arthur Robertson. John D. Thomson.

Cusmano, Guido, stereo- and structural isomerides obtained by the introduction of acyl radicles into Bhydroxylamines. I., 1910, A., i, 50.

behaviour of alicyclic hydroxylamines and hydroxylamineoximes towards nitrous acid. I., 1910, A., i, 182.

a-pineneisonitroamineoxime and its decomposition products, 1910, A., i, 574.

Cusmano, Guido, action of hydroxylnitroso-chlorides and amine on I. d-Limonene-o-hydrnitrosates. oxylamineoxime, 1910, A., i, 685.

mechanism of the opening of the cyclobutane ring in derivatives of

pinene, 1910, A., i, 686. action of hydroxylamine on nitrosochlorides and nitrosates. II. a-Pinene-o-hydroxylamineoxime, 1910, A., i, 863.

action of hydroxylamine on nitrosochlorides and nitrosates. III. aß-Amylenehydroxylamineoxime and derivatives, 1911, A., i, 186.

Cusmano, Guido, and Arrigo Linari, synthesis of a ketone derived from cineole, 1912, A., i, 272.

Cusmano, Guido, See also Luigi Fran-

cesconi and Giuseppe Oddo.

Cuthbertson, Clive, refractive indices of the elements, 1905, A., ii, 129, 293. new determinations of some constants of the inert gases, 1911, A., ii, 108.

Cuthbertson, Clive, and (Mrs.) Maud Cuthbertson, refraction and dispersion of krypton and xenon and their relation to those of helium and argon, 1909, A., ii, 105.

refraction and dispersion oxygen, nitrogen, and hydrogen and their relations, 1910, A., ii, 85.

refraction and dispersion of sulphur dioxide and hydrogen sulphide and their relation to those of their constituents, 1910, A., ii, 85.

refraction and dispersion of neon,

1910, A., ii, 85.

the refraction and dispersion of argon and redeterminations of the dispersion of helium, neon, krypton, and xenon, 1910, A., ii, 561.

optical method of measuring vapour vapour pressure and pressures: apparent superheating of solid

bromine, 1911, A., ii, 582.

Cuthbertson, Clive, and E. Parr Metcalfe, refractive indices of gaseous potassium, zinc, cadmium, mercury arsenic, selenium and tellurium, 1907, A., ii, 205.

refractive indices of gaseous nitric oxide, sulphur dioxide, and sulphur

trioxide, 1908, A., ii, 545.

dispersion of gaseous mercury, sulphur, phosphorus, and helium, 1908, A., ii, 545.

Cuthbertson. Clive. and Edmund Brydges Rudhall Prideaux, refractive index of gaseous fluorine, 1905, A., ii, 781.

Cuthbertson, (Mrs.) Mand. See Clive Cuthbertson.

Cuttitta. Salvatore. 1:3:6-trinitro-7methylacridone, 1906, A., i, 697.

Cyanid-Gesellschaft in Berlin, preparation of calcium eyanamide, 1904, A., i, 562.

Cybulsky, S., acetylation of some aminoderivatives of the naphthalene and quinoline groups, 1903, A., i, 775.

Cyriax, (Mrs.) Eva Richardis, See

Holland Crompton.

Cytronberg, Seweryn, the cholesterase of blood-corpuscles, 1912, A., ii, 1065. Czadek, O. von, amount of sugar con-

tained in cinnamon bark, 1903, A., ii, 568.

assimilation of iron by spinach, 1904, A., ii, 436.

Czakó, Emerich, estimation of ozone, 1912, A., ii, 1092.

Czakó, Emerich, See also Hermann Staudinger.

Czapek, Friedrich, nitrogen assimilation and protein formation of moulds, 1903, A., ii, 35, 168.

Czapek, Friedrich. See also Eduard Kohn.

Stanislaus von Kost-Czaplicki, S., anecki, and Victor Lampe, attempts and its to synthesise chromenol derivatives, 1909, A., i, 235.

Czapski. A. See Heinrich Fresenius. Czarnecki, Stefan. See Ludwik Bruner, Czerkis, Max, cannabinol, the active constituent of hashish, 1907, A., i, 331.

Czerkis, Max. See also Eugen Bamberger.

Czermak, Willy, changes in the so-called physical properties of soil by frost, heat, and addition of salts, 1912, A., ii, 198.

Czernecki, Wincenty, creatine and creatinine in the organism, 1905, A., ii,

the amount of oxyproteic acids in serous fluids, and in the blood in normal and pathological cases, 1911, A., ii, 302.

Czerný, F. See Julius Stoklasa.

Czerwek, A., new method for the separation of antimony and tin, 1906, A., ii, 708.

Cziser, Stefan. See Paul Lindner.

Czubalski, F., the influence of intestinal extract on blood-coagulation, 1908, A., ii, 304.

Czyhlarz, Ernst von, and Otto von Fürth, animal peroxydases, 1907, A., i, 1101.

D.

Daalen, Cornelis Koert van, estimation of humus acids in soils by Tacke's method, 1907, A., ii, 58.

Daalen, Cornelis Koert van, See also

Boure Sjollema.

Dabrowski, Stephane, the fundamental colouring matter of urine, 1908, A., i, 232.

method of fractionation by diffusion, and its application to the study of colloidal solutions. I., 1912, A., ii, 1146.

Dabrowski, Stephane. See also Josef

Browinski.

D'Achiardi, Giovanni, some minerals from the tourmaline lodes of the granite of S. Piero in Campo (Elba), 1906, A., ii, 555.

a probably new zeolite from Elba, 1906, A., ii, 773.

origin of the boric acid in the soffioni of Tuscany, 1908, A., ii, 955.

pickeringite (=picroallumogene) from the Island of Elba, 1912, A., ii, 174.

Daconto, V. See Guido Bargellini.

Dadourian, H. M., radioactivity of underground air, 1905, A.,

radioactivity of thorium, 1906, A., ii,

415.

constituents of atmospheric radio-activity, 1908, A., ii, 453.

Daege, H. M. See Wilhelm Steinkopf. Daels, F. V., reduction of a-isodypno-

pinacolin, 1906, A., i, 357.

Dafert, Franz Wilhelm, Adolf Halla, and R. Waschata, composition of certain Chilian caliches, 1908, A., ii, 603.

Dafert, Franz Wilhelm, and R. Miklauz, new compounds of nitrogen with hydrogen and metals, 1909, A., ii, 882.

antique glass mirror, 1910, A., ii, 955.

some new compounds of nitrogen and hydrogen with lithium, 1911, A., ii, 39, 393; 1912, A., ii, 253.

the carbon-like substance occurring in Compositæ, 1912, A., ii, 195.

the compounds of cerium with nitrogen and hydrogen, 1912, A., ii, 942.

Dafert, Otto. See Michael Pfannl. Dagaeff, W. F. See Efim Semen London. Daghlian, G. K. See John Livingston Rutgers Morgan.

D'Agostini, Leonida. See Giacomo Car-

rara.

D'Agostino, E., and G. Quagliariello, application of curves of neutralising force to the determination of the molecular magnitudes and dissociation constants of chemical compounds in general and proteins in particular. 1912, A., ii, 1158.

D'Agostino, E. See also Giuseppe Ker-

not.

Dahl & Co. [azo-compounds from acylp-aminophenols], 1904, A., i, 207, 459. Dahle, Alfred, new distillation flask,

1911. A., ii, 975.

Dahle, Alfred. See also Hermann Matthes.

Dahlem, Karl. See Felix Meyer.

Dahm, Karl, the importance of the mechanical part of the work of digestion in relation to metabolism in the ox, 1910, A., ii, 1083.

Dahmen, Reiner. See Fritz Ullmann.

Dahmer, Georg, action of nitrous acid on brominated phenols, 1904, A., i, 871.

Dahmer, Georg. See also Friedrich Wilhelm Küster.

Dahse, Willy, derivatives of resacetophenone, 1908, A., i, 552.

Daikuhara, Gintaro, correction of a very unfavourable ratio of lime to magnesia in a soil for the culture of barley, 1906, A., ii, 387.

application of magnesia in the form of magnesium sulphate for the needs of the rice plant, 1906, A., ii, 388.

lime factor for the tobacco plant, 1906. A., ii, 388.

are soils containing less than 0.02% SO₃ benefited by special manuring with sulphates? 1908, A., ii, 128.

influence of solubility on availability, 1908, A., ii, 128.

manuring with magnesium sulphate, 1908, A., ii, 129.

Daikuhara, Gintaro, and Tsunejiro Imaseki, behaviour of nitrate in paddy soils, 1908, A., ii, 127.

Daimer, Josef. See Robert Kremann. Dainotti, Cesarina. See Bernardo Oddo.

Dains, Frank Burnett, action of acyl chlorides on mixtures of amines, 1906, A., i, 804.

some ferrocyanides of calcium, barium, and magnesium, 1907, A., i, 596.

Dains, Frank Burnett, and E. Brown, reactions of the formamidine derivatives, 1906, A., i, 781.

Daire. See P. Dornic.

Daitz, Werner, [qualitative] separation of metals of the ammonium sulphide group, 1906, A., ii, 308.

Dakin, Henry Drysdale, the hydrolysis of ethyl mandelate by lipase, 1903, P., 161.

proteolytic action of kidney enzyme,

1903, A., ii, 671.

the fractional hydrolysis of amygdalinic acid; isoamygdalin, 1904, T.,

1512; P., 200.

the hydrolysis of optically inactive esters by means of enzymes. I. The action of lipase on esters of mandelic acid; the resolution of inactive mandelic acid, 1904, A., i, 1071. the synthesis of substances allied to

adrenaline, 1905, P., 154.

fractional hydrolysis of optically active esters by lipase. II., 1905, A., i, 556.

physiological action of synthetical substances allied to adrenaline,

1905, A., ii, 410.

synthesis of a substance allied to adrenaline; physiological activity of substances indirectly related to adrenaline, 1906, A., i, 56.

oxidation of amino-acids with the production of substances of biological importance, 1906, A., ii, 105.

formation of glyoxylic acid, 1906, A.,

ii, 374.

action of arginase on creatine and other guanidine derivatives, 1907, A., i, 1099.

glyoxylic acid reaction for tryptophan, indole, and scatole, 1907, A., ii, 320.

oxidation of simple aliphatic substances in the animal organism, 1907, A., ii, 490.

oxidation of butyric acid by hydrogen

peroxide, 1908, A., i, 74.

oxidation of ammonium salts of hydroxy-fatty acids with hydrogen peroxide, 1908, A., i, 75.

oxidation of leucine, a-aminoisovaleric acid and a-amino-n-valeric acid with hydrogen peroxide, 1908, A., i, 80.

oxidation of ammonium salts of saturated fatty acids with hydrogen

peroxide, 1908, A., i, 119. synthesis of certain naturallyoccurring aliphatic ketones, and their possible mode of formation in the organism, 1908, A., i, 134.

use of p-nitrophenylhydrazine in the identification of aliphatic ketones and aldehydes, 1908, A., ii, 234,

relative rate of absorption of optically isomeric substances from the intestine, 1908, A., ii, 710.

degradation of carboxylic acids in the animal body, 1908, A., ii, 719.

Dakin, Henry Drysdale, oxidation of phenyl derivatives of fatty acids by the animal organism and by hydrogen peroxide, 1908, A., ii, 720.

mode of oxidation of phenyl derivatives of fatty acids in the animal organism, 1908, A., ii, 964; 1910,

A., ii, 795.

the oxidation of hydroxy-derivatives of benzaldehyde and acetophenone.

1909, P., 194.

mode of oxidation of phenyl derivatives of fatty acids in the animal organism. III. Synthesis of some derivatives of phenylpropionic acid, 1909, A., i, 103.

oxidation of glutamic and aspartic acids by hydrogen peroxide, 1909,

A., i, 293.

glycine as a detoxicating agent, 1909,

A., ii, 420.

mode of oxidation in the animal organism of phenyl derivatives of IV. Fate of phenylfatty acids. propionic acid and its derivatives. V. Fate of phenylvaleric acid and its derivatives. VI. Fate of phenylalanine, phenyl-\beta-alanine, phenylserine, phenylglyceric acids, and phenylacetaldehyde, 1909, A., ii, 684.

action of amino-acids. catalytic peptones, and proteins in effecting certain syntheses, 1910, A., i, 101. general reaction for

the conversion of saturated fatty acids, CH2R·CH2·CO2H, into ketones, R·CO·CH₃, 1910, A., i, 557.

catalytic racemisation of optically active hydantoin derivatives and of related substances as the result of tautomeric change, 1910, A., i,

the urorosein reaction, 1910, A., ii, 145.

fate of sodium benzoate in the human organism, 1910, A., ii, 228.

a new mode of formation of \$\beta\$-hydroxybutyric acid in the animal organism,

1910, A., ii, 632.

fate of inactive tyrosine in the animal body, together with some observations on the detection of tyrosine and its derivatives in the urine; the synthesis and probable mode of formation of Blendermann's p-hydroxybenzylhydantoin, 1910, A., ii, 796.

mode of decomposition of tyrosine and of related substances in the animal

body, 1910, A., ii, 796.

Dakin, Henry Drusdale, the formation in the animal body of l-B-hydroxybutyric acid by the reduction of acetoacetic acid, 1910, A., ii, 976.

chemical nature of alcaptonuria, 1911,

A., ii, 416.

the fate of benzoylacetic acid in the animal body, 1911, A., ii, 419.

Dakin, Henry Drysdale, and Mary Dows Herter, production of phenolic acids by oxidation of ammonium salts of benzoic acid, 1907, A., i, 1035.

Dakin, Henry Drysdale, and Ransom, treatment of diabetes by secretin, 1907, A., ii, 189.

Dakin, Henry Drysdale, and Alfred John Wakeman, formic acid as an intermediary substance in the katabolism of fatty acids and other substances, 1911, A., ii, 623.

katabolism of histidine, 1912, A., ii,

271.

Henry Drysdale. See also Julius Berend Cohen, Albrecht Kossel, Lafayette Benedict Mendel, and Alfred John Wakeman.

Dakin, William John, osmotic concentration in body-fluids of aquatic animals, 1909, A., ii, 78.

Dakin, William John. See also Benjamin

Moore.

Dale, Dorothy, and George Ralph Mines, action of acids on skeletal muscle, 1911, A., ii, 628.

physiological action of d- and l-tetrahydroquinaldine, 1911, A., ii, 636. Dale, Hugh Gordon. See Raphael Mel-

dola.

Dale, Henry Hallett, physiological action of chrysotoxin, 1905, A., ii, 545.

physiological actions of ergot, 1906, A., ii, 474.

action of extracts of the pituitary

body, 1909, A., ii, 1036. Dale, Henry Hallett, and Walter Ernest Dixon, physiological action of pressor

amines, 1909, A., ii, 688.

Dale, Henry Hallett, and Patrick Playfair Laidlaw, action of an active principle from Apocyneum, 1910, A., ii, 529.

physiological action of B-iminazolylethylamine [4-\beta-aminoethylglyoxaline], 1911, A., ii, 137, 1017.

a reversed action of the chorda tympani on salivary secretion, 1911, A., ii, 997.

preparation of secretin, 1912, A., i, 592. a simple coagulometer, 1912, A., ii, 269. actions of pilocarpine and nicotine, 1912, A., ii, 667.

Dale, Henry Hallett, and Patrick Playfair Laidlaw, the significance of the suprarenal capsules in the action of certain alkaloids, 1912, A., ii, 854.

Dale, Henry Hallett. See also Francis Arthur Bainbridge and George Barger.

Dale, J. See M. Rothermundt.

and Henri Dalebroux, (Mlle.) R., Wuyts, synthesis of halogenated tert.-alcohols by means of organoningnesium compounds, 1907, A., i.

Dallimore, P. B., melting points, 1909, A., ii, 118.

apparatus for Gutzeit's test, 1909, A., ii, 344.

a pipette wash-bottle, 1909, A., ii, 394.

volumetric estimation of diammonium hydrogen phosphate, 1909, A., ii,

gravimetric estimation of copper sulphate, 1909, A., ii, 833.

Dalmer, Karl, chemical changes in contact-metamorphism, 1903, A., ii,

constitution of biotite, 1907, A., ii,

Dalton, John, centenary of, 1903, P., 140. presentation of bust of, by Dr. Thorpe, 1903, P., 141, 212.

Dalton, John P., specific heat of saturated

vapours, 1907, A., ii, 330.

variation of specific heats with temperature and density, 1907, A., ii,

saturation constants according to van der Waal's equation, 1907, A., ii,

Daly, Arthur R., oxidation of naphthalene to phthalonic acid by alkaline solutions of permanganate, 1907, A., i,

Dam, Willem van, estimation of nitrogen in saltpetre, 1906, A., ii, 898.

use of manganese compounds as fertilisers, 1907, A., ii, 649.

rennet action, 1909, A., i, 278.

action of rennet on calcium paracaseinate, 1909, A., i, 685.

the question of the identity of pepsin and rennet, 1910, A., i, 290.

combination of lactic acid and casein, 1911, A., i, 91.

swelling of casein under the influence of sodium chloride and lactic acid, 1911, A., i, 407.

digestion of casein by pepsin from the calf, pig, and ox, 1912, A., i,

671.

DAN

Dam, Willem van, the enzymes of ren-

net, 1912, A., ii, 460.

Dam, Willem van, and A. D. Donk, equilibria in the system silver iodide, potassium iodide, and water, 1912, A., ii. 31.

Damant, G. C. C. See Arthur Edwin

Boycott.

Dambergis, Anastase, and Telemachos Komnenos, products of the action of sodium alkyloxides on acid esters, 1912, A., i, 934.

Dambergis, Anastase. See also Tele-

machos Komnenos.

Damje, Wulf. See Adolf Kaufmann. Damm, F., and Friedrich Krafft, the autoreduction of some metallic oxides in the vacuum of the cathode light and on the volatility of the corresponding sulphides, 1908, A., ii, 39. Damm, J. See Franz Sachs.

Dammann, Hans. See Johannes Schrö-

See Emil Abder-Dammhahn, Karl. halden.

Damoiseau, P. See Paul Lebeau.

Damond, Emile. See Paul Freundler. Dana, Charles Loomis, and Thomas W.

Hastings, cytodiagnosis in nervous diseases, 1904, A., ii, 359.

Danaila, Negoitza, oxidation of dimethylanilinoisatins, 1909, A., i, 971.

synthesis of 5:7:5':7'-tetrabromoindigotin and 5:7:5':7'-tetrachloroindigotin, 1910, A., i, 137.

synthesis of m-bromobenzoic anhydr-

ide, 1910, A., i, 381.

oxidation products of "thioindigotin," 1910, A., i, 411.

Danaila, Negoitza. See also Carl Liebermann.

Danckwortt, Peter Walter, condensation of aldehydes and hydroxyaldehydes with phenols, 1909, A., i, 938.

belladonna and henbane extracts, 1911, A., ii, 644.

Danckwortt, Peter Walter. Ernst Beckmann.

Dandeno, J. B., relation of mass action and physical affinity to toxicity, 1904, A., ii, 583.

Dané, Aristide, rapid methods for the analysis of water, 1910, A., ii, 1004. easy method for detecting nitrites, 1911, A., ii, 534.

a hygienic limit for potable waters,

1912, A., ii, 485.

Danesi, L., and M. Topi, disinfection of plants, 1911, A., ii, 820.

Dangeard, P. A., action of light on chlorophyll, 1911, A., ii, 86.

D'Angelo, A. See Alberto Peratoner. Daniek, M. See Simon Zeisel.

Daniel, Karl, Rivot's estimation of iron in the presence of zirconium, 1904, A., ii, 149.

estimation of fluorine in fluorides: a critical examination of the Wöhler-Fresenius method, 1904, A., ii, 289.

Daniel, Karl, and Hans Leberle, Rivot's quantitative estimation of iron in presence of zirconium, 1903, A., ii,

Daniel, Kenneth C. R., and Maximilian Nierenstein, the utilisation of carbalkyloxy-derivatives for the estimation of hydroxyl groups, 1911, A., i, 371.

Daniel, Lucien, and Victor Thomas, utilisation of mineral principles by grafted plants, 1903, A., ii, 36.

Daniel-Brunet, A., and C. Rolland, chemical and physiological examination of the liver of oxen, 1911, A., ii, 1111. Daniels, Amy L. See Lafayette Benedict

Mendel.

Daniels, Lloyd C., derivatives of complex inorganic acids: aluminotungstates and aluminophosphotungstates, 1909, A., ii, 52.

Danilewsky, B., the action of cholesterol on the frog's heart, 1907, A., ii, 981.

physiological action of products of metabolism. III. Action of scatole on the frog's heart. IV. Action of indole on the frog's heart, 1909, A., ii, 81.

Emile, employment of the Danjou, biochemical method for the detection and estimation of sucrose and glucosides in the plants of the family of the Caprifoliaceæ, 1907, A., ii, 510.

Danjou, Emile. See also Emile Bourquelot.

Danne, Jacques, a new radium mineral, 1905, A., ii, 133.

a new radioactive product of the uranium series, 1909, A., ii, 288.

Danne, Jacques, and Victor Crémieu, quantity of radium emanation liberated from one of the springs at Columbières-sur Orb (Hérault), 1911, A., ii, 1049.

Danne, Jacques. See also Pierre Curie and Haret.

Danneel, Heinrich, a simple standard electrode, 1904, A., ii, 697.

order of magnitude of the time of formation of complex molecules, equilibrium constants, and atomic dimensions, 1904, A., ii, 714. ionic velocities, 1905, A., ii, 499.

Danneel, Heinrich, and Lorenz Stockem, position of the alkali and alkalineearth metals in the electrochemical series at high temperatures, 1905, A., ii, 388.

Dannehl, Hugo. See Karl Auwers.

Dannenberg, Paul, iodine and bromine derivatives of thymol, 1903, A., i,

Dannenberg, Wilhelm. See Rudolph Fittig.

Dannerth, Frederic, action of phosphorus oxychloride on 1-naphthylamine-8sulphonic acid, 1907, A., i, 909.

D'Ans, Johannes, two acid sodium

sulphates, 1906, A., ii, 351.

ammonium syngenite, 1906, A., ii, 751; 1908, A., ii, 182.

two new ammonium calcium sulphates,

1907, A., ii, 168. acid sulphates, II. Acid calciumsodium sulphate, 1907, A., ii, 459.

cæsium dicalcium sulphate, 1908, A., ii, 590.

neutral triple sulphates of calcium, 1908, A., ii, 590.

acid sulphates. III., IV., and V., 1909, A., ii, 139, 885; 1910, A., ii, 125.

do clays and cements adsorb CO2" ions?

1910, A., ii, 213.

D'Ans, Johannes, and Wilhelm Frey, direct preparation of organic per-acids, 1912, A., i, 601.

D'Ans, Johannes, and Walter Friederich, synthesis of Caro's acid and of persulphuric acid, 1910, A., ii, 706. derivatives of hydrogen peroxide, 1912,

A., ii, 151.

D'Ans, Johannes, and Oskar Fritsche, acid sulphates. VI., 1910, A., ii, VI., 1910, A., ii,

D'Ans, Johannes, and J. Kautzsch, chlorination of ethyl chloride, 1909, A., i, 754.

D'Ans, Johannes, and Otto Schreiner, calcium alkali sulphates, 1909, A.,

ii, 401.

the solubility of alkali sulphates in alkaline solutions, and of calcium sulphate in solutions of alkali sulphate and free alkali, 1910, A., ii, 849.

the ternary systems: alkali-phosphoric acid-water, 1910, A., ii, 1050.

D'Ans, Johannes, and Wilhelm Zeh, rubidium calcium sulphates, 1908, A., ii, 104.

D'Ans. Johannes. See also Jacobus Henricus van't Hoff and Gustav Keppeler.

Dantony, E. See V. Vermorel.

Danysz, Jean, action of radium on the virus of rabies, 1906, A., ii, 379.

the B-rays of the radium family, 1911, A., ii, 840; 1912, A., ii, 113, 219.

the retardation undergone by B-rays on traversing matter, 1912, A., ii, 617.

Danysz, Jean, and William Duane, the electrical charges carried by the a- and B-rays, 1912, A., ii, 888.

Danysz, Jean, and J. Götz, the B-rays of the slow-changing active deposit of

radium, 1912, A., ii, 220.

Danysz, Jean, jun., radioactive lead extracted from pitchblende, 1906, A., ii. 644.

Danzel, Lucien, [the glucoside of Aralia japonica], 1912, A., i, 640.

Danzfuss, Wilhelm. See Michaelis.

Danziger, E. See Julius von Braun.

Danziger, John Louis. See Edmund Howd Miller.

Danziger, Sigismund. August See Michaelis.

Da Ponte, Constante. See Giuseppe Bruni.

Darapsky, August, reduction of ketohydrazines; benzhydrylhydrazine, 1903, A., i, 367.

reduction of ketohydrazines; benzhydrylhydrazine and s-dibenzhydrylhydrazine, 1903, A., i, 367.

new method of preparation of azoimide and diazobenzeneimide [phenylazoimide], 1907, A., i, 729.

Hofmann's reaction with amides and hydrazine derivatives of carbonic acid, 1908, A., i, 106.

so-called unsymmetric methyl azinsuccinate, 1910, A., i, 435.

so-called symmetrical methyl azinsuccinate, 1910, A., i, 436.

optically active hydrazino-acids, 1912, A., i, 307.

Buchner's pyrazolinecarboxylic acid, 1912, A., i, 391.

Darapsky, August, and Moreshwar Prabhakar, reduction of ethyl diazoacetate, 1912, A., i, 543, 841.

Darapsky, August. See also Theodor Curtius.

Darbishire, Francis Vernon, and Jocelum Field Thorpe, note on the formation of \$\beta\$-methylglutaconic acid and of a\$\beta\$dimethylglutaconic acid, 1905, T., 1714; P., 239.

Dard, apparatus for the prevention of acid fumes in gold and silver assaying,

1908, A., ii, 72.

Darier, Georges, and E. Mannassewitch, condensation of nitro-derivatives of benzyl chloride with naphthylamines,

1903, A., i, 82. Dar Juan, T., behaviour of triethylamine towards oxidising agents, 1910,

A., i, 98.

Darmois, Eugène, a case of anomalous rotatory dispersion; application of measurements of rotatory dispersion to the study of the composition of oil of turpentine, 1908, A., ii, 747.

composition of oil of turpentine, 1910,

A., i, 52.

artificial camphor, 1910, A., i. 398. natural and magnetic rotatory polarisation, 1911, A., ii, 352.

Darms, Hans, the influence of radium on the body temperature of man, 1912,

A., ii, 470.

Darmstaedter, Ernst, estimation of \(\beta\)hydroxybutyric acid in urine, 1903,

A., ii, 394.

Darmstädter. Friedrich. electrolytic preparation of p-aminophenol and its derivatives, 1904, A., i, 664, 1001.

electrolytic preparation of hydrazo-

compounds, 1908, A., i, 301. rin, Marc. See H. K. Benson and Darrin, Marc. Horace Greeley Byers.

Darton, Nelson Horatio, and C. E. Siebenthal, [bentonite from Laramie, Wyoming], 1912, A., ii, 267.

Darwin, C. G. See Ernest Marsden. Darzens, Georges, hydrogenation of aromatic ketones by means of reduced nickel; new method of synthesising

> aromatic hydrocarbons, 1905, A., i, 66.

general method of synthesising aldehydes by means of the substituted glycidic acids, 1905, A., i, 116.

new method of synthesising saturated ketones by catalytic reduction, 1905,

A., i, 172.

general method of synthesising aßtrisubstituted glycidic esters and ketones, 1906, A., i, 62.

glycidic condensation of aldehydes with ethyl a-chloropropionate, 1906,

A., i, 137.

preparation of \$\beta\beta\cdot\delta\beta\disubstituted glyeidic acids, 1907, A., i, 178.

preparation of aldehydes containing a secondary alkyl group, 1907, A., i,

catalytic hydrogenation of unsaturated esters, 1907, A., i, 277.

glycidic synthesis of hexahydroaromatic ketones, 1907, A., i, 627.

Darzens, Georges, glycidic esters and aldehydes in the naphthalene series, 1908, A., i, 91.

catalytic hydrogenation of aromatic and quinoline bases, 1910, A., i, 63. new method for synthesis of unsaturated ketones, 1910, A., i, 322.

action of halogen acids on glycidic

esters, 1910, A., i, 460.

new method for preparation of glycidic esters, 1911, A., i, 6.

condensation of halogen compounds with ethyl BB-dimethylglycidate, 1911, A., i, 259.

new method for esterification of alcohols by halogen acids, 1911, A.,

i, 513.

action of thionyl chloride in presence of a tertiary base on esters of hydroxy-acids, 1911, A., i, 517.

carbon pernitride, 1912, A., i, 542. Darzens, Georges, and Ernest Berger, new method for the preparation of β-halogen derivatives of naphthalene, 1909, A., i, 297.

Darzens, Georges, and François Bourion, action of thionyl chloride on metallic

oxides, 1911, A., ii, 878.

Darzens, Georges, and Pierre Lefébure, preparation of glycidic esters and aldehydes in the hexahydroaromatic

series, 1906, A., i, 430.

Darzens, Georges, and Henri Leroux, glycidic esters of decahydro-8-naphthyl ketone, decahydro-β-naphthaldehyde. methyldecahydro-B-naphthyl ketone, 1912, A., i, 627.

Darzens, Georges, and H. Rost, new method for preparation of homologues of naphthalene, 1908, A., i,

hexahydrophenylacetylene cyclohexylacetylene] and hexahydrophenylpropiolic acid, 1909, A., i, 899.

synthesis of ketones in the tetrahydroaromatic series, 1910, A., i, 856.

derivatives of butylcyclohexane, 1911, A., i, 290.

synthesis of new hydroaromatic ketones, 1911, A., i, 988.

Darzens, Georges, and J. Sejourné, condensation of ethyl BB-dimethylglycidate with ethyl bromoacetate, 1911, A., i, 420.

the esters of dichlorosuccinic acid and their stereoisomerides, 1912, A., i,

Das, B. M. See Edmund Stiasny.

Das, Tarak Nath, reactions of oxalates, 1909, A., ii, 707.

Das, Tarak Nath, indirect estimation of copper, 1910, P., 130.

properties of precipitated silver, 1910,

A., ii, 209.

estimation of chlorates in the presence of nitrates and chlorides, 1910, A., ii, 238, 448.

Dastre, A., and A. Stassano, kinase, antikinase, and protrypsin, 1903, A.,

ii, 497.

Datta, Rasik Lal, the formation of dichlorocarbamide and its behaviour towards amines, 1911, P., 264; 1912, T., 166.

preparation and decomposition of benzylmonochloro- and benzyldichloro-amines, 1912, A., i, 962.

Datta, Rasik Lal. See also Prafulla Chandra Rây.

Desha Adalf at

Daube, Adolf, ethylidenephthalide, 1905, A., i, 210.

Daube, Adolf. See also Martin Freund.

Daudel. See Marc Tiffeneau.

Daudt, Herbert Wilkens. See Gregory Paul Baxter.

Daufresne, Maurice, presence of pmethoxycinnamaldehyde in essential oil of tarragon, and some derivatives of estragole, 1908, A., i, 19.

fluorene series; spontaneous formation of an ozonide, 1908, A., i, 164.

constituents of tarragon oil (Oleum dracunculi), 1908, A., i, 436.

Daufresne, Maurice, and Flament, levorotatory component of tarragon oil, 1908, A., i, 558.

Daufresne, Maurice. See also Marc Tiffeneau.

Tineneau

Daumas, A. See Henri Stassano.

Dauphin, J., influence of radium rays on the development and growth of lower fungi, 1904, A., ii, 279.

Dautriche, H., action of alkali salts of a fixed base on the combustion of gases and combustible powders, 1908, A., ii, 275.

action of safety explosives containing ammonium nitrate in the presence of carbon, paper, and paraffin, 1910, A., ii, 34.

Dautry, René. See William Echsner

de Coninck.

Dautwitz, Fritz, condensation of tiglic aldehyde with acetone, 1906, A., i, 803.
 Dauvé, a reaction of gold chloride, 1909,

A., ii, 352.

Dauwe, Ferdinand, absorption of ferment by colloids, 1905, A., i, 623.
D'Auzay, P. Turquand. See Albert

Bruno. See Albert

Daval. L. See Gustave Patein.

Davenport, A. T., estimation of small quantities of nitrogen by Pelouze's reaction, 1910, A., ii, 998.

David, Elkan, and Stanislaus von Kostanecki, synthesis of 7:8-dihydroxy-

chromone, 1903, A., i, 272.

David, J., method for the analysis or fats by the separation of the solid fatty acids from the liquid acids, 1910, A., ii, 1123.

David, W. T., radiation in explosions of coal gas and air, 1911, A., ii, 1046.

Davidoff, W. See Leonor Michaelis. Davidsohn, Heinrich, the stomach lipase, 1912, A., ii, 1067.

Davidsohn, Heinrich. See also Leonor Michaelis.

Davidsohn, Isser. See Arthur Rosenheim.

Davidsohn, J., and G. Weber, determination of the saponification number in oils and fats, 1906, A., ii, 908.

Davidson, Alfred. See Thomas Stewart Patterson.

Davidson, Emil, the decomposition of potassium chlorate by hydrochloric acid a reaction of the first order, 1905, A., ii, 584.

Davidson, Emil. See also Adalbert Kolb.

Davidson, J. F., electrical conductivity of flames, 1906, A., ii, 325.

Davidts, Alfons, thermal expansion of aqueous salt solutions, 1912, A., ii, 427.

Davies, Arthur Hugh. See Arthur George Green.

There I work

Davies, Harold, and Frederic Stanley Kipping, different methods of applying the Grignard reagents, 1911, T., 296; P., 39.

Davies, Harold, Henry Stephen, and Charles Weizmann, aδ-derivatives of adipic and β-methyladipic acids; preliminary note, 1912, P., 94.

Davies, Harold. See also Frederic Stanley Kipping and Charles Weiz-

mann.

Davies, Henry, a relation between coefficients of expansion of liquids and their critical temperatures, 1912, A., ii, 426.

some applications of the law of the rectilinear diameter, 1912, A., ii, 902.

Davies, John Hughes, formation and decomposition of ammonia by the silent electric discharge in a Siemens tube, with particular reference to the validity of the law of mass action, 1909, A., ii, 30. Davies, John Hughes, and Edgar Philip Perman, back reactions in iodine titrations, 1906, A., ii, 489.

Davies, John Hughes. See also Max Le Blanc and Edgar Philip Perman. Davies, Llewellyn John. See James Scott

Rowland.

Davies, Samuel Henry, and Basil Gordon McLellan, estimation of carbon dioxide in the atmosphere, 1909, A., ii,

Davies, Samuel Henry. See also James Scott Bainbridge.

Davies, Thomas Huws. See John Joseph

Sudborough.

Davila, Ch. See Philippe Auguste Guye. Davis, Bergen, and C. W. Edwards, chemical combination of oxygen and hydrogen under the action of radium rays, 1905, A., ii, 448.

Bernard Francis, gadolinite Davis. from West Australia, 1903, A., ii,

734.

Davis, Bernard Francis, and Arthur Robert Ling, action of malt diastase on potato starch paste, 1903, P., 275; 1904, T., 16.

Davis, C., and J. Louis Foucar, rapid volumetric method for the estimation of free sulphur, 1912, A., ii, 384.

D'Avis, C. See Robert Pschorr.

Davis, Daniel, intravenous injection of thrombin, 1912, A., ii, 60.

Davis, Eric Gordon, and Samuel Smiles. new syntheses of thioxanthone and its derivatives, 1910, T., 1290; P., 93,

Davis, Frank M., new normal solution and reagent bottle, 1910, A., ii, 1105.

Davis, Grant Train, new instrument for reducing gas volumes to standard conditions, 1908, A., ii, 666.

Davis, Grant Train. See also William Maurice Dehn and Moses Gomberg.

Davis, Harold S., conductivity of rosaniline hydrochloride in water and in certain organic solvents, 1912, A., ii, 894.

Davis, Morton James Pryce. See John

Joseph Sudborough.

Davis, Oliver Charles Minty, the action of nitrogen sulphide on organic sub-Part III., 1905, T., 1831; stances. P., 258.

some thio- and dithio-carbamide derivatives of ethyleneaniline and the ethylenetoluidines, 1906, T., 713; P., 114.

the action of nitrogen sulphide on certain metallic chlorides, 1906, T., 1575; P., 261.

Davis, Oliver Charles Minty, the adsorption of iodine by carbon, 1907, T. 1666; P., 208.

the quantitative decomposition of the anilides; a study in steric influence, 1909, T., 1397; P., 197.

preparation of the acvl derivatives of the aldehyde-cyanohydrins. H., 1910, T., 949; P., 89.

steric effects, static and dynamic, 1912.

A., ii, 32.

Davis, Oliver Charles Minty. See also Francis Ernest Francis and James William McBain.

Davis, P. B., and Harry Clary Jones. conductivity and negative viscosity coefficients of certain rubidium and ammonium salts in glycerol and in mixtures of glycerol and water from 25° to 75°, 1912, A., ii, 1124.

Davis, R. O. E., analysis of kunzite,

1904, A., ii, 621.

estimation of ammonia without a condenser, 1909, A., ii, 615.

Davis, R. O. E. See also Charles Holmes Herty.

Davis, William Alfred, basic carbonates, 1906, A., ii, 670.

changes involved in the production and setting of plaster of Paris, 1907, A., ii, 686.

Davison, Alice Lenore, electrolytic estimation of cadmium with the use of a rotating anode, 1905, A., ii, 859.

Davison, John M. See Kenneth S. Howard.

Davisson, Clinton J., positive thermions from the salts of the alkaline earths, 1912. A., ii, 116.

the rôle played by gases in the emission of positive thermions from salts,

1912, A., ii, 116.

Davoll, David L., jun., estimation of raffinose, 1904, A., ii, 96, 217.

Dawe, Karl. See Alfred Werner. Dawson, Ben. See Harold Baily Dixon.

Dawson, Harry Medforth, the relative affinities of polybasic acids, 1903, T., 725; P., 135.

the formation of periodides in organic solvents, 1904, T., 467; P., 54.

the nature of ammoniacal copper solutions, 1906, T., 1666; P., 256.

influence of strong electrolytes on partition phenomena, 1906, A., ii, 730.

the formation of polyiodides in nitrobenzene solution. Part III. The chemical dissociation of the polyiodides of the alkali metals and ammonium radicles, 1908, T., 1308; P., 181.

Dawson, Harry Medforth, the nature of ammoniacal copper solutions. II. The solubility of cupric hydroxide in ammoniacal sulphate solutions, 1909, T., 370; P., 33.

a method for investigating dissociation equilibria in solutions, and its application to the study of aqueous potassium mercuri-iodide solutions, 1909,

T., 870; P., 129.

copper complexes in ammoniacal solution, 1909, A., ii, 316.

ammoniacal solutions of cupric hydr-

oxide, 1909, A., ii, 1011. changes in volume in the formation of dilute solutions, 1910, T., 1041; P., 116.

changes in volume in the formation of dilute solutions. Part II. Relationship between change in volume and constitution, 1910, T., 1896; P., 202.

the activity of acids as catalysts in relation to the nature of the solvent medium, 1910, P., 326; 1911, T., 1.

Dawson, Harry Medforth, and Harry Ark, the reactivity of ketones towards iodine and the relative rates of tautomeric change. Part II., 1911, T., 1740; P., 223.

Dawson, Harry Medforth, and (Miss) Ethel Elizabeth Goodson, the formation of periodides in nitrobenzene solution. Part II. Periodides of the alkali and alkaline earth metals, 1904, T., 796; P., 126.

Dawson, Harry Medforth, and Colin Gyrth Jackson, volume changes which accompany transformations in the system Na₂S₂O₃: 5H₂O, 1907, T., 552; P., 75.

the influence of foreign substances on transition temperatures and the determination of molecular weights,

1908, T., 344; P., 26.

the formation of polyiodides in nitrobenzene solution. Part IV. The electrolytic dissociation of the polyiodides of the alkali metals and ammonium radicles, 1908, T., 2063; P., 213.

Dawson, Harry Medforth, and (Miss) May Sybil Leslie, dynamics of the reaction between iodine and acetone, 1909, T., 1860; P., 246.

ionisation in non-aqueous solvents, 1911, T., 1601; P., 208.

Dawson, Harry Medforth, and Frank Powis, the conditions of isodynamic aliphatic ketones. change in the Part I. The autocatalytic reaction between acetone and iodine, 1912, T., 1503; P., 159.

Dawson, Harry Medforth, and Robert Wheatley, the reactivity of ketones towards iodine and the relative rates of tautomeric change, 1910, T., 2048; P., 233.

Dawson, Harry Medforth. See also

Julius Berend Cohen

Dawson, Lowell E., fruit of Diervilla Florida, 1912, A., ii, 864.

Dawson, Percy Millard, intravenous injection of sodium hydrogen carbonate after severe hæmorrhage, 1904, A., ii,

Dax, R., photodynamic action in alkaline, neutral, and acid media, 1907. A., ii, 37.

Day, Alexander A. See Arthur I. Ken-

dall. Day, Arthur Louis, and Eugene Thomas

Allen, isomorphism and thermal properties of the felspars, 1906, A., ii, 177. Day, Arthur Louis, and John Kay

Clement, measurements with gas thermometer, 1908, A., ii, 1013.

Day, Arthur Louis, and Earnest Stanley Shepherd, lime-silica series of minerals, 1906, A., ii, 770.

Day, Arthur Louis, and Robert B. Sosman, the melting points of minerals, 1911, A., ii, 496.

the nitrogen thermometer scale from 300° to 630° with a direct determination of the boiling point of sulphur, 1912, A., ii, 531.

Day, Arthur Louis, Robert B. Sosman. and Eugene Thomas Allen, the nitrogen thermometer from zinc to palladium, 1910, A., ii, 261.

Day, Arthur Louis. See also George Ferdinand Becker.

Day, Frank Edward. See Julian Levett Baker.

Day, H. F. See Walter Bradford Cannon.

De, Tincowry. See Prafulla Chandra Rây.

Deakin, (Miss) Stella, and Albert Cherburg David Rivett, conductivity and dissociation of diacetyltartaric acid, 1911, P., 316; 1912, T., 127.

Deakin, (Miss) Stella, (Miss) Margaret Emilie Scott, and Bertram Dillon Steele, complex oxalates of cobalt and

nickel, 1909, A., i, 877.

Deakin, (Miss) Stella, and Norman Thomas Mortimer Wilsmore, some reactions of keten; combination with hydrocyanic acid, 1910, T., 1968; P.,

Dean, Arthur L., inulin, 1904, A., i, 717.

Dean, Arthur L. See also Yandell Henderson.

Dean, E. W. See William Allen Drushel.

Dean, George (Elstree). See J. Andersen

Dean, George (Ilford), the bromination of silver cyanate, 1904, T., 1370; P., 183.

Dyan, Graham W., estimation of silica in iron ores containing alumina, 1906, A., ii, 630.

estimation of silica and alumina in iron ores, 1907, A., ii, 818.

Dean, H. R. See Emil Abderhalden. Dean, Paul M. See John Bernard Eke-

Debaiseux, Maurice, determination of the free acid in electrolytic copper

baths, 1909, A., ii, 756. **Debierne**, André, induced radioactivity caused by salts of actinium, 1903,

A., ii, 257, 348. the emanation of actinium, 1904, A.,

ii, 223, 729.

radioactive lead, radiotellurium, and polonium, 1904, A., ii, 642.

gases produced by actinium, 1905, A., ii, 623.

phosphorescence phenomena, 1906, A., ii, 257.

some properties of actinium, 1906, A., ii, 414.

radioactivity, 1908, A., ii, 550.

decomposition of water by radium salts, 1909, A., ii, 364.

radium emanation, 1909, A., ii, 534. the atomic weight of the radium emanation, 1910, A., ii, 675.

Debierne, André. See also (Mmc.) Marie Curie.

Débourdeaux, Léon, volumetric estimation of nitric acid, 1903, A., ii, 573.
 modification of the Pelouze-Fresenius method of estimating nitric acid, 1904, A., ii, 147.

estimation of chlorates, bromates, and iodates, 1904, A., ii, 204.

estimation of manganese, 1904, A., ii, 212.

estimation of nitrogen, 1904, A., ii,

estimation of morphine in opium and in opium preparations, 1911, A., ii, 345.

Debus, Heinrich, contributions to the history of glyoxylic acid, 1904, T., 1382; P., 184.

Debye, Peter, calculation of molecular dimensions from radiometer observations, 1911, A., ii, 34. Debye, Peter, theory of specific heats, 1912, A., ii, 1134.

Dechanoff, W. N. See Wladimir N. Ipatieff.

Dechend, Alfred von. See Max Trautz.

Dechend, Hermann von, spectral analytical investigation of the glow light at points, 1910, A., ii, 2.

light at points, 1910, A., ii, 2.

Dechend, Hermann von, and W. Hammer, specific chemical actions of the canal rays of different elements, 1911, A., ii, 454.

Dechend, Hermann von. See also Franz Himstedt.

Decker, Claus. See Richard Stoermer. Decker, F., colouring matter in saffron, 1906, A., i, 686.

Dacker, Herman, ammonium compounds, 1903, A., i, 278.

practical estimation of alkyl groups, 1903, A., ii, 763.

ionisation of chromophores, 1904, A., ii, 702.

conjugated dionium ring systems,

1906, A., i, 874. binuclear quinones as chromogens,

1908, A., i, 805.
formation of naphthol derivatives from
papaverine and the binuclear quinones of the naphthalene series, 1908,
A., i, 806.

preparation of hydrastinine salts, 1911, A., i, 906.

preparation of dihydroisoquinoline derivatives, 1912, A., i, 581, 1018.

Decker, Herman, and Paul Becker, condensation of a substituted formamide to a derivative of aminomalonamide, 1911, A., i, 714.

action of formaldehyde on \(\beta\)-phenylethylamine, 1912, A., i, 844.

Decker, Herman, Hans Bünzly, Theodore von Fellenberg, Oskar Klauser, and Waslaw Wisloki, relationships of doubly-linked carbon to nitrogen, oxygen, and sulphur, 1905, A., i, 667.

Decker Herman, Fritz Dinner, Theodore von Fellenberg, Enos Ferrario, Leo Stern, and August Würsch, benzopyronium and higher homologous and isologous pyronium rings, 1907, A., i, 1064.

Decker, Herman, and Georges Dunant, reduction of cyclic amine-ones. I. Preparation of acridine from acridone, 1906, A., i, 901.

occurrence of hydroacridine in coal tars, 1909, A., i, 420.

reduction of cyclic amine-ones. II. Diacridyl, 1909, A., i, 483.

Decker, Herman, Georges Dunant, and Max Girard, phenolbetaines papaverine, 1908, A., i, 204.

Decker, Herman, and Oscar Eliasberg, ammonium compounds: action of alkalis on quinoline methiodides, 1903,

A., i, 516.

Decker, Herman, Oscar Eliasberg, and Waslaw Wisloki, ammonium compounds; action of alkalis on oxydihydro-bases, 1903, A., i, 718.

Decker, Herman, and Harry Engler, ammonium compounds, 1903, A., i,

518.

Decker, Herman, Harry Engler, and Wladimir Rumine, amino- and hydroxy-quinolones, 1909, A., i, 512.

Decker, Herman, and Theodore von Fellenberg, synthesis of benzopyrylium derivatives, 1907, A., i, 950. establishment of the oxonium theory,

1909, A., i, 116.

Decker, Herman, and Heinrich Felser, cyclic oxonium salts from disalicylideneacetone, and spiropyran derivatives, 1908, A., i, 906.

dibenzopyronium, 1908, A., i, 1003. Decker, Herman, Enos Ferrario, Eduard Laube, Matei Sassu, Carl Schenk, and August Würsch, coeroxene, its derivatives and isologues, 1906, A., i,

Decker, Herman, Stephani Gadomska, and Max Girard, ammonium compounds. XIX. Nitration of quaternary cycloammonium nitrates, 1905, A., i,

Decker, Herman, Stephani Gadomska, Fani Sandberg, and Andreas Stavrolopoulos, ammonium compounds. XVIII. Formation and decomposition of quaternary ammonium compounds of the inert bases, 1905, A., i, 374.

Decker, Herman, and Lucas Galatty, decomposition of laudanosine, 1909,

A., i, 409.

Decker, Herman, Max Girard, and Oskar Klauser, papaverinium bases,

1904, A., i, 1045.

Decker, Herman, and Theodor Hock, ammonium compounds: methylation of 5-phenylacridine-o-carboxylic acid, 1904, A., i, 450.

ammonium compounds. XVII. Formation of non-oxygenated tertiary bases from cyclammonium hydr-

oxides, 1904, A. i, 620.

Decker, Herman, and Adolf Kaufmann, eyelic ammonium bases, 1911, A., i, 807.

Decker, Herman, Adolf Kaufmann. Alberto Albertini, S. Pfeifer, N. Prohatzka, Matei Sassu, and Waslaw Wisloki, cyclic ammonium bases, 1911, A., i, 1023.

Decker, Herman, and Oskar Klauser. papaverinium bases, 1904, A., i, 338.

Decker, Herman, and Otto Koch, papaverinium bases. III., 1905, A., i,

methylation of vanillin by methyl

sulphate, 1908, A., i, 35.

Decker, Herman, and C. Kopp, formation of indigetin from quinoline, 1906, A., i, 180.

Decker, Herman, and Walter Kropp, a new synthesis of dihydroisoguinoline

derivatives, 1909, A., i, 513.

Decker, Herman, and Eduard Laube, constitution of alizarin monomethyl

ethers, 1906, A., i, 192.

Decker, Herman, Robert Pschorr, Otto Koch, and Hans Einbeck, action of magnesium benzyl chloride on cyclic amine-ones, 1904, A., i. 926.

Decker, Herman, and Frederic George Percy Remfry, quinoline derivatives. I. 5-Quinaldine derivatives, 1905, A., i, 828.

methiodides of cinchonic esters and their colour, 1909, A., i, 408.

Decker, Herman, and Carl Schenk. ammonium compounds. XXI. Action of amines on quaternary salts of 5phenylaeridine-o-carboxylic acid, 1906, A., i, 304.

Decker, Herman, and Boris Solonina, nitrosophenol dyes. III., 1905, A., i,

Decker, Herman, Boris Solonina, and Stephani Gadomska, nitrosophenol dyes, 1903, A., i, 838.

Decker, Herman, and Andreas Stavrolopoulos, nitroquinolones and nitrocarbostyrils, 1903, A., i, 719.

Decker, Herman, and August Würsch, constitution of isorosindone and allied

substances, 1906, A., i, 905.

Decker, Herman. See also Hans Bünzly, Stephani Gadomska, Adolf Kaufmann, Walter Kropp, Frederic George Percy Remfry, and Alfred Schmid.

Decker, Oskar. See Carl Friedheim.

Deckers, Alphonse, influence of ammonia and ammonium salts in the Schaffner zine titration, 1907, A., ii, 53.

Decolle, Willy. See Robert Kremann. Dede, L., effect of sucrose on the accuracy of the copper voltameter, 1911, A., ii, 461.

Dede, L., arrangement for collecting the condensed water from the outside of reflux condensers, 1911, A., ii, 714.

cobalt, 1911, A., ii, 1034.

analysis of calcined magnesite, 1912, A., ii, 491.

Dedichen, Georg M., affinity constants of cyclic bases, 1906, A., i, 539.

Deetjen, Heinrich, the disintegration and life of blood-platelets, 1910, A., ii, 51. Deetjen, Heinrich. See also Emil Abder-

halden.

Defacqz, Edouard, new method of preparing some anhydrous crystalline fluorides, 1904, A., ii, 123.

fluorides, fluorochlorides, fluorobromides, and fluoroiodides of the alkaline earth metals, 1904, A., ii, 170, 333.

a new tungsten silicide, WSi2, 1907,

A., ii, 475.

compounds of silicon and molybdenum; molybdenum disilicide, 1907, A., ii, 696.

silicides of tungsten and of molybdenum, 1908, A., ii, 595.

a new method of separation of silica and tungsten trioxide, 1908, A., ii, 737. compounds of silicon and uranium; uranium disilicide USi₂, 1909, A.,

ii, 53, **Defacqz**, Edouard, and Hippolyte Copaux,
a new iodide of titanium, titanous iodide, TiI₂, 1908, A., ii, 699.

Degens, P. N., alloys of lead and tin,

1909, A., ii, 888.

Degrazia, Josef von, polarimetric estimation of nicotine in tobacco extract, 1911, A., ii, 671.

estimation of nicotine in tobacco, 1911,

A., ii, 672.

Dehérain, Pierre Paul, and Em. Demoussy, yellow lupins, 1903, A., ii, 37.

white clover, 1903, A., ii, 97.

Dehérain, Pierre Paul, and C. Dupont, cultivation of wheat in the experimental fields at Grignon in 1902, 1903, A., ii, 96.

Dehn, Frank Bernhard, and Jocelyn Field Thorpe, note on the anhydride of phenylsuccinic acid, 1906, T., 1882; P., 283.

Dehn, William Maurice, primary arsines, 1905, A., i, 184.

estimation of chlorine in urine, 1905, A., ii, 350.

new urometer; modification of the hypobromite method, 1906, A., ii, 816. Dehn, William Maurice, some new forms of apparatus, 1907, A., ii, 755. gasometric estimation of hydrogen peroxide, 1907, A., ii, 906.

simple demonstrations of the gas laws,

1908, A., ii, 355.

characteristic test for hippuric acid [in urine], 1908, A., ii, 907.

reactions of hypohalites with organic compounds; reactions with derivatives of methane, 1909, A., i, 867.

analysis of mixtures of halogen acids, 1909, A., ii, 612; 1910, A., ii, 67.

action of di-iodoacetylene on organic bases, 1911, A., i, 829.

action of tetrabromoethane on organic bases, 1912, A., i, 240.

action of tetraiodoethylene on organic bases, 1912, A., i, 242.

acetylations in ether solutions, 1912, A., i, 833.

Dehn, William Maurice, and Ray B. Conner, action of iodoform on organic bases, 1912, A., i, 834.

Dehn, William Maurice, and Grant Train Davis, improved method for the preparation of alkyl chlorides, 1907, A., i, 885.

Dehn, William Maurice, and Albert H. Dewey, action of carbon tetrabromide on organic bases, 1911, A., i, 914.

Dehn, William Maurice, and Edward O. Heuse, decomposition of hydrated ammonium salts, 1907, A., ii, 766.

Dehn, William Maurice, and S. J. McGrath, arsonic and arsinic acids,

1906, A., i, 341.

Dehn, William Maurice, and Silas F. Scott, characteristic colour reactions produced by sodium hypobromite, 1908, A., i, 780.

Dehn, William Maurice, and Burton B. Wilcox, secondary arsines, 1906, A.,

i, 150.

Dehn, William Maurice, Elrick Williams, and Burton B. Wilcox, reactions of the arsines, 1908, A., i, 720.

Dehnel, Erich. See Karl Reinking. Deibel, Wilhelm. See Hartwig Franzen. Deichler, Christian, and Charles Weizmann, syntheses in the paulthacene-

mann, syntheses in the naphthacenequinone series, 1903, A., i, 349, 350, 640.

Deiglmayr, Ivo. See Carl Bülow. Deihle, P. See William Küster.

Deininger, Fritz, emission of negative ions by heated metals and by heated calcium oxide 1908. A ii. 83

calcium oxide, 1908, A., ii, 83.

Deischa, *Helene*, heterogeneous structure of "fluid crystals" of p-azoxyphenetole, 1912, A., ii, 109.

Doiss, Eugen, formation and properties of colloidal manganese dioxide, 1910, A., ii, 213.

estimation of manganese by the Volhard-Wolff process, 1910, A., ii,

351

use of sodium carbonate for oxidising purposes, 1910, A., ii, 802.

Deiss, Eugen, and Hans Leysaht, the separation of iron and vanadium by the ether method, 1911, A., ii, 939.

Dejean, P., solidification of copper, 1906,

A., ii, 356.

Dejust, Henri Louis, action of carbon monoxide on silver oxide; detection of traces of the gas in the atmosphere, 1905, A., ii, 453.

some oxidising and decolorising properties of graphite, 1907, A., ii, 614.

Dekhuyzen, Marinus Cornelis, osmotic pressure of blood and urine in fishes, 1905, A., ii, 836.

a eryoscope, 1908, A., ii, 661.

specific gravity of ammonium sulphate solutions, 1911, A., ii, 603.

Dekker, Johan, cocoa-seed shells (preparation of theobromine; xanthine derivatives; method of detection of the shells), 1903, A., ii, 172.

estimation of theobromine in cocoa,

1903. A., ii, 459.

some constituents of cocoa and kola and their estimation, 1903, A., ii, 619. constitution of tannin, 1906, A., i, 686, 974.

tannin from the bark of Eucalyptus occidentalis, 1909, A., i, 403.

Delachanal, B., examination of an old devitrified glass which had become violet in colour under the influence of solar radiation, 1909, A., ii, 317. occluded gases present in certain com-

mon metals, 1909, A., ii, 402.

Delachanal, B. See also G. Guillemin. Delacre, Maurice, isomerisation, 1904, A., ii, 811.

constitution of pinacolin and its derivatives, 1906, A., i, 476.

constitution of a- and \$\beta\$-benzopina-colins, 1906, A., i, 518; 1910, A., i, 323.

acetyl chloride as a reagent for pinacolyl alcohols, 1906, A., i, 551.

tert.-pinacolyl alcohol, 1906, A., i, 784; 1907, A., i, 459.

sec. - and tert.-pinacolyl alcohols and their separation, 1906, A., i, 921.

cycles of reactions which determine isomerisation, 1907, A., i, 7. Friedel's pinacolyl acetate, 1907, A., i, 7. Delacre, Maurice, isomerisation point of sec.- and tert.-pinacolyl alcohol derivatives, 1907, A., i, 578.

Friedel's pinacolin-pinacone and the constitution of ordinary pinacolin, 1907, A., i, 579.

tetramethylethylene [βγ-dimethyl-Δβ-butylene] oxide, 1907, A., i, 581.

by-products of the hydrolysis of tetramethylethylene [βγ-dimethyl-Δβ-butylene] bromohydrin, 1907, A., i, 999.

facts and hypotheses concerning isomeric changes in derivatives of pinacone, 1907, A., i, 999.

relation of tetramethylene oxide to

pinacolin, 1908, A., i, 243. pinacolyl alcohols, 1909, A., i, 126. action of sodium on acetone, 1909, A., i, 764.

p-benzoyltriphenylmethane and p-benzoyldiphenylmethane; p-benzoyltriphenylcarbinol and benzoylbenzophenone, 1909, A., i, 807.

the pyrogenetic decomposition of (1)

\$\beta\$-benzopinacolin and (2) \$a\$-benzopinacolin 1910

A i 120

pinacolin, 1910, A., i, 120. new isomerisation of benzopinacolins and Le Chatelier's law, 1910, A., i, 323.

gradual synthesis of the benzene chain, 1911, A., i, 32.

[pinacolin derivatives] corrections, 1911, A., i, 102.

quantitative dehydration of pure pinacone, 1911, A., i, 347.

accessory products in the hydrolysis of (1) crude pinacone; (2) pure pinacone, 1911, A., i, 939.

new dodecane, 1912, A., i, 1.

α-isodypnopinacolin, 1912, A., i, 30.
 chemical individuality in the pinacone series, 1912, A., i, 599.

Delacre, Maurice, and Louis Gesché, gradual synthesis of the benzene ring, 1904, A., i, 32.

Deladrier, E., estimation of fluorine, 1904, A., ii, 441.

Delage, Marcel, pyrogallolsulphonic acids, 1903, A., i, 416.

action of alkaline-earth bases on the alkaline-earth pyrogallolsulphonates, 1903, A., i, 482, 559.

Delage, Yves, carbon dioxide as an agent in producing artificial parthenogenesis in star-fish, 1903, A., ii, 162,737.

oxygen, osmotic pressure, acids, and alkalis in experimental parthenogenesis, 1907, A., ii, 799.

isotonic and isosmotic solutions, 1908, A., ii, 305,

263

Delage, Yves, and P. de Beauchamp, comparative study of phenols as agents in parthenogenesis, 1908, A., ii, 51.

Delaite, J., and Julien Legrand, estimation of soluble and insoluble volatile fatty acids [in butter], 1907, A., ii, 57.

Deland. See Emile Nicolas.

Delange, Léon, solubility and certain reactions of pinacolin, 1908, A., i, 762.

Delange, Raymond, conversion of benzophenone into triphenylcarbinol, 1904. A., i, 173.

dichloromethylene-1:2-dioxy-5-propylbenzene and 5-propyleatechol earbonate, 1904, A., i, 313.

two homologues of catechol, 1904, A.,

i, 741.

the ethereal function in dichloromethylenecatechol, 1907, A., i, 700. Delange, Raymond. See also Charles

Moureau and Marc Tiffeneau.

Delattre, A., application of the biochemical method to Hepatica triloba; presence of a glucoside hydrolysed by emulsin, 1912, A., ii, 1085.

Delauney, Julien, and Maurice Garnier, atomic weights, 1909, A., ii, 305.

Delaunay, Nicolas, certain relations between the atomic weights of the elements, 1908, A., ii, 97.

symmetry in the law of atomic weights,

1908, A., ii, 269.

Delava, Paul, rotatory power of the protein substances from the serum of dog's blood, 1912, A., ii, 363.

Delbridge, Thomas G., tetrachloro-

phthalic acid, 1909, A., i, 389. Delbridge, Thomas G. See also See also William Ridgely Orndorff.

Delbrück, Konrad. See Eduard Buchner and Emil Fischer.

Delden, A. van, reduction of sulphates by bacteria, 1904, A., ii, 67, 68.

Delden, A. van. See also Martinus Willem Beyerinck.

Deleano, N. T., purification of per-oxydase, 1909, A., i, 752.

disassimilation in plants, 1909, A., ii, 512.

carbohydrates and nitrogenous substances of vine leaves, 1912, A., ii, 1086.

Deleano, N. T., and Georg Trier, presence of betaine in green tobacco leaves, 1912, A., ii, 800.

Delehaye, H., estimation of formic acid in the presence of acetic acid, 1910, A., ii, 1007.

Delépine, [Stéphane] Marcel, action of alkyl haloids on ammonium dithiocarbamate, 1903, A., i, 156.

Delépine, [Stéphane] Marcel, nitrogen and sulphur derivatives of carbon disulphide; dithiocarbamie esters derived from ammonia, 1903, A., i,

nitrogen and sulphur derivatives of carbon disulphide; iminodithiocarbonic esters, 1903, A., i, 237.

nitrogen and sulphur derivatives of carbon disulphide, 1903, A., i, 237.

heats of formation of some compounds containing sulphur and nitrogen, 1903, A., ii, 269.

action of hydrogen cyanide on aldehyde-ammonia and analogous com-

pounds, 1904, A., i, 20.

derivatives of a-aminopropionitrile, 1904, A., i, 148.

basicity of a-aminonitriles, 1904. A., i, 149.

heat of oxidation of molybdenum, 1904, A., ii, 108.

decomposition of ammonium sulphate by sulphuric acid in the presence of platinum, 1906, A., ii, 24.

solution of platinum in sulphuric acid, 1906, A., ii, 93; 1910, A., ii, 135.

action of hot sulphuric acid on platinum and iridium salts in the presence of ammonium sulphate, 1906, A., ii, 289.

double sulphate of iridium and potassium, Ir₂(SO₄)₃, 3K₂SO₄, 1906, A., ii,

ethylideneimine (aldehyde-ammonia) and hexaethylidenetetramine, 1907, A., i, 484.

metallic dithiocarbamates; preparation of aliphatic thiocarbimides, 1907, A., i, 594.

formaldehyde solutions, 1908, A., i,

properties of the metallic dithiocarbamates, 1908, A., i, 511.

apparatus for fractional distillation under reduced pressure, 1908, A., ii,

detection of copper and iron, 1908, A., ii, 633.

alkali iridichlorides and iridochlorides, 1908, A., ii, 702.

oxalate reduction of alkali iridochlor-

ides, 1908, A., ii, 765. action of sulphuric acid on acetaldehyde and paracetaldehyde; pre-paration of crotonaldehyde, 1909,

presence of 5:6-dimethoxy-3:4-methylenedioxy-1-allylbenzene in oil of

samphire, 1909, A., i, 642,

Delépine, [Stéphane] Marcel, iridium ammonium disulphates, 1909, A., ii, 408.

new "boat" for organic analysis, 1909,

A., ii, 937.

bimolecular polymeride of crotonaldehyde and the corresponding acid, 1910, A., i, 218.

constitution of the bimolecular polymeride of crotonaldehyde, 1910, A.,

i. 219.

organic compounds spontaneously oxidisable with phosphorescence, 1910, A., i, 295.

oil of samphire, 1910, A., i, 401.

new case of spontaneous oxidation with phosphorescence, 1910, A., i,

nitrogen and sulphur derivatives of carbon disulphide, XIV. Phosphorescence of organic sulphur compounds by spontaneous oxidation,

1910, A., i, 612.

nitrogen and sulphur derivatives of carbon disulphide. XV. Iminothio-carbonic esters of the aliphatic series: RN:C(OR)(SR₁), 1910, A., i, 613.

silver and thallium iridichlorides and iridochlorides, 1910, A., ii, 34.

metallic iridium disulphates, 1910, A., ii, 44.

nitrogen and sulphur derivatives of carbon disulphide. XVII. Tetraalkylthiocarbamides and tetra-alkylisothiocarbamides, 1911, A., i, 23.

action of pyridine on iridodisulphates, 1911, A., i, 81.

pyridinoiridopentachlorides, 1911, A., i. 565.

pyridinoiridipentachlorides, 1911, A., i, 565.

sulpho-ethereal salts or thionic esters, R·CS·OR', 1911, A., i, 768.

nitrogen and sulphur derivatives of carbon disulphide. XVIII. Chlorothiocarbonates, 1911, A., i, 944.

some supposed iridium chlorides; condensed chlorides, 1911, A., ii, 806. volatility of sulphur compounds, 1911,

A., ii, 1061.

action of sodium hypochlorite on hexamethylenetetramine, 1912, A., i,

new classes of oxyluminescent substances, 1912, A., ii, 509.

physical properties of organic sulphur

compounds, 1912, A., ii, 539.

Delépine, Marcel, and Pierre Bonnet, oxidation of aldehydes by silver oxide, 1909, A., i, 632.

Delépine, Marcel, and Paul Schving, nitrogen and sulphur derivatives of carbon disulphide. XVI. Action of ammonia and amines on thiocarbonates, 1910, A., i, 720.

Delépine, Marcel, and René Sornet. separation and estimation of ammonia

and of pyridine, 1911, A., ii, 827. Delépine, Marcel. See also Camille

Matignon. Delépine, [Auguste] Sheridan, chemical

disinfectants, 1911, A., ii, 62. Delétra, Ernst, and Fritz Ullmann, carbazoles, 1904, A., i, 270.

Delétra, Ernst. See also Frédéric Rever-

din and Fritz Ullmann.

Delezenne, C., activation of pancreatic juice by calcium salts, 1906, A., ii, 99; 1907, A., ii, 369.

activation of pancreatic juice by salts; specificity of calcium, 1906, A., ii,

100.

Delezenne, C., and Henri Mouton, presence of a kinase in some Basidiomycetes, 1903, A., ii, 229.

presence of an erepsin in Basidio-

mycetes, 1903, A., ii, 448. Delezenne, C., Henri Mouton, and E.

Pogerski, action of papain, 1906, A.,

Della Crose, v., estimation of lead in the solder and plating of tins used for tinned foods, 1909, A., ii, 764.

Dellschaft, Friedrich Hermann.

Robert Stollé. Delluc, G. See Thomas Roman.

Delmarcel, G. See Arthur Fischer.

Delorme, J. See A. Astruc.

Delpiano, A. See Galeazzo Piccinini. Delpy, Max. See Ernst Berl.

Del Rio, Giuseppe. See Mario Retti.

Del Rosso, Giovanni. See Bernardo Oddo.

DeLury, J. S. See Francis Barclay Allan.

DeLury, Ralph E., rate of oxidation of potassium iodide by chromic acid, 1903, A., ii, 471.

DeLury, Ralph E. See also George Augustus Hulett.

Delvalez, J., configuration of equipotential lines in an electrolyte, 1912, A., ii, 124.

Demant, Jules, preparation of aromatic hydroxy-aldehydes, 1907, A., i,

Demant, Jules. See also Emilio Noelting. Dember, Harry, photoelectric effect and fall of potential at an alkali electrode in argon, helium, and hydrogen, 1906, A., ii, 516.

Dember, Harry, the influence of radium rays on the photo-electric sensitiveness of metals, 1911, A., ii, 567.

Demenitroux, M. See Georges Urbain. Dementeyeff, Leonid. See Pavel Iw. Petrenko-Kritschenko.

Demichel, A., determination of alcohol and extract in wines by weight, 1903, A., ii, 337.

the contraction occurring when sucrose is dissolved in water and the density of sucrose, 1910, A., i, 223.

contraction occurring during solution and the law of Guéritsch, 1910,

A., i, 223.

Demierre, Henri, and Marcel Duboux, reaction between barium thiocyanate and bromoacetic acid dissolved in

acetone, 1907, A., i, 833.

Demierre, Henri. See also Paul Dutoit.

D'Emilio, C. See Arnaldo Piutti. Deming, Clinton Demas. See Isaac King Phelps.

Deming, Horace G., new solvents for cellulose and their action on this sub-

stance, 1911, A., i, 771.

Demjanoff, Nikolaus J., behaviour of w-iodomethyltrimethylene towards alkali hydroxides, 1903, A., i, 80.

action of hydrogen bromide on nitroisobutyl glycol, 1903, A., i, 394.

the nitrile of hexamethylenecarboxylic acid; the amine, C6H11 CH2 NH2, and its transformation into suberyl alcohol, 1904, A., i, 410.

butylene nitrosite and b diamine, 1907, A., i, 174. butylene-

isomerism of cyclic amines containing the side-chain CH2: NH2; the nature of the alcohol obtained from the

CH₂ CH·CH·NH₂, 1907, amine:

A., i, 1023.

transformations of the tetramethylene ring into the trimethylene ring, 1908, A., i, 85.

cyclobutylcarbinol and its isomerisation to pentamethylene derivatives, 1908, A., i, 85.

transformations and new nitrogenous derivatives of vinyltrimethylene,

1908, A., i, 329.

cyclobutylcarbinol (w-hydroxymethylcyclobutane) and its isomerisation under the influence of acids into pentane derivatives, 1910, A., i, 838.

Demjanoff, Nikolaus J., and M. N. Dojarenko, action of nitrous acid on pentamethylenediamine, 1907, A., i, 592.

Demjanoff, Nikolaus J., and M. N. Dojarenko, two new methods for the preparation of cyclobutanol, 1907, A., i, 605.

some transformations of cyclobutanol,

1908, A., i, 156.

two methods of obtaining evelobutanol: certain transformations of cyclobutanol accompanied by isomerisation, 1911, A., i, 778.

Demjanoff, Nikolaus J., and K. Fortunatoff, preparation and properties of trimethylenecarbinol [cyclopropylcarbinoll and some of its derivatives.

1907, A., i, 1032.

Demjanoff, Nikolaus J., and M. Luschnikoff, products of the action of nitrous acid on tetramethylenylmethylamine. [w-aminomethylcyclobutane],

1903, A., i, 403. Demjanoff, Nikolaus J., and K. W. Sidorenko, action of nitrogen trioxide on tetramethylethylene [By-dimethyl-Δβ-butylene], 1909, A., i, 754.

Demjanowski, S., extractives of muscles. XIII. The precipitability of certain nitrogenous extractives by phosphotungstic acid and mercuric salts, 1912, A., ii, 1009.

Demolis, Louis, electrolysis of the alkali chlorides; conductivity, density, and specific heat of simple and mixed solutions of sodium chloride and sodium hydroxide, 1907, A., ii, 68.

Demolon, A., the fertilising action of

sulphur, 1912, A., ii, 382.

Demolon, A. See also E. Kayser. Demon, C., estimation of ammonia in urine, 1904, A., ii, 83.

Demorest, D. J., the bismuthate method for manganese, 1912, A., ii, 690.

a new method for the estimation of vanadium, 1912, A., ii, 1100.

Demorest, D. J. See also John R. Cain. Demoussy, Em., vegetation in atmospheres rich in carbon dioxide, 1903, A., ii, 321; 1905, A., ii, 111.

influence of the carbon dioxide of the soil on vegetation, 1904, A., ii, 286. acidic properties of starch, 1906, A., i,

Demoussy, Em. See also Pierre Paul Dehérain and Leon Maquenne.

Dempwolff, Carl, migration of the ions in methyl alcohol as solvent, 1905, A., ii, 9.

Demuth, Eduard. See Eugen Bam-

berger.

Denaro, Antonio, and Giuseppe Scarlata, some transformations of d-pinene and terpene hydrate, 1903, A., i, 844.

Dencks, Emil. See Carl Paal.

Denet, J. See P. Mahler.

Denève, H., automatic regulator for the pneumatic agitation of liquids, 1909, A., ii, 724.

Dengler, Otto. See Friedrich Kehrmann. Denham. Henry George, temperature of combustion of methane in the presence of palladiumised asbestos, 1906,

A., ii, 56. the electrometric determination of the hydrolysis of salts, 1907, P., 260;

1908, T., 41.

the existence in aqueous solution of a univalent cadmium ion, a subvalent thallium ion, and a bivalent bismuth ion, 1908, T., 833; P., 76.

abnormal behaviour of salts of zinc, magnesium, thorium, cerium, nickel, and cobalt on hydrolysis, 1908, A.,

ii, 380.

electrometric determination of the hydrolysis of blue and green chromic sulphates, 1908, A., ii, 389.

formation of autocomplexes in solutions of cupric bromide, cupric chloride, and cobalt bromide, 1909,

A., ii, 373.

catalysis in heterogeneous systems; the equilibrium TiIII + H = TiIV + H, and the reaction HCN + 2H2 $= CH_2 \cdot NH_2$, 1910, A., ii, 598.

the action of alkyl iodides on copper

oxide, 1911, A., ii, 804.

Denham, Henry George, and Arthur John Allmand, anomalous behaviour of the hydrogen electrode in solutions of lead salts, and the existence of univalent lead ions in aqueous solutions, 1908, T., 424; P., 14.

Denham, Henry Henderson, an automatic gas generator, 1903, A., ii, 202.

Denham, William. See Paul Rabe.

Denham, William Smith, the action of sulphur monochloride on salts of organic acids: a convenient method of preparing anhydrides, 1909, T., 1235; P., 179.

preparation of anhydrides by the action of thionyl chloride on salts of organic acids; preliminary note, 1909,

Denicke, Gustav, oxidation of uric acid in the presence of ammonia, 1906, A., i, 938.

Denier. See Brau.

Deniges. Georges, reactions of pinacolin and pinacone, 1903, A., i, 606.

volumetric estimation of true casein and other proteins in milk, 1903, A., ii, 460.

Deniges, Georges, detection of quinine in organic secretions, etc., by means of its fluorescing properties, 1903, A., ii, 618.

formation of dimethylisopropylcarbinol in the hydrogenation of acetone,

1904, A., i, 706.

localisation of arsenic, 1905, A., ii, 745.

chronometric method applied to quantitative analysis, 1907, A., ii, 993.

reactions of hordenine based on the constitution of this substance, 1908, A., i, 735.

the normal citric acid of wines, 1908,

A., ii, 640.

micro-chemical reactions of arsenic applicable to medico-legal investigations, 1908, A., ii, 1070.

mercurous nitrate as a microchemical reagent for arsenic, 1908, A., ii,

1070.

mechanism of the resorcinol-tartaric colour reaction, 1909, A., i, 378.

nature of the chromophore group in the resorcinol test for tartaric acid, 1909, A., ii, 190.

colour reactions of dihydroxyacetone,

1909, A., ii, 272

new reactions of dihydroxyacetone,

1909, A., ii, 273.

sensitive new reactions for detection and identification of glycerol, 1909, A., ii, 353.

theory of the colour reactions of dihydroxyacetone in sulphuric acid,

1909, A., ii, 448.

methylglyoxal as a general colour reagent in analysis, 1909, A., ii, 624.

sensitive reactions for lactic and glycollic acids, 1909, A., ii, 627.

detection of allyl alcohol and its derivatives, 1909, A., ii, 944.

detection of traces of formaldehyde in presence of acetaldehyde by Schiff's reagent, 1910, A., ii, 357.

detection of methyl alcohol in general, and especially in presence of ethyl

alcohol, 1910, A., ii, 461.

presence of tartaric residues from wine in an antique vase, 1910, A., ii, 646.

detection of ethyl alcohol in presence of methyl alcohol, 1910, A., ii, 1115.

preparation of \u03c4-morphine by mineral catalysis, 1911, A., i, 397.

new reactions of morphine, 1911, A., ii, 79.

new reaction of cupreine, 1911, A., ii, 162.

Deniges, Georges, characteristic reaction of bromine, 1911, A., ii, 652.

detection of nitrates and nitrites in water by means of reduced strychnine, 1911, A., ii, 655.

theory and modification of the Malaquin test for strychnine, 1911, A.,

ii, 673.

a new, very sensitive and characteristic reaction of free bromine, 1912,

A., ii, 1208.

Denis, Willey, rate of diffusion of the salts of the blood into solutions of non-electrolytes, and its bearing on theories of heart rhythm, 1906, A., ii, 776.

behaviour of various aldehydes, ketones, and alcohols towards oxidising agents, 1907, A., i, 997.

oxidation of the amino-acids. I. Glycine and cystine, 1911, A., i, 616.

oxidation of the amino acids. Alanine and tyrosine, 1911, A., i,

estimation of total sulphur in urine, 1911, A., ii, 66.

estimation of the amide nitrogen in proteins, 1911, A., ii, 163.

iodine in the human pituitary, 1911, A., ii, 746.

Denis, Willey. See also Otto Folin and Ralph Hopkins.

Denison, Robert Beckett, direct measurement of transport numbers, 1903, A., ii. 709.

equilibrium between magnesium and sodium sulphates, 1905, A., ii,

relative rates of migration of ions in aqueous solution. I., 1910, A., ii, 15.

Denison, Robert Beckett, and Bertram Dillon Steele, a new method for the measurement of hydrolysis in aqueous solution based on a consideration of the motion of ions, 1906, T., 138, 999; P., 162.

accurate measurement of ionic velocities, 1906, A., ii, 68, 329.

Denison, Robert Beckett. See also John Gibson and Jacobus Henricus van't Hoff.

Denk, Bruno. See Arthur Stähler. Denneler, H. See Gustav Birstein. Dennemark, A. See Stephen Engel.

Denning, Arthur du Pré. See Thomas

Slater Price.

Dennis, Louis Monroe, some new forms of projection apparatus, 1912, A., ii,

Dennis, Louis Monroe, and Charles W. Bennett, fractional crystallisation of the picrates of the rare earths, 1912, A., ii, 257.

Dennis, Louis Monroe, and Arthur Wesley Browne, hydronitric acid [azoimide] and the inorganic trinitrides,

1904. A., ii. 558.

Dennis, Louis Monroe, and William Chauncey Geer, atomic weight of indium, 1904, A., ii, 342.

Dennis, Louis Monroe, and Helen Isham, hydrazoic acid [azoimide], 1907, A., ii, 165, 255,

Dennis, Louis Monroe, and Ellen S. McCarthy, estimation of benzene in illuminating gas, 1908, A., ii, 435.

Dennis, Louis Monroe, and James George O'Neill, estimation of benzene in illuminating gas, 1903, A., ii, 514.

Dennstedt, Max [Eugen Hermann], simplified elementary analysis, 1903, A., ii, 103; 1907, A., ii, 986.

simplified elementary analysis; quick method, 1905, A., ii, 202.

simplified elementary analysis and its technical application, 1905, A., ii, 651; 1906, A., ii, 306.

simplified method of elementary analysis for scientific purposes, 1906, A., ii, 51, 398.

supposed sources of error in the simplified method of elementary analysis, 1906, A., ii, 200.

use of copper oxide in elementary analysis, 1906, A., ii, 632.

elementary analysis of proteins containing phosphorus, 1907, A., ii,

the use of palladium as a contact substance in elementary analysis, 1907, A., ii, 909.

soda-lime apparatus for organic analysis and carbon dioxide estimation, 1908, A., ii, 225.

new experiences in the simplified method of elementary analysis, 1908, A., ii, 321.

estimation of sulphur in coals and cokes, 1909, A., ii, 435.

improvements in the apparatus for elementary analysis, 1909, A., ii, 759.

recent advances in forensic chemistry, 1911, A., ii, 224.

Dennstedt, Max, and F. Hassler, lead dioxide as absorbent in ultimate analysis, 1903, A., ii, 686.

estimation of sulphur in pyrites, 1905, A., ii, 761; 1906, A., ii, 896;

1907, A., ii, 195.

Dennstedt, Max, and F. Hassler, decomposition of protein, 1906, A., i, 916.

simultaneous estimation of carbon, hydrogen, and nitrogen, etc., in organic compounds by the method of simplified elementary analysis, 1908, A., ii, 984.

catalytic action of coal, brown coal, or peat in the aerial oxidation of organic substances, 1909, A., i,

199.

combustion of compounds containing nitrogen by the simplified method, 1909, A., ii, 270.

lead peroxide in organic combustions,

1910, A., ii, 547.

Dennstedt, Max, and Th. Klünder, estimation of carbon in iron, graphite, and tungsten by combustion, 1910, A., ii, 547.

Dennstedt, Max, and Theodor Rumpf, estimation of the inorganic constituents of human organs, 1904, A., ii,

447.

Dennstedt, Max. See also Theodor

Rumpf.

Densch, Alfred, action of soil moisture and nitrogen manure on the amounts of starch and nitrogen in barley, 1907, A., ii, 645.

estimation of nitrogen in soil extracts,

1910, A., ii, 70.

Densdorff, O. See Eduard Vongerichten.

Denso, P., copper cadmium alloys, 1903, A., ii, 293. quantitative deposition of meta's by

electrolysis, 1903, A., ii, 575.

Denstorff, Oskar. See Arthur Hantzsch.

Denzler, Walter. See Fritz Ullmann.
Deprat, Jacques, alkali quartz-porphyries in Corsica; remarkable occurrence of orthoclase, 1907, A., ii, 36.

zeolites from the basalt of Montresta, Sardinia, 1909, A., ii, 61.

Derby, Ira Harris, catalysis. IV. Catalysis of imino-esters, 1908, A., i,

Derby, Ira Harris. See also Julius Stieglitz.

Derby, John Hamilton, jun. See Treat Baldwin Johnson.

Derby, Orville Adelbert, manganese ore deposits of the Queluz District, Brazil, 1908, A., ii, 506.

Déré, C., preparation and some properties of the oxyhæmocyanin crystallised from the snail, 1908, A., i, 375.

Derichsweiler, Rudolf, band spectra of copper halogen salts, 1907, A., ii, 322.

Derick, Clarence G., molecular rearrangements of carbon compounds, 1910, A., i, 805.

polarity of elements and radicles measured in terms of a logarithmic function of the ionisation constant,

1911, A., ii, 712.

application of polarity measured in terms of a logarithmic function of the ionisation constant. I. The use of polarity in the explanation of the reactions of aldehydes and ketones, 1911, A., ii, 712.

application of polarity measured in terms of a logarithmic function of the ionisation constant. II. Scale of combined influence of substitution in organic compounds, 1911, A., ii,

713.

application of polarity measured in terms of a logarithmic function of the ionisation constant. III. Correlation of chemical structure with ionisation, 1911, A., ii, 713.

correlation of ionisation and structure.

II. Negatively substituted benzoic

acids, 1912, A., i, 188.

Derick, Clarence G. See also William Albert Noves.

Dernoscheck, A. See Wolfgang Ostwald. Derome, Edgard, dissociation of the lithium silicates, 1907, A., ii, 542.

D'Errico, Gennaro, action of bile and bile-salts on the tonus of automatic movements of the intestine, 1910, A., ii, 729.

D'Errico, Gennaro. See also Filippo Bottazzi.

Derrien, Eugène. See Jules Ville.

Derry, John Newton. See Tom Sidney Moore.

Dervin, E., action of heat and light on mixtures of phosphorus sesquisulphide and sulphur in carbon disulphide solution, 1904, A., ii, 253.

Desaga, Alfred. See Conrad Willgerodt.

Desamari, Kurt. See Richard Meyer.

Desch, Cecil Henry, the composition of eutectic mixtures, 1911, A., ii, 381.

Desch, Cecil Henry. See also Edward Charles Cyril Baly, Alfred Kirby Huntington, and Thomas Martin Lowry.

Deschauer, Alphons. See Richard Anschütz.

Descudé, Marcel, new compound of the hexamethylenetetramine group, 1903, A., i, 72.

action of fatty amines on methylene dibenzoate, 1903, A., i, 168.

Descudé, Marcel, properties of compounds of the types R·CO·O·CH₂Cl and (R·CO·O)₂CH₂, 1903, A., i, 168.

polymerides of formaldehyde, 1903,

A., i, 232.

chlorine derivatives of methylene chloroacetate and diacetate, 1903, A., i, 600.

condensations by zinc chloride, 1903,

A., i, 735.

dichloromethyl oxide, 1904, A., i, 546. a new class of ether oxides, 1904, A., i, 706.

order of substitution of hydrogen by chlorine in methylal, 1906, A., i,

558.

Deseniss, Max. See Carl Bülow.

Desfontaines, Marcel, a-substituted \$\beta\$-methyladipic acids, 1904, A., 1, 288.

Desfontaines, Marcel. See also Gustave Blanc and Albin Haller.

Desfourneaux, J., estimation of nitrites

in waters, 1904, A., ii, 367.

Desgrez, Alexandre, toxicity of two new nitriles and the antitoxic action of sodium thiosulphate towards one of them, 1911, A., ii, 756.

influence of chemical constitution on the toxicity of nitriles and amides,

1911, A., ii, 1119.

Desgrez, Alexandre, and J. Adler, acid dyscrasia, 1904, A., ii, 193; 1905,

A., ii, 102.

Desgrez, Alexandre, and J. Ayrignac, elimination of sulphur and phosphorus, demineralisation of the organism, and size of the molecule elaborated in skin diseases, 1905, A., ii, 104.

the influence of alimentation on the value of urologic coefficients, 1906,

A., ii, 377.

Desgrez, Alexandre, and Dorléans, hypotensive action of guanine, 1912, A., ii, 585.

Desgrez, Alexandre, and Feuillié, estimation of carbamide, 1912, A., ii, 104.

Desgrez, Alexandre, and (Mlle.) Bl. Guende, acid dyscrasia, 1905, A., ii, 406.

influence of phosphoric acid and phosphates of sodium on metabolism, 1906, A., ii, 560.

influence of sodium chloride in excess on nutrition and renal elimination,

1912, A., ii, 465.

Desgrez, Alexandre, P. Regnier, and Robert Moog, influence of trimethylamine hydrochloride on nutritive exchanges, 1912, A., ii, 188.

Desha, Lucius Junius, an apparatus for the purification of mercury, 1909, A., ii, 315.

Desha, Lucius Junius, and Solomon Farley Acree, difficulties in the use of the hydrogen electrode in the measurement of the concentration of hydrogen ions in the presence of organic compounds, 1912, A., ii, 125.

Deslandres, Henri [Alexandre], characteristics of line and band spectra; origin of the two spectra, 1904, A., ii,

105.

Desmots, Henri, production of acetylmethylcarbinol by the bacteria of the group Bacillus mesentericus, 1904, A., ii, 276.

Desmoulière, Em., estimation of citric acid in milk, 1911, A., ii, 548.

Desmoulières, Albert, interpretation of the action of ferric chloride on salicylic acid, methyl salicylate, salicylaldehyde, and certain other phenolic compounds, 1903, A., i, 93.

existence in certain milks of a ferment which decomposes salol, 1903, A.,

ii, 312, 667.

estimation of ammonical nitrogen in "mistelles" and wines, 1903, A., ii, 689.

normal occurrence of salicylic acid in certain plants of the Violaceæ, 1904, A., ii, 282.

estimation of glycogen, 1906, A., ii, 401.

estimation of urinary sulphur, 1906,

A., ii, 799.

Desmoulières, Albert, and A. Chatin, action of sulphuretted waters on mercurial treatment, 1907, A., ii, 640.

Desmoulières, Albert, and Emile Gautrelet, urobilin in cow's milk, 1903, A., ii, 500.

De Souza, David Henriques, elimination of thiocyanates, 1907, A., ii, 375.

effects of temperature on the osmotic properties of muscle, 1909, A., ii, 819.

Desparmet, E. See Louis Meunier.

Desplantes, Gaston. See Camille Matignon.

Dessoulavy, Ed. See Eugène Grandmougin.

Desvergnes, Loys, estimation of tungsten, 1904, A., ii, 783.

composition of an ancient English gunpowder, 1905, A., ii, 317.

Desvignes, Paul, estimation of caffeine in kola, 1910, A., ii, 763.

Determeyer, Heinrich, and Benno Wagner, uric acid of the urine, 1908, A., ii. 122.

Detœuf, A. See Auguste Béhal.

Detoros, Georg. See Theodor Curtius. Detscheff, Theodor. See Alfred Wer-

Dettmar, Wilhelm. See Franz Kunckell. Deuss, Joseph J. B., the action of aluminium chloride on phenyl mercaptan, 1908, A., i, 530.

constitution of thianthren [diphenylene disulphide], 1908, A., i, 635.

action of aluminium chloride on diphenyl disulphide and thiocresols, and the action of sulphuric acid on thianthren, 1909, A., i, 321,

Deuss, J. J. B. See also Frans Antoon Hubert Schreinemakers.

Deussen, Ernst, d-cadinene, 1903, A., i.

hydrogen fluoride. I. and II., 1905. A., ii, 311; III., 1906, A., ii, 531. solubility of ferric oxide in hydrofluoric acid, 1905, A., ii, 459.

estimation of ferric oxide in presence of much alumina, 1905, A., ii, 484.

detection and estimation of [traces of] sulphuric acid in hydrofluoric acid, 1907, A., ii, 576.

sesquiterpenes, 1909, A., i. 171.

estimation of camphor in officinal spirit of camphor, 1909, A., ii, 770. evaluation of ammonium hydrogen

fluoride, 1910, A., ii, 749. detection of small quantities of sulphur

in inorganic and organic compounds, 1910, A., ii, 750.

humulene of oil of hop flowers, 1911, A., i, 549.

method for examining the purity of optically active compounds, 1912, A., ii, 510, 1020.

Deussen, Ernst, and Benno Eger, the oils of copaiba balsam, 1912, A., ii, 812.

Deussen, Ernst, Benno Eger, Kurt Meyer, C. Vielitz, and Max Ziem,

sesquiterpenes. V., 1912, A., i, 368.

Deussen, Ernst, and Alfred Hahn, elimination of hydrogen chloride from d-limonene nitrosochloride, 1909, A., i, 502.

monoterpenes, limonenes, and carvones, 1910, A., i, 272. oil of copaiba, 1910, A., i, 687.

Deussen, Ernst, Alfred Hahn, Arno Klemm, Adolf Loesche, and Hans Philipp, sesquiterpenes. III., 1909, A., i, 813.

Deussen, Ernst, Gustav Heller, and Otto Nötzel, conductivity of N-sodioisatin and sodium isatoate in aqueous solution, 1907, A., i, 442.

Deussen, Ernst, and Heinrich Kessler. new method of estimating fluorine and the composition of iron fluoride.

1907, A., ii, 265.

Deussen, Ernst, and Arnold Lewinsohn. sesquiterpenes. I. Caryophyllene, 1907, A., i, 945.

sesquiterpenes. II., 1908, A., i. 353, Deussen, Ernst, and Hans Philipp. sesquiterpenes. IV., 1910, A., i, 575.

gurjun oil (so-called East Indian copaiba oil), 1910, A., i, 687.

Deutsch, E., 2:5-diketo-dinitro--diamino-diphenylpiperazines, 1907. A., i, 1082.

Deutsch, G. See Paul Friedländer.

Deutsch, Hans. See Julius von Braun. Deutsche Gold- & Silber-Scheide-Anstalt

vorm Roessler, preparation of indoxyl, 1903, A., i, 632. [preparation of alkali cyanides and

cyanamides], 1904, A., i, 380, 478. preparation of the alkali salts of organic acids from the corresponding nitriles and amides, 1906, A., i, 845. preparation of zinc and magnesium

perborates, 1906, A., ii, 448. preparation of glycollic acid by the electrolytic reduction of oxalic acid,

1908, A., i, 600.

preparation of sodium perborate, 1908, A., ii, 689.

preparation of sodium arylimides, 1910, A., i, 164.

Deutsche Sprengstoff Aktien-Gesellschaft, preparation of monochlorohydrin, 1907, A., i, 998. preparation of chlorohydrin from

glycerol and sulphur chloride, 1909, A., i, 201.

Deutschland, A. See Johannes Scheiber. See Albert Gascard. Devalment.

Deventer, Charles Marius van, explanation of the action of strong sulphuric acid on metals, 1905, A., ii, 383.

free iodine in alkaline solutions, 1905, A., ii, 417.

action of strong sulphuric acid on copper, 1906, A., ii, 854.

the so-called passivity of aluminium towards nitric acid, 1907, A., ii, 265.

solidification pressure in Moissan's preparation of diamonds, 1907, A., ii, 456.

estimation of nitric nitrogen, 1907, A., ii, 812.

Deventer, Charles Marius van, amalgamated zinc, 1908, A., ii, 591.

self-induction with the semi-insulator in relation to concentration cells,

1911, A., ii, 693.

Deventer, Charles Marius van, and H. J. van Lummel, aluminium in the potential series, 1908, A., ii, 12, 558. galvanic self-induction of metals, 1908, A., ii, 558; 1909, A., ii, 958.

correction for the method of determining galvanic ennobling of metals,

1910, A., ii, 179.

Deventer, Charles Marius van. See also P. Anema.

Dewar, (Sir) James, electric resistance thermometry at the temperature of boiling hydrogen, 1904, A., ii, 380.

physical constants at low temperatures.
I. Densities of solid oxygen, nitrogen, hydrogen, etc., 1904, A., ii, 393.
preparation of nickel carbonyl and metallic nickel, 1904, A., ii, 488.

absorption of gases by wood carbon at low temperatures, 1904, A., ii, 652. direct separation, without liquefaction, of the most volatile gases of the air,

1904, A., ii, 728.

liquefaction of helium, 1904, A., ii, 729. the thermo-electric junction as a means of determining the lowest temperatures, 1905, A., ii, 799.

studies with the liquid hydrogen and air calorimeters. I. Specific heats. II. Latent heats, 1905, A., ii, 801.

new low temperature phenomena, 1906, A., ii, 830.

rate of production of helium from radium, 1908, A., ii, 921.

long-period determination of the rate of production of helium from radium, 1910, A., ii, 376.

production of solid oxygen by the evaporation of the liquid, 1912, A.,

ii, 40.

Dewar, (Sir) James, and Pierre Curie, emanation of gases occluded or disengaged by radium bromide, 1904,

A., ii, 255.

Dewar, (Sir) James, and Robert Abbott Hadfield, effect of liquid air temperatures on the mechanical and other properties of iron and its alloys, 1909, A., ii, 229.

Dewar, (Sir) James, and Humphrey Owen Jones, some physical properties of nickel carbonyl, 1903, A., ii, 485. the chemical reactions of nickel carbonyl. Part I. Reactions with the halogens and other inorganic substances, 1904, T., 203; P., 5. Dewar, (Sir) James, and Humphrey Owen Jones, the chemical reactions of nickel carbonyl. Part II. Reaction with aromatic hydrocarbons in presence of aluminium chloride: synthesis of aldehydes and anthracene derivatives, 1904, T., 212; P., 6.

physical and chemical properties of iron carbonyl, 1906, A., ii, 89.

new iron carbonyl and the action of light and heat on the iron carbonyls,

1907, A., ii, 266. application of low temperatures to some chemical problems: (1) use of charcoal in vapour density determinations; (2) rotatory power of organic substances, 1908, A., ii, 258.

the interaction of nickel carbonyl and carbon disulphide, 1910, T., 1226; P., 137; discussion, P., 138.

carbon monosulphide, 1910, A., ii, 408.

change of carbon disulphide into a gaseous product condensable and explosive near the temperature of liquid air, 1910, A., ii, 408.

the gaseous condensable compound, explosive at low temperatures, produced from carbon disulphide vapour by the action of the silent electric discharge, 1912, A., ii, 46.

Dewar, (Sir) James. See also Henri

Moissan.

Dewey, Albert H. See William Maurice Dehn.

Dewey, Frederic P., solubility of gold in nitric acid, 1910, A., ii, 304.

the direct estimation of small amounts of platinum in ores and bullion, 1912, A., ii, 810.

Dey, Biman Behary, and Hemandra Kumar Sen-Gupta, the action of hydrazine sulphate on, intrites and a new method of estimating nitrogen in nitrites, 1911, A., ii, 822.

Dey, Biman Bihari. See also Martin Onslow Forster, and Hemendra Kumar

Sen-Gupta.

Dezani, Serafino, protein bases of the sperm and ovaries of the tunny fish and their products of hydrolysis, 1909, A., ii, 163.

lecithins and cholesterols contained in the sperma and ovary of tunny fish,

1909, A., ii, 596.

pepsin, 1910, A., i, 449. the chromogenic substances of white grapes, 1911, A., ii, 223.

antipepsin. I., 1911, A., ii, 621. action of gypsum on nitrification, 1911, A., ii, 1019.

Dhar, Nilratan. See Prafulla Chandra Rây.

Dhein, Peter E., measurements in the spark spectrum of palladium, 1912, A., ii, 1114.

Dhéré, Charles, respiratory capacity of certain invertebrates, 1904, A., ii,

ultra-violet absorption spectra of the purines, 1905, A., ii, 783.

absorption of ultra-violet rays by

adrenaline, 1907, A., ii, 726.

Dhéré, Charles, and M. Gorgolewski, preparation and physico-chemical properties of demineralised gelatin, 1910, A., i, 448.

preparation by electrical dialysis of a serum almost free from electrolytes,

1910, A., ii, 515.

Dhéré, Charles, and H. Maurice, influence of age on the quantity and chemical distribution of phosphorus in

nerves, 1909, A., ii, 499. Dhéré, Charles, and W. de Rogowski, absorption of ultra-violet rays by a- and B-chlorophylls and crystallised chloro-

phyll, 1912, A., i, 887.

Dhuique-Mayer, F., analysis of a solution containing a mixture of sulphides, hydrogen sulphides, polysulphides, and hyposulphites, 1909, A., ii, 91.

Dhuique-Mayer, F. See also A. Caffin. Diamare, Vincenzo, experimental diabetes after extirpation of the pancreas in Selachians, 1907, A., ii, 285.

pancreatic diabetes in Selachian fishes,

1908, A., ii, 519.

composition of the egg in relation to biological questions. I. Dextrose in the egg: its condition in the white and in the yolk, 1910, A., ii, 320.

the dextrose of the egg and its biological significance, 1911, A., ii, 129. biology of the egg, a chemico-anatomi-

cal co-ordination, 1911, A., ii, 1110. pancreatic diabetes in cold-blooded animals, 1911, A., ii, 1117.

Díaz de Rada, Faustino, radioactivity of water from Martos and Onteniente,

1908, A., ii, 550.

radioactivity of waters of Agaete (Canary Islands), 1908, A., ii, 750. radioactivity of mud from the baths of

Fitero Viejo, 1908, A., ii, 750. analysis of the gases spontaneously liberated in the spring San José (bath of La Aliseda); radioactivity of the gases, 1912, A., ii, 570.

determination of the fixed radioactive elements in the waters of La Toja and Lérez, 1912, A., ii, 724.

Díaz de Rada, Faustino. See also José Muñoz del Castillo.

Dibbett, W., estimation of carbon dioxide in blood, 1909, A., ii, 267.

Dibdin, William Joseph, and Leonard Harry Cooper, colorimetric estimation of small quantities of bromine in the presence of large quantities of chlorine and small quantities of iodine, 1910, A., ii, 448.

Dick, Hermann. See Walter Herz. Dick, William Douglas. See Julian

Levett Baker.

Dickenson-Gair. See Gair. Dickhäuser, F. See Robert Pschorr. Dickie, Albert Ernest, manganese ferrocyanides, 1903, A., i, 155.

Dickinson, Hobert C., and E. F. Mueller, calorimetric resistance thermometers and the transition temperature of sodium sulphate, 1907, A., ii, 843.

Dickson, Charles, See James W. Wilson. Dickson, Charles W., nickel contained in nickelpyrrhotite from Sudbury in Canada, 1903, A., ii, 156.

condition of platinum in the nickelcopper ores from Sudbury, 1903,

A., ii, 302.

Dickson, Ernest, the ultra-violet fluorescence of benzene and some of its derivatives, 1912, A., ii, 4.

Dickson, Samuel, estimation of oxygen

in copper, 1905, A., ii, 479.

Dickson, William. See William Beaverly Cowie.

Dickson, W. S. See Charles Holmes Herty and Alvin Sawyer Wheeler.

Di Donna, A., estimation of organic matter in sea water and a modification of the Kubel-Tiemann process, 1907, A., ii, 821.

Dieckmann, Theodor, See Siegfried Hilpert and Friedrich Willy Hinrichsen.

Dieckmann, Walter, a-chloroglutaconaldehyde [β-chloropenta-Δαγ-dieneα-ol-ε-al], 1905, A., i, 411.

a-amino-derivatives of adipic acid, Bmethyladipic acid, and pimelic acid, 1905, A., i, 417.

phenylglyceric acid and phenylpyruvic

acid, 1910, A., i, 383.

phenylglycidic acid, 1910, A., i, 384. action of ethyl diazoacetate on benzaldehyde, 1910, A., i, 385.

isomerism and desmotropism with ethyl 2:6-diphenylcyclohexen-4-one-1-carboxylate, 1911, A., i, 450.

acylation of oxalylbenzyl cyanide [oxalylphenylacetonitrile] and oxalylethylene cyanide [oxalylsuccinonitrile], 1911, A., i, 456.

Dieckmann, Walter, Hagemann's esters and their analogues, 1912, A., i, 856.

alkylation of cyclohexanone-1:4-carboxylic esters and the constitution of the menthenone derived from Hage-

mann's ester, 1912, A., i, 857. alkylation of benzoylacetone desmotropy of methyl- and ethylbenzoylacetone, 1912, A., i, 868.

Dieckmann, Walter, Ludwig Beck, and Bruno Szelinski, dyes derived from furfuraldehyde, 1906, A., i, 109.

Dieckmann, Walter, and Fritz Breest, acetylation of ethyl cyanoacetate, 1904, A., i, 845.

constitution of dehydracctic acid, 1904, A., i, 846.

behaviour of carboxylic acids towards phenylcarbimide, 1905, A., i, 832.

Dieckmann, Walter, and Karl von Fischer, 1:5-diketones, 1911, A., i, 451.

Dieckmann, Walter, Johannes Hoppe, and Richard Stein, interaction of phenylcarbimide with 1:3-dicarbonyl compounds, 1905, A., i, 135.

Dieckmann, Walter, and Heinrich Kämmerer, behaviour of hydrogen cyanide towards phenylcarbimide, 1905, A., i, 874; 1907, A., i, 979.

αγ-diphenylpropylene, 1906, A., i,

Dieckmann, Walter, and Arthur Kron, condensations with ethyl acetoacetate and their reversion, 1908, A., i,

Dieckmann, Walter, and Wilhelm Ottmar Meiser, homophthalic esters, oxymethylenehomophthalic and their isocoumarin and isocarbostyril derivatives, 1908, A., i, 894.

Dieckmann, Walter, and Ludwig Platz, chloromalonaldehyde [β-chloro-Δβpropene-γ-ol-α-al], 1905, A., i, 117,

a new method of formation of osotetrazones, 1905, A., i, 953.

Dieckmann, Walter, and Richard Stein, Claisen's transformation of O-acyl derivatives of ethyl acetoacetate into the isomeric C-acyl derivatives, 1904, A., i, 847.

interaction of 1:3-dicarbonyl compounds and the acetyl derivatives of dimethyl- and phenyl-dihydroresorcinols, 1904, A., i, 873.

Diedrichs, A. See H. Sprinkmeyer.

Diefendorf, A. R. See Francis Gano Benedict.

Diefenthäler, Otlo. See Erich Müller.

Dieffenbach, Otto, electrolytic production of nitrosobenzene, 1908, A., i, 409.

preparation of azoxy-derivatives, 1908, A., i, 841.

preparation of manganese compounds,

1908, A., ii, 697. Diehl, Carl. See Adolf von Baeyer. Diehm, Franz. See Erich Beschke.

Diels, Otto, nitrogentricarboxylic esters and syntheses by means of ethyl sodiocarbamate, 1903, A., i, 324.

condensation product from diacetyl and ethyl oxalate, 1903, A., i, 400.

cyanuric acid derivatives, 1905, A., i, cholesterol. VII., 1908, A., i, 728.

condensation of ethyl carbamate with acid esters, 1909, A., i, 461.

Diels, Otto, and Emil Abderhalden, degradation of cholesterol, 1903, A., i, 819.

cholesterol, 1904, A., i, 880; 1906, A., i, 272.

hydrogenisation of cholesterol, 1906, A., i, 425.

Diels, Otto, and Erich Andersonn, benzylidenediacetyl, 1911, A., i, 464.

Diels, Otto, and Erich Beccard, acylated allylamines, 1907, A., i, 56.

Diels, Otto, and Paul Blumberg, constitution of carbon suboxide, 1908, A., i, 392; ii, 103.

preparation of cholesteryl ethers, 1911, A., i, 971.

Diels, Otto, and Alex Böcking, attempts to prepare methylcyclopentanetetrone, 1909, A., i, 395.

Diels, Otto, and Felix Bunzl, attempts to synthesise fluorene derivatives,

1905, A., i, 431.

Diels, Otto, and Arthur vom Dorp, constitution of monosemicarbazones and acetylhydrazones of 1:2-diketones, 1903, A., i, 862.

Diels, Otto, and Milan Farkas, hydroxydiacetyl, 1910, A., i, 535.

Diels, Otto, and Paul Fritzsche, ethyl azodicarboxylate, 1911, A., i, 957.

Diels, Otto, and Richard Gollmann, acylation and alkylation of cyanamide, 1911, A., i, 955.

Diels, Otto, and Armenak Gukassianz, chloralurethane. II., 1911, A., i, 24.

Diels, Otto, and Hans Heintzel, con-densation of some esters with ethyl carbamate and with ethyl aminoacetate, 1905, A., i, 174.

Diele, Otto, and Ernst Jacoby, carbethoxycarbimide. II., 1908, A., i, 613.

Diels, Otto, and Jacob Martin Johlin, new method for the preparation of ketone-alcohols, 1911, A., i, 254. Diels, Otto, and Hans Jost, reduction

product of the polymeride of diacetyl.

II., 1903, A., i, 427.

Diels, Otto, and Anton Kollisch, diacetyl; diacetylmonophenylhydrazones their condensations, 1911, A., i, 230.

Diels, Otto, and Leonid Lalin, carbon suboxide. IV., 1908, A., i, 939.

Diels, Otto, and Rudolf van der Leeden, condensation of isonitrosoketones with aldoximes; formation of oxadiazines. I., 1905, A., i, 946.

Diels, Otto, and Max Liebermann, new evanuric arid compounds, 1903, A., i,

867.

Diels, Otto, and Karl Linn, cholesterol. V. and VI., 1908, A., i, 164, 263. Diels, Otto, and Fritz ter Meer, ethers of

oximinoketones, 1909, A., i, 455. Diels, Otto, and Geory Meyerheim, carbon

suboxide. II., 1907, A., i, 180. Diels, Otto, and Paul Nawiasky, esters of nitrogentricarboxylic acid and similar compounds, 1904, A., i, 980.

Diels, Otto, and Felix Ochs, bromination

of urethane, 1908, A., i, 10.

Diels, Otto, and Harukichi Okada, the action of certain acid chlorides on potassium nitrate and the formation of acid anhydrides, 1912, A., i, 3.

constitution of the compound derived from benzoylchlorocarbamide and alkali, 1912, A., i, 918.

Diels, Otto, and Albert Pillow, bistenzoyl

cyanide, 1908, A., i, 535.

Diels, Otto, and Georg Plant, use of oximino-ethers in condensations, 1905, A., i, 509.

Diels, Otto, and Martin Reinbeck, dibromomaleic anhydride. I., 1910, A.,

Diels, Otto, and Richard Rhodius, reductions with sodium amyloxide, 1909, A., i, 351.

Diels, Otto, and Karl W. Rosenmund, observations in the diphenylmethane and xanthone series, 1906, A., i, 673.

Diels, Otto, and Erich Sasse, oxadiazines. II., 1907, A., i, 1086.

Diels, Otto, and Carl Seib, choralure-

thane, 1909, A., i, 885.

Diels, Otto, Johannes Sielisch, and Ernst Müller, 1-methylcyclopentane-2:4:5-trione. I., 1906, A., i, 438.

Diels, Otto, and Erich Stamm, the formation of basic derivatives of cholesterol and the preparation of a-cholestylamine, 1912, A., i, 698.

Diels, Otto, and Hugo Stein, termolecular benzoyl cyanide, 1907, A., i, 528.

Diels, Otto, and Erich Stephan, methylketol. I., 1907, A., i, 1000. dimethylketol. II. Conversion into a ketotriose, 1909, A., i, 472.

Diels, Otto, and Max Stern, condensation of ethyl oxalate with dimethylketol,

1907, A., i, 466.

diacetylmonoxime; decomposition of its benzovl derivative; theory of the Beckmann transformation, 1907, A.,

Diels, Otto, and Paul Straumer, icomeric diacetylcyanohydrins and their transformation into the imides of dimethylmesotartaric acid and dimethylracemic acid, 1912, A., i, 942.

Diels, Otto, and Alfred Wagner, benzoylcyanamide and a synthesis of benzoylenecarbamide (diketotetrahydroquinazoline) from o-nitrobenzovlcvanamide,

1912, A., i, 511.

Diels, Otto, and Bertram Wolf, carbethoxyl isocyanate [ethyl carbimidecarboxylate], 1906, A., i, 237. carbon suboxide. I., 1906, A., ii,

227.

Diem, Ernst. See Carl Friedheim.

Diemer, Melvin Edison, and Victor Lenher, specific gravity and percentage strength of selenic acid, 1909, A., ii,

Diena, G., the influence of the ingestion of thiocyanates, 1912, A., ii, 373.

Dienel, Hans, a-anthramine and a-anthrol, 1905, A., i, 767.

1:4-anthraquinone, 1906, A., i, 290. Dienert, F., action of zinc on microbes in water, 1903, A., ii, 447.

action of magnesium and of magnesia on microbes, 1905, A., ii, 190.

radioactivity of springs of potable waters, 1906, A., ii, 324.

fluorescent substances contained in water, 1909, A., ii, 361.

processes used to measure the fluorescence of waters, 1909, A., ii, 361.

use of physico-chemical volumetric methods in the analysis of waters, 1912, A., ii, 807.

Dienert, F., and E. Bouquet, radioactivity of springs of potable waters,

1906, A., ii, 211.

Dienert, F., and A. Guillerd, application of physico-chemical volumetric methods to the estimation of substances in water, 1912, A., ii, 687.

Dienes, Ludwig, the internal frictions of colloidal and non-colloidal liquids,

1911, A., ii, 590.

Dienes, Ludwig, do the individual redblood corpuscles of a suspension of the same show measurable individual differences? 1911, A., ii, 740.

the individual differences of the blood corpuscles, 1912, A., ii, 181.

Dienstbach, Oskar. See Otto Dimroth. Diepolder, Emil, derivatives of 1:2-dimethylbenzene [o-xylene], 1909, A., i, 786; 1911, A., i, 853.

collection of small precipitates, 1910,

A., ii, 343.

sublimation apparatus, 1911, A., ii, 96.

Dierssen, Heinrich, products of degradation of starch containing sugar, formed in the hydrolysis by means of oxalic acid, with special reference to Lintner's isomaltose, 1903, A., i, 321.

Diesbach, Heinrich von. See Alfred

Einhorn.

Diesel, W., isomorphous mixtures of anhydrous calcium, magnesium, and iron carbonates, 1911, A., ii, 725.

Dieseldorff, Arthur, nephrite from New

Zealand, 1903, A., ii, 556.

Diesselhorst, G., estimation of fat in flesh, 1910, A., ii, 1008.

Dieterich, A. von, and Lothar Wöhler, lecture experiments to demonstrate the law of mass action, 1903, A., ii, 274.

Dieterich, A. von. See also Lothar

Wöhler.

Dieterich, Karl, fatty oil contained in apricot kernels, 1903, A., ii, 95. assay of beeswax, 1903, A., ii, 767.

acid number of colophony, 1904, A., i, 680.

new fossil copal (Java copal),

A., i, 30. bee resin (propolis), 1912, A., i, 280.

Dieterle, Hedwig. See Hugo Bauer and Julius Schmidt.

Dieterle, Paul. See Fritz Fichter and Fritz Ullmann.

Diethelm, Bernardo, and Fritz Foerster, electrolytic reduction of solutions of titanic sulphate, 1908, A., ii, 350.

Diethelm, Bernardo. See also Erich

Müller.

Dietrich, M., the caseinogen-peptones containing phosphorus, 1910, A., i, 82.

Dietrich, Th., injuriousness of perchlorate, 1903, A., ii, 571.

lime requirements of Hessian soils, 1905, A., ii, 114.

Dietrich, if Th., and Felix Mach, beet molasses of various origin, 1905, A., ii, 55.

Dietrich, Walter. See Wilhelm Völtz. Dietz, Rudolf. See Franz Mylius.

Dietz, Wilhelm, reversible fermentation in a heterogeneous system; formation and hydrolysis of esters, 1907, A., ii, 677.

Dietze, Albert. See Aristides Kanitz. Dietze, F., assay of sweet spirits of nitre, 1911, A., ii, 662.

Differt, Reinhold. See Carl Adam Bischoff.

Digby, W. Pollard, relation of stability to electrochemical efficiency in hypochlorite production, 1906, A., ii, 265.

Dilling, Walter J., isolation of conium alkaloids from animal tissues, 1909, A., ii, 709.

coniine, conhydrine, ψ-conhydrine, γ-coniceine, and a new isomeride of coniine, 1909, A., ii, 771.

a possible fallacy in Fleitmann's test [for arsenic], 1912, A., ii, 91.

a spurious reaction for cellulose and quinine bark, 1912, A., ii, 304.

Dillon, Thomas. See Hugh Ryan.
Dilthey, Alfred. See Emil Fischer.
Dilthey, Walther, silicon compounds,
1903, A., i, 405, 591; 1904, A., i,

action of titanium tetrachloride on 1:3-diketones, 1904, A., i, 290.

Dilthey, Walther, and Fritz Eduardoff, preparation of phenylsilicon compounds, 1904, A., i, 464.

diphenylsilicone and benzylsilicon compounds, 1906, A., i, 128.

Dilthey, Walther, Fritz Eduardoff, and Franz Jos. Schumacher, siliconium, boronium, and titanonium salts, 1906, A., i, 342.

Dilthey, Walther, and E. Last, action of magnesium aryl haloids on dicarboxylic acids, 1904, A., i, 667, 1029.

Dimitz, Ludwig. See Sigmund Fränkel.
Dimroth, Otto, syntheses with phenylazoimide [triazobenzene], 1908, A., i, 450.

new syntheses of diazonmino-derivatives, IV., 1905, A., i, 311.

desmotropic compounds, 1905, A., i, 383.

action of diazo-compounds on primary aliphatic amines, 1905, A., i, 618.

syntheses with azoimides. V. Diazoaminomethane (dimethyltriazen), 1907, A., i, 21.

phenyltriazen (diazobenzeneamide),

1907, A., i, 653.

behaviour of diazo-compounds with keto-enolic desmotropic compounds, 1907, A., i, 662.

1906.

Dimroth, Otto, earminic acid, 1909, A., i, 485.

spontaneous decomposition of phenylnitromethane, 1910, A., i, 831.

Dimroth, Otto, and Hans Aickelin, 5hydroxy-1:2:3-triazole, 1907, A., i,

Dimroth, Otto, Hans Aickelin, Benno Brahn, Gustav Fester, and Elsa Merckle, intramolecular transformations. IV. Hydroxytriazoles and diazoamides, 1910, A., i, 518. Dimroth, Otto, and Oskar Dienstbach,

chromoisomerism and transformation of 4-oximino-1-phenyl-5-triazolone,

1909, A., i, 62.

decomposition products of 4-oximino-1-phenyl-5-triazolone, 1909, A., i, 63.

Dimroth, Otto, Ernst Eberhardt, and Eugen Letsche, desmotropic com-

pounds, 1905, A., i, 98.

Dimroth, Otto, Ernst Eberhardt, Eugen
Letsche, and Georg Werner, syntheses

with phenylazoimide, 1903, A., i, 127.

Dimroth, Otto, and Max Eble, carbon
monoxide scission from ethyl a-bromoa-phenylacetoacetate, 1907, A., i, 57.

Dimroth, Otto, Max Eble, and Woldemar

Dimroth, Otto, Max Eble, and Woldemar Gruhl, tautomerism of diazoaminocompounds, 1907, A., i, 664.

Dimroth, Otto, and Gustav Fester, triazole and tetrazole from azoimide, 1910,

A., i, 645.

Dimroth, Otto, and Heinrich Feuchter, action of phosphorus pentachloride on ethyl propionylphenylacetate, 1903, A., i, 629.

carbon monoxide scission from ethyl a-bromopropionylphenylace-

tate, 1903, A., i, 631.

Dimroth, Otto, Erich Frisoni, and Joseph Marshall, syntheses with azoimides. VI. Condensation of phenylazoimide with ketones, 1907, A., i, 97.

Dimroth, Otto, and Alexander Hamburger, dye of kermes, 1910, A., i,

487.

Dimroth, Otto, and Max Hartmann, transformations of azo-compounds into hydrazones, 1907, A., i, 1090. the mechanism of coupling, 1909, A., i, 66

Dimroth, Otto, Fritz Hess, Joseph Marshall, and Georg Werner, intramolecular transformations, 1909, A., i, 267.

Dimroth, Otto, and Siegfried Merzbacher, synthesis of tetrazoles from phenylazoimide, 1907, A., i, 659.

synthesis of tetrazoles from arylazoimides, 1910, A., i, 897. Dimroth, Otto, and Guillaume de Montmollin, diazohydrazides, 1910, A., i, 898.

Dimroth, Otto, and Karl Pfister, monosubstituted triazens and attempts to prepare triazen, 1910, A., i, 904.

Dimroth, Otto, and Wolfgang von Schmaedel, sulphonation in presence of mercury, 1907, A., i, 620.

Dimroth, Otto, and Heinrich Schneider, intramolecular transformations. V. Influence of the solvent on the velocity of reaction and the equilibrium, 1911, A., ii, 31.

Dimroth, Otto, and Hermann Stahl, desmotropic compounds. II., 1905,

A., i, 384.

Dimroth, Otto, and Ludwig Taub, formation of derivatives of oxanilhydroxamic acid from 4-isonitroso-1-phenyl-5-triazolone, 1907, A., i, 96.

Dimroth, Otto, and Wilhelm Wislicenus, methylazoimide, 1905, A., i, 422.

Dinan, estimation of phosphorus in phosphor-bronze, 1905, A., ii, 353. assay of white metal, 1905, A., ii, 357. separation of tin, arsenic, and antimony; analysis of bronzes, 1909, A., ii, 97.

Dinescu. See Pierre Mazé.

Dinesmann, Adolphe, condensation of chloral with aromatic hydrocarbons under the influence of aluminium chloride, 1905, A., i, 645.

Dinkelacker, P. See Rudolf Friedrich

Weinland.

Dinklage, Karl, quantity of soluble and coagulable nitrogen contained in malt, 1904, A., ii, 584.

Dinklage, Karl. See also Alfred Werner. Dinner, Fritz. See Herman Decker

and Frédéric Reverdin.

Dinslage, E., analysis of lime saltpetre

"kalk stickstoff," and "stickstoff kalk," 1911, A., ii, 1027.

Dinsmore, Sanford C. See C. Alfred

Jacobson.

Dinwiddie, Joseph G., and Joseph Hoeing
Kastle, bromination of phenol, 1911,

A., i, 962.
Dionneau, R., asymmetric derivatives of hexane-α^c-diol; diethyl ether and di-iodo-derivative of heptane-αη-diol, 1906, A., i, 134.

asymmetric derivatives of hexane-ofdiol; heptamethylene glycol, 1907,

A., i, 747.

synthesis of the diprimary glycols, $HO(CH_2)_{n+2}$ OH, by means of the dihaloid compounds, $X(CH_2)_n$ X, 1910, A., i, 353.

Dionneau, R., synthesis of ethers of hexane-α(-diol; production of hexylenic ethers, C₆H₁₁·OR, 1910, A., i, 353.

Diotalevi, D. See H. Cantoni.

D'Ippolito, G., the influence of chemicals on the germinating capacity of Cuscuta arvensis and Cuscuta trifolia, 1912, A., ii, 82.

Dischendorfer, Otto. See Robert Kremann.

Discher, F., variations in the action of
pepsin on fibrin in acid liquids at

50°, 1904, A., i, 211.

action of pepsin on albumin precipitated by heat in presence of acid, 1905, A., i, 251.

Dishler, E. G. See Nicolai A. Pushin.

Ditmar, Rudolf, methylglucoside and
other derivatives of lactose, 1903,
A., i, 151.

chemistry of caoutchouc and its distillation products, 1904, A., i, 680.

decomposition of the colloid molecule of caoutchouc and its conversion into a cyclic hydrocarbon, 1904, A., i, 757.

action of radium rays on caoutchouc,

1905, A., ii, 72.

colloidalising action of caoutchouc on selenium, 1905, A., ii, 701.

absorption of gases by rubber tubing, 1908, A., ii, 159.

Dito, Johannes Willebrordus, action of phosphorus on hydrazine, 1903, A., ii, 592.

Ditrich, M. See Nicolai Alexandrovitsch Menschutkin.

Ditte, Alfred, formation of vanadium ores in nature, 1904, A., ii, 568.

action of mercuric iodide on sulphuric acid and mercury sulphates, 1905, A., ii, 391.

sulphides and double sulphides, 1907, A., ii, 862.

Dittler, Émil, ethylenediguanide, 1908, A., i, 924.

solidification curves of certain molten silicates, 1909, A., ii, 47.

formation of delvauxite, 1909, A., ii, 675.

thermochemistry of the silicates, 1911, A., ii, 96.

melting point of silicates, 1912, A., ii, 552.

Dittler, Emil, and Cornelio Doelter, application of colloid chemistry to mineralogy and geology; bauxite, a natural alumina hydrogel, 1912, A., ii, 171.

nomenclature of aluminium hydroxides, 1912, A., ii, 357.

Dittler, Emil. See also Rezso Balló and V. Schumoff-Deleano.

Dittmer, Otto. See Eduard Vongerichten. Ditto, R. C. See Owen Willans Richardson.

Dittrich, [Georg Paul] Max, estimation of manganese in rocks, 1903, A., ii, 107.

chemical-geological investigations on absorption by decomposed rocks, 1903, A., ii, 176.

separation of manganese and iron,

1903, A., ii, 576

oxidation of organic substances with persulphates in acid solution, 1904, A., ii, 80

filtration and ignition of gelatinous precipitates, 1904, A., ii, 512.

estimation of ceria and other rare earths in rocks, 1909, A., ii, 185.

*estimation of ferrous iron in silicates according to the Pebal-Dölter method, 1911, A., ii, 543.

estimation of organic matters in waters from sulphur springs, 1911, A., ii,

the applicability of the methods of estimating water in silicate minerals and rocks, 1912, A., ii, 1207.

Dittrich, Max, and Hermann Bollenbach, action of persulphates on haloids, 1905, A., ii, 239.

estimation of perchlorates, 1905, A.,

ii, 281.

Dittrich, Max, and W. Eitel, improvements in Ludwig and Sipöcz's method for the estimation of water in silicates, 1912, A, ii, 804.

Dittrich, Max, and Saly Freund, new method for separating titanium and zirconium, 1908, A, ii, 134.

separation of titanium and thorium by means of ammonium salicylate, 1908, A., ii, 134.

simultaneous precipitation of titanium and zirconium in the presence of iron, 1908, A., ii, 134.

separation of thorium, titanium, and zirconium from iron, 1908, A., ii, 135.

Dittrich, Max, and Carl Hassel, quantitative separations by persulphates in acid solution, 1903, A., ii, 243, 454.

new method for the analysis of ferriand ferro cyanides, 1903, A., ii, 581.

employment of persulphate for quantitative separations, 1904, A., ii, 679.

Dittrich, Max, and Alfred Leonhard, estimation of ferrous oxides in silic ates, 1910, A., ii, 1002.

Dittrich. Max, and Alfred Leonhard, the estimation of ferrous iron in silic-

ates, 1912, A., ii, 299.

Dittrich, Max, and Richard Pohl, estimation of zirconium in presence of titanium, especially in rocks, 1905, A., ii, 287.

Dittrich, Max, and Adolf Reise, estimation of lead by persulphate in acid

solution, 1905, A., ii, 483. Ditz, Hugo, the oxidising action of im-

pure ether, 1905, A., i, 404. oxidation of naphthalene to phthalic acid by concentrated sulphuric acid in presence of oxides or salts of rare

metals, 1905, A., i, 516.

oxidising action of impure ether containing peroxide and its influence on Kreis's reaction, 1905, A., ii, 560.

action of concentrated hydrochloric acid on potassium chlorate in the presence of potassium iodide or bromide; estimation of chlorates, 1905, A., ii, 760; 1906, A., ii, 155.

purification of acetylene by means of calcium hypochlorite, 1906, A., i,

617.

Tarugi's view of the formation and composition of bleaching powder,

1906, A., ii, 26

action of ammonium persulphate solution on cellulose. I. Formation and properties of cellulose peroxide, 1907, A., i, 829.

bleaching powder, 1907, A., ii, 459. some reactions of formaldehyde in presence of sulphuric acid, 1907,

A., ii, 511.

action of ammonium persulphate solution on cellulose. II. The relation of the cellulose peroxide formed to the other products of the reaction and the mechanism of the process of oxidation; reaction of oxycellulose with Nessler's reagent, 1908, A., i. 954.

decomposition of iron sulphides by aluminium, and the probable existence of a double sulphide of iron and aluminium, 1908, A., ii, 111.

Ditz, Hugo, and Friedrich Bardach, the estimation of phenol and p-cresol in mixtures of the two, 1912, A., ii, 98,

Ditz, Hugo, and Benjamin Max Margosches, iodometric standardisation,

1903, A., ii, 450.

detection and estimation of iodides in the presence of bromides and chlorides by means of potassium iodate, 1904, A., ii, 366.

Ditz, Hugo, and Benjamin Max Margosches, estimation of iodine in soluble iodides, also in the presence of bromides and chlorides, 1905. A., ii, 59.

Divers, Edward, constitution of nitric peroxide, 1903, P., 283; 1904, T., 110. peroxylaminesulphonic acid, 1903, P.,

283; 1904, T., 108.

silver hyponitrite, 1903, A., ii, 725. Dunstan, Jowett, and Goulding's paper on the rusting of iron, 1905, P.,

251; discussion, P., 253.

the products of heating silver nitrite. 1905, P., 281; discussion, P., 284.

Raschig's theory of the lead-chamber process, 1905, A., ii, 83.

theory of the action of metals on nitric

acid, 1905, A., ii, 84.

constitution of Fremy's sulphazilate and of Pelouze's nitrosulphate, 1905, A., ii, 449, 517.

the constitution of silver nitrite; a correction, 1907, P., 11.

mercurous hyponitrite, 1907, P., 264. decomposition of mercurous and silver hyponitrites by heat, 1907, P., 265.

cupric nitrite, 1907, P., 269. decomposition of hyponitrous acid,

1908, P., 16.

the action between potassium sulphite and potassium pentathionate, 1908,

a modification of Raschig's theory of the lead-chamber process, 1911, A.,

ii, 596.

Divine, Julia, respiration of the heart of turtle and frog, 1906, A., ii, 40.

Divine, Robert E., use of tannic acid in the estimation of alumina, 1905, A., ii, 205.

Divizia, Bianca. See Vincenzo Paolini. Dixon, Augustus Edward, the action of metallic thiocyanates on carbonyl

chloride, 1903, T., 84. salts of a mercaptoid isomeric form of thioallophanic acid, and a new synthesis of iminocarbaminethioalkyls, 1903, T., 550; P., 104.

certain organic phosphorus compounds,

1904, T., 350; P., 41.

caprovithiocarbimide, 1904, T., 807: P., 128. the chemistry of organic acid "thio-

cyanates" and their derivatives, 1906, T., 892; P., 147.

Dixon, Augustus Edward, and John Hawthorne, the tautomerism of acetyl thiocyanate, 1905, T., 468; P., 121.

the action of acid chlorides on thioureas, 1906, P., 322; 1907, T., 122. Dixon, Augustus Edward, and John Taylor, acyl-4-derivatives of iminothiocarbamic acid and their isomerides, 1907, T., 912; P., 119.

acylogens and thiocarbamides, 1907,

P., 294; 1908, T., 18. the constitution of "thiocyanates" containing an electronegative group, 1908, T., 684; P., 73.

study of the constitution and properties of the rhodanides of inorganic radicles, 1908, T., 2148; P., 238.

apparatus for demonstrating the electrolysis of hydrochloric acid, 1910,

T., 374; P., 25.

the molecular refraction of thiocyanates and other salts, 1910, T., 927; P.,

substituted isothiohydantoins, 1912, T., 558; P., 54.

the constitution and reactions of thiocarbamides, 1912, T., 2502; P.,

Dixon, Augustus Edward. See also Robert Elliott Doran.

Dixon, Harold Baily, explosion waves, 1905, A., ii, 577.

presidential address, 1910, T., 661; 1911, T., 588.

Berthelot memorial lecture, 1911, T.,

Dixon, Harold Baily, and William Arthur Bone, an analysis of the natural gas at Heathfield, Sussex, 1903, P., 63.

Dixon, Harold Baily, Joshua Bower, Lawrence Bradshaw, Ben Dawson, Edward Graham, Robert Henry Jones, and Edward Halford Strange, movements of the flame in the explosion of gases, 1903, A., ii, 273.

Dixon, Harold Baily, and Lawrence Bradshaw, explosion of pure electro-

lytic gas, 1907, A., ii, 450.

Dixon, Harold Baily, and Hubert Frank Coward, the ignition temperatures of gases, 1909, T., 514; P., 67.

Dixon, Harold Baily, and Edward Charles Edgar, atomic weight of chlorine, 1905, A., ii, 696.

Dixon, Henry H., thermoelectric method

of cryoscopy, 1911, A., ii, 853.

Dixon, Henry H., and William Ringrose Gelston Atkins, osmotic pressure in plants; thermo-electric method of determining freezing points, 1910, A., ii, 533.

changes in the osmotic pressure of the sap of the developing leaves of Syringa vulgaris, 1912, A., ii,

802.

Dixon, Henry H., and Joseph Theodore Wigham, action of the radiations from radium bromide on some organisms. 1905, A., ii, 548.

Dixon, Walter Ernest, physiological action of apocodeine, 1904, A., ii.

selective action of cocaine on nervefibres, 1905, A., ii, 106.

action of alcohol on the circulation.

1907, A., ii, 377.
Dixon, Walter Ernest, and William Dobinson Halliburton, action of the choroid plexuses on the secretion of cerebrospinal fluid, 1910, A., ii,

the action of drugs on the cerebral

vessels, 1911, A., ii, 52.

the rapidity of absorption of drugs introduced into the cerebrospinal fluid, 1912, A., ii, 584.

Dixon, Walter Ernest, and Philip Hamill, action of secretin and receptive sub-

stances, 1909, A., ii, 414.

Dixon, Walter Ernest, and Orlando Inchley, an instrument for recording ciliary activity, 1905, A., ii, 542.

Dixon, Walter Ernest, and Walter Malden, physiological effects of colchicine, 1908, A., ii, 520.

Dixon, Walter Ernest. See also Joseph Barcroft, Thomas Gregor Brodie, and Henry Hallett Dale.

Dluska, (Mlle.) J. See Ludwik Bruner. Dmitrieff, S. A. See Wassili W. Scharwin.

Dmitriew, W. See Efim Semen London. Dmitrowsky, G. See F. Venulet.

Dmochowski, Roman, and Bernhard Tollens, constituents of cauliflower, 1910, A., ii, 534.

new method for estimating cellulose,

1910, A., ii, 554.

employment of the new method of estimating cellulose in wood and the materials employed in the paper industry, 1910, A., ii, 555.

Dobbelstein, W. See Paul Goerens.

Dobbie, James Johnston, and John Jacob Fox, the absorption spectra of quining. cupreine, 6-methoxyquinoline and 6hydroxyquinoline, 1911, P., 325; 1912, T., 77.

Dobbie, James Johnston, John Jacob Fox, and Arthur Josiah Hoffmeister Gauge, diphenylene; a new aromatic hydrocarbon. Parts I. and II., 1911, T., 683; P., 90; 1912, P., 327.

2:2'-dibromodiphenyl and 2:2'-dichlorodiphenyl, 1911, T., 1615; P.,

217.

Dobbie. James Johnston, and Alexander Lauder, on the relation between the absorption spectra and the chemical structure of corydaline, berberine, and other alkaloids, 1903, T., 605; P., 7.

the absorption spectra of laudanine and laudanosine in relation to their constitution, 1903, T., 626; P., 9; discussion, P., 10.

hydroxycodeine, a new alkaloid from opium, 1910, P., 339; 1911, T.,

the absorption spectra of cinchonine. quinine, and their isomerides, 1911.

T., 1254; P., 148.

- Dobbie, James Johnston, Alexander Lauder, and Charles Kenneth Tinkler, the constitution of cotarnine, 1903, T., 598; P., 75; discussion, P., 77.
 - the relative strengths of the alkaline hydroxides and of ammonia as measured by their action on cotarnine, 1903, P., 279; discussion, P., 280; 1904, T., 121.

Dobbie, James Johnston, and Charles Kenneth Tinkler, the constitution of hydrastinine, 1904, T., 1005; P.,

162.

the constitution of phenylmethylacridol, 1905, T., 269; P., 74.

- the ultra-violet absorption spectra of certain diazo-compounds in relation to their constitution, 1905, T., 273; P., 75.
- Dobbin, Leonard, interaction of sodium arsenate and lead acetate, 1904, A., ii, 406.

soluble potassium ferric arsenite, 1904.

A., ii, 410.

Dobbin, Leonard, and Alex. D. White. simple mode of preparing synthetic

populin, 1904, A., i, 905.

Dobroserdoff, Dimitri K., analysis of chromic acid and of its ammonium salts, 1903, A., ii, 761.

conditions of the interaction between aniline vapour and aluminium chlorate solution, 1904, A., i, 661.

aluminium chlorate: its hydrates and its decomposition on heating, 1904, A., ii, 564.

constitution and properties of the hydrate of aluminium bromate, 1907, A., ii, 551.

dielectric properties of the elements,

1910, A., ii, 93.

quantitative relations between the dielectric constants and other properties of substances, 1910, A., ii, 94.

Dobroserdoff, Dimitri K., dielectric constants of organic compounds in relation to their composition and structure. I., II., III., and IV., 1911, A., ii, 458.

molecular refractions of organic compounds for light of infinite wave-

length, 1912, A., ii, 309.

dielectric constants of liquid mixtures of non-associated organic solvents, 1912, A., ii, 729.

Dobrowolskaja, N. A., chemistry of digestion in animals. XXII. The importance of the blood in gastric digestion, 1908, A., ii, 870.

the influence of the loss of blood on digestive processes, 1911, A., ii, 620.

Dobrowolskaja, N. A. See also Efim Semen London.

Dobrowolsky, Stunislaus. See Michael I. Konowaloff.

Dobrzyński, Felia, and Stanislaus von Kostanecki, an isomeride of galangin. 1904, A., i, 763.

Dobson, (Miss) Mary Elizabeth, John Ferns, and William Henry Perkin, jun., synthesis of cyclohexanone-3carboxylic acid, 1909, T., 2010; P.,

Dobson, (Miss) Mary Elizabeth, and William Henry Perkin, jun., the identity of xanthaline and papaveraldine, 1911. T., 135; P., 4.

Dobson, Mildred Eaton. See Robert Alexander Robertson.

Doby, Géza, action of calcium on alcoholic ammonia, 1903, A., i, 546. the rôle of oxalate in the germination

of beet seed, 1909, A., ii, 256. the general application of the Geryk

air pump to vacuum distillations, 1911, A., ii, 744.

Doby, Géza, and Gusztáv Melczer, axial ratios and chemical composition of ilmenite, 1904, A., ii, 666

Doby, Géza. See also Henri Hérissey. Dockhorn, W., detection of blood in

fæces, 1912, A., ii, 504.

Dodgson, John Wallis, the stability of the double oxalates of sodium, and nickel and sodium and cobalt, 1911, P., 260.

Dodonow, Jacob. See Jakob Meisenheimer.

Dodt, Julius. See Arthur Strigel and Julius Tafel.

Döblin, A. See Peter Rona.

Doebner, Oscar [Gustav], unsaturated acids of the sorbic series and their conversion into cyclic hydrocarbons. III., 1907, A., i, 203.

Doebner, Oscar, and Max Kersten, B-benzvlmalic acid, 1905, A., i, 786.

Doebner, Oscar, and Gerhard Schmidt, unsaturated acids of the sorbic series and their conversion into cyclic hydrocarbons. IV., 1907, A., i, 204.

Doebner, Oscar, and Ludwig Segelitz. ethylmalic acid, 1905, A., i, 737.

Doebner, Oscar, and Hermann Standinger, unsaturated acids of the sorbic series and their transformation into cyclic hydrocarbons, 1904, A., i, 149.

Doelter [y Cisterich]. Cornelio [August], melting points of minerals and rocks,

1903, A., ii, 26.

influence of viscosity in silicate-fusions, 1906, A., ii, 350.

rate of reaction in fused silicates, 1906, A., ii, 611.

investigation of silicate-fusions, 1906,

A., ii, 665; 1907, A., ii, 166. determination of melting points by optical methods, 1906, A., ii, 726.

dissociation of fused silicates, 1908,

A., ii, 178, 839.

action of radium- and Röntgen-rays on the colours of precious stones, 1909, A., ii, 109.

action of radium and ultra-violet rays on the colours of minerals, 1909, A.,

ii. 363. colloidal colouring matters in the mineral kingdom, 1909, A., ii, 409.

stability of the colours of minerals produced by radium, 1909, A., ii, 455.

transformation of amorphous into crystalline substances, 1910, A., ii, 696, 834; 1911, A., ii, 376.

conduction of electricity in crystals at high temperatures, 1910, A., ii, 818.

the action of cathode rays on certain minerals, and the nature of the mineral colorations, 1911, A., ii, 569. the electrical conductivity and be-

haviour of diamond at high temperatures, 1911, A., ii, 601.

Doelter, Cornelio, and Felix Cornu, the borderland between colloidal chemistry, mineralogy, and geology, 1909, A., ii, 303, 408.

Doelter, Cornelio, and Heinrich Sirk, radioactivity of minerals. I., 1910,

A., ii, 569.

the different influences of a-, B-, and y-rays on the colours of solid substances, 1911, A., ii, 171.

determination of the absolute value of the viscosity of molten silicates, 1911, A., ii, 880.

Doelter, Cornelio. See also Emil Dittler. Doeltz, F. O., and Carl Artur Graumann, behaviour of zinc oxide at high temperatures, 1906, A., ii,

behaviour of cadmium oxide at high temperatures, 1906, A., ii, 671.

reduction of zinc oxide, 1907, A., ii,

reduction of cadmium oxide, 1907. A., n ii, 687.

reduction of the oxides of lead, copper, and tin by carbon, 1907, A., ii, 687. the copper Bessemer reaction, 1907,

A., ii, 689. Doeltz, F. O., and Wl. Mostowitsch, behaviour of heavy spar at high temperatures, 1907, A., ii, 545.

melting point of lead oxide, 1907, A.,

ii, 619.

Doepmann, Felix. See August Michaelis. Doerinckel, Friedrich, alloys of thallium with copper and aluminium, 1906, A., ii, 166.

compounds of manganese and silicon,

1906, A., ii, 676.

platinum alloys, 1907, A., ii, 785.

preparation of colloidal gold solutions by means of hydrogen peroxide, 1909, A., ii, 896.

the heat of coagulation of colloidal solutions, 1910, A., ii, 269.

calorimetric observations of the reciprocal coagulation of ferric hydroxide and silver hydrosols, 1910, A., ii, 589.

the system manganous oxide-silica,

1911, A., ii, 608.

Döring, Karl. See Max Weger.

Döring, Theodor, behaviour of chromium prepared by the "aluminothermal method" towards hydrogen haloids, 1906, A., ii, 451.

the estimation of alkalis in silicates by the Lawrence Smith method,

1910, A., ii, 348.

Döring, Theodor. See also Richard Beck.

Doermer, Ludwig, properties of electrolytic calcium, 1906, A., ii, 162. structure of electrolytic calcium, 1906, A., ii, 540.

Dörpinghaus, Theodor. See Emil Abderhalden, Peter Bergell, and Emil Fischer,

Doerr, R., and J. Moldovan, the action of colloid solutions which act as protein precipitants on warm-blooded animals, and their relationship to anaphylactic processes, 1912, A., ii, 654.

Dörsing, Karl, measurement of the velocity of sound in liquids and of the ratio of the two specific heats of ether with the help of Kundt's dust figures, 1908, A., ii, 153.

Döscher, Hans. See David Holde, Jusef Houben, and Julius Marcusson.

Doesschate, Anton ten, lactic acid in eclampsia, 1908, A., ii, 122.

Dogiel, Joh., the effect on the animal organism of chloroform and cocaine or strychnine, 1909, A., ii, 420.

Dohrn, Max, the behaviour of atophan in the organism, 1912, 965.

Doht, Richard, iodophenylearbamides, 1905, A., i, 49.

chlorophenylca bamides, 1906, A., i,

elementary analysis, 1912, A., ii, 92. Doht, Richard, and J. Haager, action of nitrous acid on phenylcarbamide, 1904, A., i, 236.

Doht, Richard. See also Friedrich Epstein, J. Haager, and M. Picha.

Dojarenko, A. G., oxidation of humic acid, 1911, A., i, 357.

Dojarenko, M. N. See Nicolaus J. Demjanoff.

Dokkum, Lolke, carboxyethylcamphor, 1903, A., i, 504.

Dolch, P. See Robert Kremann.

Dold, Hermann, the action of ethyl alcohol and related alcohols on the frog's heart, 1906, A., ii, 558.

Dolezalek, Friedrich, binary mixtures and concentrated solutions, 1909, A.,

ii, 22; 1910, A., ii, 184.

Dolezalek, Friedrich, and Karl Finckh, thermodynamics of heterogeneous hydrolytic equilibrium, 1906, A., ii, 597.

solubility and oxidation potential of lead disulphate and dioxide, 1907,

A., ii, 87.

Dolezalek, Friedrich, and Friedrich Krüger, experiment to demonstrate the non-validity of the tension law for electrolytes, 1906, A., ii, 723.

Dolezalek, Friedrich. See also Friedrich

Kohlrausch.

Dolgolenko, V. I., lower critical temperature of solution of two liquids, 1907, A., ii, 846.

Dolgopoloff, Feodor. See Pavel Iw.

Petrenko-Kritschenko.

Doliński, Jarostaw Henryk, solubilities of certain organic acids in water at various temperatures, 1905, A., i, 524.

Doll, M. See André Wahl.

Doll, Paul, potassium manuring of barley and replacement of potassium by sodium, 1903, A., ii, 174.

See also August Morgen. Doll, Paul. Dolley, J. See John James Rickard Macleod.

Dollfus, Robert, action of alkali silicates on soluble metallic salts, 1907, A., ii,

83. Dollinger, Josef, additive compounds of aromatic amines with phenols, 1910, A., i, 700.

Domarus, A. von, blood-formation in spleen and liver in experimental anæmia, 1908, A., ii, 509.

Dombrowski, Alfred. See Karl Auwers

and Adolf Spilker.

Dombrowski, St., migration of odoriferous and colouring substancs to milk, 1904, A., ii, 585.

the chemical nature of the fundamental colouring matter of urine, 1907, A., i, 993.

excretion of urochrome in man, 1908, A., ii, 212.

uromelanin; the decomposition product of the colouring matter of urine, 1909, A., i, 820.

See also Stanislaus Dombrowski, St.

Bondzyński. See Rudolf Weiss-Dombrowsky, A. gerber.

Domentéeff, A., chlorosis of plants, 1905, A., ii, 476.

Domergue, A., flowers of sulphur and sublimed sulphur, 1905, A., ii, 82.

Domin, K. See Vladimir Stanek. Dominici, F. See Italo Bellucci.

Dominici, H., G. Petit, and A. Jaboin, persistent radioactivity of the organism under the influence of injections of insoluble radium salts; radium serotherapy, 1912, A., ii, 187.

Dominicis, Angelo de, detection of hydrocyanic acid, 1905, A., ii, 746.

value of the spectrum of hæmochromogen, 1906, A., ii, 134.

hydrocyanic acid poisoning, 1906, A., ii, 879.

sensitive reaction for carboxyhæmoglobin, 1908, A., ii, 643.

direct demonstration of carbon monoxide in the tissues at a time long subsequent to death, 1911, A., ii, 439.

detection of minimal traces of blood mixed with rust, 1912, A., ii, 1111.

Dominicis, Angelo de. See also Celso Ulpiani.

Dominikiewicz, Alfred. See Heinrich Lührig.

Dominikiewicz, Mieczyslaw, filtering apparatus for microscopic colouring matters and sterilised solutions, 1909, A., ii, 656.

estimation of fatty acids in soaps, 1909,

A., ii, 707.

measuring flask for estimating the iodine number, 1911, A., ii, 447.

Dominikiewicz, Mieczyslaw. See also

Heinrich Lührig.

Domke, Johann, tables for sugar estimations, 1912, A., ii, 499.

Domke, Johann, and Willy Bein, density and expansion of sulphuric acid in aqueous solution, 1905, A., ii, 157.

Donaldson, Harold, spectra of the electrodeless ring discharge in certain

gases, 1911, A., ii, 1042.

Donard, E., and Henri Labbé, protein substance from maize grains, 1903, A., i, 215, 782.

Donath, Eduard, estimation of manganese by means of hydrogen peroxide, 1905, A., ii, 766.

separation of tungsten and tin, 1906,

A., ii, 309.

replacement of hydrogen sulphide in chemical analysis, 1908, A., ii, 730. apparatus for evaporating in a dish under reduced pressure, 1908, A., ii,

1027.distillation and rectification of alcohol (lecture experiment), 1909, A., ii,

fossil coals, 1909, A., ii, 152.

volumetric estimation of manganese with potassium permanganate, 1910, A., ii, 550.

properties of potassium nitrite, 1911,

A., ii, 799.

the rusting of iron in reinforced concrete, 1911, A., ii, 897.

the removal of rust from iron in reinforced concrete, 1912, A., ii, 52.

Donath, Eduard, and Fritz Braunlich, coal and carbonised residues, 1912, A., i, 337.

Donath, Eduard, and A. Indra, iron rust, 1911, A., ii, 805.

arsa coal, 1912, A., ii, 1060.

Donath, Hedwig, activation of pancreatic steapsin, 1907, A., ii, 975.

Donath, Julius, production of choline in the cerebrospinal fluid in cases of epilepsy and nervous diseases, 1904, A., ii, 63, 791.

phosphoric acid in cerebrospinal fluid in nervous diseases, 1904, A., ii,

detection of choline by the polarisation microscope, 1906, A., ii, 133.

Donath. Julius, lactic acid in eclampsia. 1908, A., ii, 213.

Donato, Linda di. See Antonio Mannino.

Donau, Julius, formation of magnetite by heating iron in carbon dioxide, 1904, A., ii, 343.

microchemical detection of gold by means of the colloidal coloration of silk fibres, 1904, A., ii, 684.

coloration of borax beads by colloidal dissolved noble metals, 1904, A., ii. 784.

red colloidal solution of gold obtained · by means of carbon monoxide, 1905, A., ii, 462.

colloidal nature of the black palladium solution obtained by means of carbon monoxide, 1906, A., ii, 289.

new method for the estimation of metals (especially gold and palladium) by means of conductivity measurements, 1906, A., ii, 309.

detection of gold, silver, and the platinum metals by means of the metaphosphate bead, 1908, A., ii,

polarimetric measurements with small quantities of liquid, 1908, A., ii,

spectroscopic experiments with small quantities of liquids, 1909, A., i, 2. a micro-filter for the treatment of small quantities of precipitate, 1911,

A., ii, 225.

quantitative treatment of small quantities of precipitate, 1912, A., ii, 199.

the estimation of sulphur and of halogens in small quantities of organic substances, 1912, A., ii, 384.

Julius. See also Friedrich Donau.

Emich.

Done, Edward. See Percy Faraday Frankland.

D'Onghia, Onofrio. See Ezio Comanducci.

Donington, George Caulton. See Thomas Martin Lowry.

Donini, G. See Fernando Ageno.

Donk, A. D., mercuric salts of organic acids, 1907, A., i, 819.

nitration of glycine anhydride, 1907, A., i, 831.

thioantimonates of alkali metals. I. and II., 1908, A., ii, 763, 859.

the series: sodium thioantimonate, sodium thiosulphate, and water, 1908, A., ii, 953.

See also Willem van Donk, A. D.

Dam.

Donnan, Frederick George, theory of capillarity and colloidal solutions, 1904, A., ii, 240.

formation of complexes: hydration and colour, 1905, A., ii, 806.

equilibria and potentials at membranes in the presence of non-dialysing electrolytes, 1911, A., ii, 848.

Donnan, Frederick George, and Arthur John Allmand, a standard electrode with alkaline electrolyte: Hg | HgO alkali, 1911, T., 845; P., 70.

Donnan, Frederick George, and Bryce Chudleigh Burt, the solubilities and transition-points of lithium nitrate and its hydrates, 1903, T., 335; P., 37.

Donnan, Frederick George, and Albert Buckley Harris, the osmotic pressure and conductivity of aqueous solutions of Congo-red, and reversible membrane equilibria, 1911, T., 1554; P., 209.

Donnan, Frederick George, and Geoffrey Dodleston Hope, calorimetrical analysis of hydrated salts, 1910, A., ii, 392.

Donnan, Frederick George, and Robert velocity and Rossignol, the mechanism of the reaction between potassium ferricyanide and potassium iodide in neutral aqueous solution, 1903, T., 703; P., 120.

Donnan, Frederick George, and Harold Edward Potts, kinetics of the reaction between silver salts and aliphatic iodides, 1910, T., 1882; P., 212.

the physico-chemical theory of soap emulsions; emulsification of hydrogen oils by aqueous solutions of salts of the fatty acids, 1910, A., ii, 933.

Donnan, Frederick George, and Wilhelm Schneider, the colour of aqueous solutions of violuric acid, 1909, T., 956; P., 148.

Donnan, Frederick George, and T. W. A. Shaw, solubility of oxygen in molten silver, 1910, A., ii, 844.

Donnan, Frederick George, and John Smeath Thomas, the solubility of cuprous oxide in aqueous ammonia solutions, and the composition of the cuprous-ammonia complex, 1911, T., 1788; P., 213.

Donnan, Frederick George, and Albert Simpson White, the system: palmitic acid-sodium palmitate, 1911, T., 1668; P., 216.

Donnan, Frederick George. See also (Miss) Katharine Alice Burke.

Donovan, Willie. See James Scott Maclaurin.

Dons, R. K., the refraction of fats and fatty acids, 1907, A., ii, 314.

estimation of the caprylic [octoic] acid value of butter-fat, 1907, A., ii, 824; 1908, A., ii, 238. some of the fatty acids occurring in

butter-fat, 1909, A., ii, 190.

Doński, L., alloys of calcium with zinc, cadmium, aluminium, thallium, lead, tin, bismuth, antimony, and copper, 1908, A., ii, 278.

Dontas, S., action of sodium evanide on muscles and nerves of cold-blooded animals, 1909, A., ii, 75.

Dony-Hénault, Alice. See Octave Dony-Hénault.

Dony-Hénault, Octave, new regulator for thermostats, 1905, A., ii, 142.

electrolytic formation of chromium, 1906, A., ii, 363.

systematic investigation of oxydases, 1908, A., i, 588.

electrolysis of cupric solutions, 1910, A., ii, 209.

rôle of metallic salts in the assimilation of nitrates by green plants, 1912, A., ii, 862.

Dony-Hénault, Octave, and Alice Dony-Hénault, supposed radioactivity of hydrogen peroxide, 1906, A., ii, 644.

photographic capacity and supposed radioactivity of hydrogen peroxide, 1908, A., ii, 647.

Dony-Hénault, Octave, and (Mlle.) J. van Duuren, systematic investigation of oxydases in animal tissues, 1907, A.,

Dony-Hénault, Octave, and Edouard Leroy, systematic investigation of the oxydases. III., 1909, A., i, 686.

Donzé, G., and Eugène Lambling, estimation of urea, 1903, A., ii, 581.

Doornbosch, H. R., iodides of the elements of the nitrogen group, 1912, A., ii, 249.

Doornbosch, H. R. See also Frans Mauritz Jaeger.

Frederick William. See Dootson, William James Sell.

Doran, James M. See Everhart Percy

Harding. Doran, Robert Elliott, the tautomeric

character of the acyl thiocyanates, 1904, P., 20.
Doran, FRobert Elliott, and Augustus

Edward Dixon, the influence of temperature on the interaction between acetyl thiocyanate and certain bases. Thiocarbamides, including carboxyaromatic groups, 1905, T., 331; P., 77.

Dorée, Charles, cholesterol in cœ'enterata, 1908, A., ii, 769.

terata, 1908, A., ii, 769.
contributions to the chemistry of
cholesterol and coprosterol, 1909,
T., 638; P., 88.

distribution of cholesterol and its

allies, 1909, A., i, 152.

Dorée, Charles, and John Addyman Gardner, cholestenone, 1908, T., 1328; P., 173.

coprosterol. Part I., 1908, T., 1625;

P., 196.

origin and destiny of cholesterol in animals. I. Hippo-coprosterol. II. Excretion of cholesterol by the dog, 1908, A., ii, 514.

origin and destiny of cholesterol in animals. III. Absorption of choles-

terol, 1909, A., ii, 498.

Dorée, Charles, and Frederick Lucien Golla, trimethylamine as a normal constituent of human blood, urine, and cerebrospinal fluid, 1911, A., ii, 212.

Dorée, Charles, and Charles Stotesbury, the action of bromine on cholesteryl benzoate; preliminary note, 1912, P., 196.

Dorée, Charles. See also Miss Mary Cunningham.

Dorfmüller, Gustav. See Rudolf Pummerer and Georg Rohde.

Dorleans. See Alexandre Desgrez.

Dorlencourt, H., the supposed antidotes to alkaloids and artificial antitoxins, 1908, A., ii, 721.

Dorlencourt, H. See also Marc Tif-

feneau.

Dormaar, Jacobus Marius Martinus, transformation of carvoneand encarvone into carvaerol and the velocity of this transformation, 1905, A., i, 222. electrolytic estimation of antimony, 1907, A., ii, 200.

Dormael, Jos. van, estimation of free acids in superphosphates, 1907, A.,

ii, 394.

Dormane, Jean, estimation of phosphorus in wine, 1911, A., ii, 931.

Dormann, Edmund. See Oscar Piloty.
Dorn [Friedrich], Ernst, canal rays in hydrogen, helium, and argon, 1907, A., ii, 837.

optics of liquid crystals, 1910, A., ii,

809.

Dorn, Ernst, Eugen Baumann, and Siegfried Valentiner, action of radium emanations on pathogenic bacteria, 1905, A., ii, 748.

Dorn, Ernst, and Fritz Cario, behaviour of helium in a platinum-iridium vessel at high temperatures, 1906, A., ii, 539. Dorn, Ernst, and Wilhelm Lohmann, measurement of the optical constants of certain liquid crystals, 1909, A., ii, 529.

Dorn, Hugo. See August Michaelis.

Dorner, Alfred, influences acting on the alcoholic fermentation in the cell and in the expressed cell juice, 1912, A., ii, 1082.

Dorner, G., the formation of creatine and creatinine in the organism, especially in rabbits, 1907, A., ii, 709.

contents of a pancreatic cyst, 1909,

A., ii, 821.

Dornic, P., and Daire, sterilisation by ultra-violet rays; application to butter, 1909, A., ii, 778.

Dorno, Carl. See Wilhelm Lossen.
Dorogi, Stefan. See Richard Will-

stätter.

Doroschewsky, Antony G., specific heats of mixtures of saturated alcohols and water. II., 1909, A., ii, 967.

certain properties of aqueous solutions of trimethylcarbinol, 1911, A., i, 414.

414.

reciprocal action of associated liquids, 1911, A., ii, 468.

relation of vapour pressure to specific gravity in binary liquid mixtures, 1911, A., ii, 698.

partial pressures of water and alcohols in aqueous alcohols. V., 1911,

A., ii, 1062.

Doroschewsky, Antony G., and A. A. Bardt, reactions of artificial zeolites, 1910, A., ii, 615.

Doroschewsky, Antony G., and S. V. Dvorschantschik, index of refraction of mixtures of alcohol and water, 1908, A., ii, 241, 785.

application of the formulæ of Pulfrich and Hess to mixtures of ethyl alcohol and water, 1909, A., ii, 841.

indices of refraction of mixtures of methyl alcohol and water. III.,

1909, A., ii, 949.

Doroschewsky, Antony G., and E. V. Poljansky, vapour pressures and boiling points of mixtures of saturated alcohols with water, 1910, A., ii, 266.

boiling points of aqueous solutions of isopropyl alcohol and of trimethyl-

carbinol, 1911, A., i, 253.

Doroschewsky, Antony G., and Adam W. Rakowsky, action of nitric acid on starch, 1907, A., i, 678.

specific heat of alcohol and of its mixtures with water, 1908, A., ii, 807 Doroschewsky, Antony G., and Adam W. Rakowsky, specific heats of solutions of salts in water and alcohol, 1909, A., ii, 968.

Doroschewsky, Antony G., Adam W. Rakowsky, and A. A. Bardt, action of nitrie acid on starch. II., 1908,

A., i. 767.

Doroschewsky, Antony G., and Michael S. Roschdestvensky, electrical conductivity of mixtures of alcohol and water, 1908, A., ii, 800.

specific gravities of alcoholic solutions. I. Mixtures of methyl alcohol with

water, 1909, A., i, 868.

specific gravity of solutions of alcohols: mixtures of propyl alcohol with water, 1910, A., i, 85.

van Laar's theory of the contraction in water-alcohol solutions, 1910,

A., ii, 931.

Dorp, Arthur vom. See Otto Diels. Dorp, Gerard Carel Adriaan van, constitution of ethyl 6:8-dinitrotetrahydroquinoline-1-carboxylate, 1905, A., i, 81.

equilibrium in the system: sulphuric acid-ammonium sulphate-water at

30°, 1910, A., ii, 698.

equilibria in the system: sulphuric acid-lithium sulphate-water at 30°, 1910, A., ii, 698.

equilibria in the system: sulphuric acid-ammonia-water at 30°, 1911,

A., ii, 379.

Dorp, Gerard Carel Adriaan van, and J. Rodenburg, solubility of cadmium sulphide in light petroleum containing oil, 1910, A., ii, 126.

estimation of tannin [in catechu],

1910, A., ii, 167.

Dorp, Willem Anne van. See Sebastiaan Hoogewerff.

Dorp, Willem Anne van, jun., derivatives of piperazine, 1909, A., i, 327.

Dorp, Willem Anne van, jun. See also Frans Antoon Hubert Schreinemakers.

Dorronsoro, Bernabé, essential oil of Spanish wild marjoram, 1911, A., i, 74. Dorsch, Robert. See Paul Wagner.

Dorschky, Karl. See Ferdinand Henrich and Hans Rupe.

Dorset, Marion. See Emil Alexander de Schweinitz. Dorssen, S. van, nitro- and amino-

sulphobenzoic acids, 1911, A., i, 29. Dorssen, Willem van. See Pieter van

Romburgh.

Dorta, G. See S. Fachini.

Doryland, Charles J. T. See Walter E. King.

Dost. Karl, oxidation products of thiocarbamides and their isomerides, 1906, A., i, 315.

new oxidation products of unsymmetrical disubstituted aromatic thiocarbamides, 1906, A., i, 351.

Dott. David Brown, mercuric zinc cyanide, 1905, A., i, 695.

solubility of salicin, 1907, A., i, 230. melting point of cotarnine, 1907, A., i,

chloroform and acetone, 1908, A., i,

tin, 1908, A., ii, 989.

reduction of stannic oxide, 1908, A., ii, 1075.

apomorphine hydrochloride, 1909, A., i. 119.

Dotta, Eligio. See Karl Dziewoński. Douetteau, Réne, 2:3- and 3:4-dihydroxybenzylamines, 1911, A., i, 973.

2:3-dihydroxybenzylmethylamine and 2:3-dihydroxybenzyldimethylamine. 1912, A., i, 620.

Dougherty, George T., iron analysis, 1903, A., ii, 45.

rapid estimation of nickel in steel, 1907, A., ii, 583.

Doughty, Howard Waters, preparation of phosphorus di-iodide, 1906, A., ii. 21.

benzeneselenonic acid and related compounds, 1909, A., i, 296.

an automatic hydrogen sulphide generator, 1909, A., ii, 228.

Doughty, Howard Waters, See also William Albert Noyes and William Stone Weedon.

Douglas, Claude Gordon, estimation of the volume of blood in animals, 1906, A., ii, 179.

the oxygen capacity of the blood after hæmorrhage, 1910, A., ii, 316.

periodic breathing at high altitudes; the estimation of total oxygen blood-volume capacity and different altitudes by the carbon monoxide method, 1910, A., ii,

estimation of total respiratory exchange in man, 1911, A., ii, 653.

Douglas, Claude Gordon, and John Scott Haldane, Cheyne-Stokes breathing; regulation of breathing, 1909, A., ii,

effect of forced breathing and oxygen on the distress caused by muscular work, 1909, A., ii, 679.

absorption of oxygen by the lungs, 1910, A., ii, 511; 1911, A., ii, 737; 1912, A., ii, 653.

Douglas, Claude Gordon, and John Scott Haldane, the capacity of the air passages under varying physiological conditions, 1912, A., ii, 1063.

Douglas, Claude Gordon, John Scott Haldane, and J. B. S. Haldane, the laws of combination of hæmoglobin with oxygen and carbon monoxide,

1912, A., i, 591.

Douglas, Claude Gordon, John Scott Haldane, Yandell Henderson, and Edward C. Schneider, the physiological effects of low atmospheric pressures as observed on Pike's Peak, Colorado, 1912, A., ii, 457.

Douglas, Claude Gordon, Arthur Edwin Boycott. See also

Doumer, Emmanuel, electrolysis of solutions of pure hydrogen chloride, 1908, A., ii, 252.

determination of ionisation factor of water in hydrochloric acid solutions.

1908, A., ii, 349.

velocity of transport of the ions H, Cl, OH in the electrolysis of solutions of hydrogen chloride, 1908, A., ii, 458.

Douris, Roger, thiodine, 1909, A., i,

293.

hydrogenation of crotonaldehyde in presence of nickel, 1911, A., i, 949.

Dourlen, Jacques. See René Duchemin. Dover, (Miss) Mary Violet, time curves for cadmium deposited from organic electrolytes, 1911, A., ii, 1033.

Dover, (Miss) Mary Violet. See also (Miss) Mary E. Holmes, Elmer Peter Kohler, and James Wallace Walker.

Dowgelewitsch, N. See Wladimir N. Ipatieff.

Dowzard, Edwin, apparatus for the detection and estimation of minute traces of arsenic, 1903, A., ii, 41.

estimation of morphine in opium and tineture of opium, 1904, A., ii, 218. pressure-equalising attachment

desiccators, 1909, A., ii, 179. modified drying tube, 1910, A., ii,

1053. Arthur Wayland, intracellular Dox, enzymes of lower fungi, especially those of Penicillium camemberti,

1909, A., i, 861. enzymes of some lower fungi, 1909,

A., ii, 510.

behaviour of moulds towards the stereoisomerides of unsaturated dibasic acids, 1910, A., ii, 994.

catalase of moulds, 1910, A., ii, 1099.

Dox, Arthur Wayland, occurrence of tyrosine crystals in Roquefort cheese. 1911, A., ii, 429.

phosphorus assimilation of Asvergillus

niger, 1911, A., ii, 914.

Dox, Arthur Wayland, and Ross Golden, phytase in lower fungi, 1911, A., ii,

Dox, Arthur Wayland, and Leonard Maynard, autolysis of mould cultures,

1912, A., ii, 862.

Dox, Arthur Wayland, and Ray E. Neidig, pentosans in lower fungi, 1911, A., ii, 644.

Dox, Arthur Wayland. See also Marston

Taylor Bogert.

Doxiades, Leonidas, the maltase of blood-serum and liver, 1911, A., ii,

the glucose of blood-serum, 1912, A.,

ii, 269.

Doyon, Maurice, lipase, 1904, A., i, 131.

normal secretion by the liver of an anticoagulating substance, A., ii, 427.

Doyon, Maurice, and J. Billet, selective action of chloroform on the liver, 1905, A., ii, 471.

Dovon, Maurice, and Jean Chenn, localisation of iodine in the African turtle,

1904, A., ii, 627. Doyon, Maurice, and N. Kareff, action of [pilocarpine and adrenaline] on the

hepatic glycogen, 1904, A., ii, 272. Doyon, Maurice, and Albert Morel, action of sodium carbonate on monobutyrin, 1903, A., ii, 225.

saponifying action of serum on esters,

1903, A., ii, 560.

action of pancreatic lipase in the presence of blood, 1903, A., ii, 660. glycerol in the blood, 1903, A., ii, 661.

Doyon, Maurice, Albert Morel, and N. Kareff, effect of phosphorus on the coagulation of blood; origin of fibrinogen, 1905, A., ii, 402.

Doyon, Maurice, Albert Morel, and A. Policard, isolation of an hepatic antithrombin; description of some of its properties, 1911, A., ii, 216.

demonstration of the exclusively hepatic origin of antithrombin; extraction of this substance by a solvent for nuclear substances, 1911, A., ii, 216.

passage of the nucleo-protein anticoagulase of the liver into the blood; comparative action of atropine according to the manner of introduc-

tion, 1911 A., ii, 409.

Drabble, Eric, and Hilda Drabble, osmotic strength of cell sap in plants,

1907, A., ii, 191.

Drabble, Eric, Hilda Drabble, and Daisy G. Scott, the size of the cells of pleurococcus and saccharomyces in neutral salt solutions, 1907, A., ii, 499.

Drabble, Eric, and Hilda Lake, effect of carbon dioxide on geotropic curvature of the roots of Pisum sativum, 1905, A., ii, 751.

Drabble, Eric, and Maximilian Nierenstein, the rôle of phenols, tannic acids, and hydroxybenzoic acids in cork formation, 1907, A., ii, 192.

Drabble, Eric, and Daisy G. Scott, effect of acids, alkalis, and neutral salts on the activity and multiplication of yeast cells, 1907, A., ii, 571.

Drabble, Hilda. See Eric Drabble.
Drachussoff. See Wladimir Ipatieff.
Dragotti, G. See Marussia Bakunin.
Drapier, Paul, magnetism of solutions,

1910, A., ii, 99.

the viscosity of binary liquid mixtures in the neighbourhood of the critical dissolution temperature, 1911, A., ii, 968.

Drauzburg, W. See Carl Mannich and

Hermann Thoms.

Drawe, Paul, estimation of [combined] nitric acid in water, 1906, A., ii, 490.

a new laboratory drying apparatus, 1907, A., ii, 613.

fluorine analyses, 1912, A., ii, 806.

Dreaper, William Porter, estimation of tannin and gallic acid, 1904, A., ii, 793.

the solution state, 1906, A., ii, 13.

theory of dyeing: the colour and molecular state of pieric acid, 1911, T., 2094; P., 244.

Dreaper, William Porter, and Alexander
Wilson, the coagulating action of
colloids, 1906, P., 70; discussion,
P., 71.

absorption of gallic acid by organic colloids, 1906, A., i, 777.

theory of dyeing; dyeing with basic dyes with subsequent re-solution, 1912, A., ii, 442.

Dreeq. See (Comte) Arnaud de Gramont.
Dreger, the quantitative estimation of diphenylamine, 1909, A., ii, 708.

Dreher, Carl, combinations of titanic acid with lactic acid, 1904, A., i, 471.

Drennen Exed M the presence in the

Drennan, Fred M., the presence in the blood of the pancreatic internal secretion, 1911, A., ii, 995.

Drennan, Fred M. See also Anton Julius Carlson.

Dresel, Auguste. See Frédéric Reverdin. Dreser, Heinrich, diuretic action of 1:3-dimethylxanthine, 1904, A., ii, 360.

freezing point and conductivity of urine in pharmacological experiments, 1904, A., ii, 752.

acidity of urine, 1905, A., ii, 186.

effect of a drug on a simple vital process, 1906, A., ii, 43.

free hydrochloric acid in the gastric juice, 1906, A., ii, 777.

estimation of the respiratory capacity of small quantities of blood, 1908, A., ii, 1048.

Dreverhoff, Paul, the action of chlorine on hexoneacids (hexonsauren) [maltol], 1912, A., i, 8.

Dreverhoff, Paul. See also Otto Fischer.
Drews, Alexander. See August
Michaelis.

Dreyer, C., and Victor Goldschmidt, albite from Greenland, 1908, A., ii, 116.

Dreyer, Friedrich, velocity of crystallisation of fused liquid mixtures, 1904, A., ii, 611.

Dreyer, Friedrich, and Th. Rotarski, properties of p-azophenetole, 1905, A., i, 952.

Dreyer, Georges, and Olav Hanssen, coagulation of the proteins by the action of ultra-violet light and of radium, 1907, A., i, 883.

the laws of the action of light on glucosides, enzymes, toxins, and antitoxins, 1907, A., ii, 835.

rate of hemolysis under the influence of light, heat, and hæmolysins, 1907, A., ii, 890.

Dreyer, Georges, and Arthur John Jex-Blake, agglutination of bacteria,

1906, A., ii, 98.

Dreyer, Georges, and Ernest William Ainley Walker, production of immune substances; the differences in agglutinin-content in plasma and serum, 1909, A., ii, 817.

Dreyer, Georges, See also Carl Jul. Salomonsen.

Dreyfus, Camille, preparation of aromatic hydroxyaldehydes and partially alkylated polyhydroxyaldehydes by fission of the corresponding alkyl derivatives, 1908, A., i, 654.

Dreyfus, Camille, and Henry Dreyfus, α-naphthisatin-α-naphthalide and β-naphthisatin-β-naphthalide, 1904,

A., i, 832.

289 U

Dreyfus, Camille, and Henry Dreyfus, derivatives of a- and B-naphthisatins, 1904, A., i, 893.

Dreyfus, Henry. See Camille Dreyfus. Dreyfus, Isaac. See Emilio Noelting.

Dreymann, Carl, preparation of solid fatty acids, 1906, A., i, 622.

Willem Pieter Driessen Mareeuw. Hendrik van den, detection and estimation of "saccharin" in cocoapowder, 1907, A., ii, 413.

saponifying constituents of the cola

nut, 1909, A., ii, 447.

Willem Pieter Driessen Mareeuw, Hendrik van den. See also Hendrik Wefers Bettink.

Driot, oxychlorides of zinc, 1910, A., ii,

mercuric oxychlorides, 1911, A., ii, 397.

Drjewezki, Alexis von, influence of alkalinity on liver autolysis, 1906, A., ii. 873.

Drouginine, G. See Philippe Auguste

Guye.

Drozdowski, Edward. See Karol Adwentowski.

Karl, determination Drucker, calculation of equilibria for highly dissociated acids, 1904, A., ii, 809.

dissociation of ternary electrolytes, 1905, A., ii, 371.

aqueous solutions of fatty acids, 1905, A., ii, 680.

connexion between depression freezing point and latent heat of fusion, 1906, A., ii, 71.

molecular weight of the solvent in binary mixtures, 1906, A., ii, 74. mobility of ions in water, 1907, A., ii,

supercooling and chemical constitution, 1909, A., ii, 211.

Stas's investigation of the solubility of silver chloride, 1909, A., ii, 482.

general equation of state, 1910, A., ii, 110.

elevation of boiling point under reduced pressure, 1910, A., ii, 929.

dissociation of sulphuric acid and the mobility of the hydrogen sulphate ion, 1911, A., ii, 687.

specific heat of gases, 1911, A., ii,

chlorides of zinc and mercury in aqueous solution, 1912, A., 424.

electrolytic dissociation of potassium bromide, 1912, A., ii, 732.

[dissociation constants of sulphuric acid], 1912, A., ii, 1035.

Drucker, Karl, and Richard Kassel, fluidity of binary mixtures, 1911, A., ii, 373.

Drucker, Karl, and B. Kršnjavi, transport number for dilute hydrochloric

acid, 1908, A., ii, 559.

Drucker, Karl, and Enrique Moles. solubility of gases in aqueous solutions of glycerol and of isobutyric acid, 1911, A., ii, 23.

Drucker, Karl, and Gustav Ullmann. effect of the glass surface in vapour density determinations, 1910, A., ii,

931.

Drucker, Karl. See also Richard Burian and Victor Rothmund.

Drude, Oskar, A. Neumann, and Franz Ledien, forcing experiments with shrubs by means of ether or chloroform, 1905, A., ii, 191.

Drugman, Julien, the oxidation of hydrocarbons by ozone at low temperatures, 1906, T., 939; P.,

dimorphism and crystalline form of diphenylmaleic anhydride, 1912, A., i, 625.

Drugman, Julien, and William Ernest Stockings, note on the action of hydrogen sulphide on formaldehyde and acetaldehyde solutions, 1904, P., 115.

Drugman, Julien. See also Richard Anschütz and William Arthur Bone. Drummond, William Blackley, histologi-

cal changes produced by the injection of adrenaline chloride, 1904, A., ii, 430.

Drummond, William Blackley, and Diarmid Noël Paton, the influence of adrenaline poisoning on the liver, 1904, A., ii, 430.

William Allen, volumetric Drushel. estimation of lanthanum as the

oxalate, 1907, A., ii, 816.

volumetric estimation of potassium as the cobaltinitrite, 1908, A., ii, 66. application of the cobaltinitrite method

to the estimation of potassium in soils, 1908, A., ii, 735.

volumetric estimation of potassium in

animal fluids, 1909, A., ii, 94. hydrolysis of esters of substituted aliphatic acids, 1912, A., i, 599; ii, 147.

Drushel, William Allen, and E. W. Dean, hydrolysis of esters of substituted aliphatic acids, 1912, A., ii, 927.

Drushel, William Allen, and J. W. Hill, hydrolysis of esters of halogensubstituted acids, 1910, A., ii, 702.

Drushel, William Allen, and George Linhart, hydrolysis of Augustus metallic alkyl sulphates, 1911, A., ii, 707.

Drushel, William Allen. See also

Philip Embury Browning.

Dryfuss, Barney Joachim, and Charles George Lewis Wolf, physiological action of lanthanum, praseodymium, and neodymium, 1906, A., ii, 473.

Duane, William, ionisation due to radium emanation, 1905, A., ii,

219.

ionisation produced between parallel plates by radium emanation, 1905, A., ii, 297.

the range of the a-rays, 1908, A., ii,

553; 1909, A., ii, 203.

secondary rays from the a-rays, 1908,

A., ii, 554.

emission of electricity from the induced activity of radium, 1908, A., ii, 748,

the heat generated by radioactive substances, 1909, A., ii, 534; 1911, A., ii, 358.

heat developed by polonium, 1909, A., ii, 637.

a photographic method of recording a-particles, 1910, A., ii, 765.

the energy of the rays of radium,

1910, A., ii, 815.

the disengagement of heat in a mixture of radium and of a phosphorescent salt, 1910, A., ii, 816.

the mass of gaseous ions, 1911, A., ii,

Duane, William, and Albert Laborde, the quantitative measurement of the radium emanation, 1910, A., ii, 676.

Duane, William. See also Jean Danysz. Dubin, Harry. See Louis J. Curtman.

Dubitzki, L. O., influence of gases on the organism. XV. Hydrogen arsenide, 1910, A., ii, 983.

Duboin, André [Grégoire], preparation of double silicates of potassium with other bases, 1905, A., ii, 634.

heavy liquids containing alkali mercuric iodides, 1905, A., ii, 637.

two lithium mercuric iodides, 1906, A., ii, 85. double iodides of mercury and calcium,

1906, A., ii, 231. calcium and strontium mercuric

iodides, 1906, A., ii, 286. barium and mercury iodides, 1906, A., ii, 359.

isomorphism of mercuric iodide with zine and cadmium iodide, 1906, A., ii, 544.

Duboin, André [Grégoire], magnesium: and manganese mercury iodides. 1906, A., ii, 544.

sodium and barium mercuric iodides.

1906, A., ii, 673.

some mercuri-iodides, 1907, A., ii, 955. application to thoria of a general method of synthesis of fluorides and silicates, 1908, A., ii, 297.

sulphur compounds of thorium, 1908,

A., ii, 502.

mercuri-iodides of thorium aluminium, 1908, A., ii, 598.

double salts of mercuric iodide, 1909, A., ii, 316.

Dubois, H. See J. Bruhat.

Du Bois, Henri E. J. G., and G. J. Elias, influence of temperature and magnetisation on selective absorption spectra, 1908, A., ii, 337,

influence of temperature and magnetisation on selective absorption and fluorescence spectra. II., 1911,

A., ii, 832.

Du Bois, Henri E. J. G., and Kotaro Honda, thermo-magnetic properties of elements, 1910, A., ii, 483.

Dubois, Raphaël, atmolysis and an atmolyser, 1912, A., ii, 193.

Dubois, Wilbur L., estimation of sulphur and phosphoric acid in foods, fæces. and urine, 1905, A., ii, 609.

estimation of salicylic acid in canned tomatoes, catsups, etc., 1907, A., ii,

use of carbon disulphide in the estimation of salicylic acid in wine, 1907, A., ii, 513.

estimation of lactose and butter fat in milk chocolate, 1907, A., ii, 587.

flask for fat estimation, 1908, A., ii,

Dubois, Wilbur L. See also Joseph Arthur Le Clerc and William McPherson.

Du Bois Reymond, René, condition of water in the tissues, 1905, A., ii, 100.

the mechanism of the gaseous exchange in the lungs, 1911, A., ii, 503.

Dubosc, André, estimation of thiocyanates in the presence of chlorides, etc., 1904, A., ii, 298.

Dubourg, Elisée. See Ulisse Gayon.

Duboux, Marcel, physico-chemical estimation of calcium in wine, 1911, A. ii, 228.

Duboux, Marcel, and Paul Dutoit, estimation of alcohol in wine, 1908, A., ii, 136.

Duboux, Marcel. See also Henri Demierre and Paul Dutoit.

Dubovitz, Hugo, acidification and dis-tillation of fatty acids; distilled oleic acid, 1908, A., ii, 991.

the distillation of difficult boiling substances, 1912, A., ii, 133.

estimation of stearin and olein in fatty acids, 1912, A., ii, 701.

Dúbrav. See Kusy von Dúbrav. Dubreuil, Louis, action of bromosuccinic and dibromosuccinic acids on the pyridine and quinoline bases, 1904, A., i, 189.

action of pyridine and quinoline bases on bromosuccinic and dibromosuccinic esters, 1905, A., i, 14.

method of calculating atomic weights,

1908, A., ii, 936.

the true atomic weight of silver according to Stas's experiments, 1908, A., ii, 1035.

atomic weight of silver, 1909, A., ii,

. 140.

true atomic weights according to Stas's determinations. III., 1909,

A., ii, 475, 563, 654, 886.

true values of the atomic weights. IV. Mathematical value of the method of calculation, 1909, A., ii, 653, 654.

true atomic weights. Stas's determinations. III., 1910, A., ii, 34,

Dubrisay, René, hydrolytic dissociation of bismuth chloride, 1909, A., ii, 406.

hydrolytic decomposition of bismuth

bromide, 1909, A., ii, 742. hydrolytic decomposition of bismuth

iodide, 1909, A., ii, 812. chemical equilibria in solution, 1912,

A., ii, 32, 339. Dubroca, M., reciprocal solubility of oil

of turpentine and methyl sulphate, 1908, A., ii, 22. Dubsky, J. V., constitution of the com-

plex metallic salts of the fatty acids, 1912, A., i, 675. Dubsky, J. V. See also Antoine Paul

Nicolas Franchimont and Alfred

Werner. Ducca, Wilhelm. See Karl Andreas

Hofmann. Ducca, W. A., methods of testing rubber contents in raw and vulcanised rubber, 1912, A., ii, 1103.

Ducceschi, Virgilio, blood coagulation in invertebrates, 1903, A., ii, 162.

Ducelliez, F., alloys of cobalt and tin, 1907, A., ii, 693, 779, 880.

Ducelliez, F., alloys of lead and cobalt, 1908, A., ii, 594.

action of arsenic chloride and arsenic on cobalt, 1908, A., ii, 853.

action of antimony trichloride on cobalt and on its alloys with antimony, 1909, A., ii, 55.

alloys of cobalt and bismuth, 1909,

A., ii, 242.

electromotive forces of cobalt alloys, 1910, A., ii, 131.

alloys of cobalt and silver, 1910, A., ii, 716.

cobalt-zinc alloys, 1912, A., ii, 53.

Ducelliez, F. See also Emile Vigouroux. Ducháček, Franz, action of different antiseptics on the enzymes of yeastjuice, 1909, A., i, 624.

Duchácek, Franz. See also Gabriel Bertrand and Julius Stoklasa.

Duchemin, René [P.], the action of alcohol, its impurities, and its denaturing agents on the ordinary metals, 1909, A., i, 450.

production of aldehyde resins by the carbonisation of wood in closed

vessels, 1910, A., i, 462.

Duchemin, René, and Gaston Criquebeuf, volumetric estimation of some combined organic acids, 1907, A., ii, 409.

Duchemin, René, and Jacques Dourlen, oxidation of methyl and ethyl alcohols at their boiling points, 1904, A., i, 961.

the acidity of commercial ethyl alcohol and its variations at the ordinary temperature, 1905, A., i, 503.

Duclaux, Jacques, chemical nature of colloidal solutions, 1904, A., ii, 162. changes produced in colloids by coagu-

lation, 1904, A., ii, 243.

the coagulation of colloidal solutions, 1904, A., ii, 325.

conductivity of colloidal solutions, 1905, A., ii, 432.

osmotic pressure of colloidal solutions,

1905, A, ii, 511. a property of enzymes, 1906, A., ii, 660.

washing colloidal precipitates, 1906, A., ii, 677.

diastatic function of colloids, 1908, A., ii, 25.

calorimetric method applied to the study of slow reactions, 1908, A., ii,

osmotic pressure and Brownian motion, 1908, A., ii, 760.

coagulation of [colloidal] arsenious sulphide by barium chloride, 1908, A., ii, 942.

Duclaux, Jacques, extension of the notion of solubility to colloids, 1909, A., ii,

cryoscopy of colloids, 1909, A., ii, 377. theory of colloids, 1910, A., ii, 108. freezing mixtures, 1910, A., ii, 1034.

application of the kinetic theory to the study of catalytic phenomena, 1911, A., ii, 479.

constitution of water, 1911, A., ii, 595. absorption of gases by porous materials,

1912, A., ii, 140.

Duclaux, Jacques, and (Mme.) E. Wollmann, osmotic pressure of colloids, 1911, A., ii, 588. Duda, L. See K. Krassusky.

Duden, Paul, preparation of bornylenediamine, 1906, A., i, 100.

Duden, Paul, Karl Bock, and Herbert J. Reid, aldehyde-ammonia, 1905, A., i,

Duden, Paul, and Rudolph Freydag, β -hydroxy- β -methyladipie 1903, A., i, 400.

transformation of lævulic acid into derivatives of cyclopentadiene, 1903, A., i, 420.

Duden, Paul, and Georg Poundorf, acidinitro-alcohols, 1905, A., i, 558.

Dudgeon, Leonard Stanley, a new pathogenic bacillus isolated from an enlarged prostate gland, 1906, A., ii, 693.

Dudgeon, Leonard Stanley, and Alfred Ernest Russell, grafting of the thymus in animals, 1905, A., ii, 842.

Dudgeon, Leonard Stanley. See also Samuel G. Shattock and Horace George

Dudley, Charles Benjamin. See William

Francis Hillebrand.

Dudley, Harold Ward. See Julius Berend Cohen.

Dudley, William Lofland, and E. V. Jones, a spectrographic study tellurium, 1912, A., ii, 935.

Dudy, Fr., bulb trap for nitrogen estimations by the methods of Kjeldahl and others, 1909, A., ii, 1050.

Dueck, Hans. See Wilhelm Lo Düggeli, M. See Robert Burri. See Wilhelm Lossen.

Dühring, Ulrich, law of corresponding boiling points, 1909, A., ii, 119.

Düllberg, P., behaviour of the vanadates

in aqueous solution, 1903, A., ii, 733. Dünschmann, Max, anthraquinone-1sulphonic acid, 1904, A., i, 326.

Düring, Erich, 4-pyrophthalone, 1905,

A., i, 233.

reduction products of 4'-methyl-4stilbazole: 4-w-triehlorohydroxypropylpyridine, 1905, A., i, 233.

Dürkes, Karl. See Wolf Johannes Müller. Dürr, Lucien, a new occurrence of lautite, 1909, A., ii, 899.

Dürr, Lucien. See also Edgar Wedekind. Dürrfeld, V., druse minerals in the granite of Waldstein, Fichtelgebirge, 1909, A., ii, 814.

red glauberite and polyhalite from Varangéville, near Nancy, 1911,

A., ii, 295.

laumontite from Heimbach, Oberstein, Germany, 1912, A., ii, 359.

adamite from Reichenbach, Baden, 1912, A., ii, 1181.

Dürrschnabel, Karl, and Hugo Weil, action of sulphurous acid on triphenylmethane dyes, 1905, A., i, 947.

Dürrschnabel, Karl. See also Hugo Weil.

Dütschke, R. See Ernst Beckmann.

Dufau, Emile, manganese aluminate, 1903, A., ii, 151.

detection of albumin in urines, 1904, A., ii, 103, 152.

hæmaphæic reaction of urines, 1908, A., ii, 410.

Dufau, Émile. See also Léon Grimbert. Dufay, A., galvanic deposition of copper on plaster, 1912, A., ii, 1174.

W. Geoffrey, the effect of Duffield, pressure on arc spectra. 3. Silver: λ 4000 to λ 4600. 4. Gold, 1911, A., ii. 350.

Duffin, H. Leroy. See Lois E. Poyneer. Duffour, Alexis, complex iridium compounds; iridodichloro-oxalic acid and its salts, 1909, A., i, 763.

complex derivatives of iridium; iridodichlorodinitro-oxalic acid

salts, 1910, A., i, 541.

new complex iridium derivatives : iridotetrachloro-oxalates and iridotetrachlorides, 1911, A., i, 519.

new types of irido-oxalic acids and irido-oxalates, 1911, A., i, 519. isomorphism of alkali iridium and

rhodium chlorides, 1912, A., ii, 849.

Duffour, Alexis. See also Maurice

Dufour, A., synthesis of silicon hydride, SiH4, from the elements, 1904, A., ii, 398.

reduction of silica by hydrogen, 1904, A., ii, 398.

apparent volatilisation of silicon in hydrogen, 1904, A., ii, 482.

the spectra of hydrogen, 1907, A., ii, 1. action of hydrogen on silicon and silica, 1907, A., ii, 83.

influence of pressure on the absorption spectra of vapours, 1907, A., ii, 920. Dufour, A., anomalous modifications of the band spectra of different compounds in the magnetic field, 1908, A., ii, 138.

magnetic changes in the spectrum of silicon fluoride observed parallel to

the field, 1908, A., ii, 446.

magnetic rotatory power of the vapour of calcium fluoride and of nitrous oxide in the neighbourhood of their absorption bands, 1909, A., ii, 107.

existence of positive electrons in vacuum tubes, 1909, A., ii, 288,

367.

secondary spectrum of hydrogen, 1909,

A., ii, 529.

an example of a longitudinal positive Zeeman effect in the emission spectra of vapours, 1909, A., ii, 530. Dugardin, M. See Eugène Boullanger.

Dugardin, M. See Eugène Boullanger.
Dugast, J., a modification of the properties of gluten produced by sulphurous acid, 1908, A., i, 709.
presence of boron in Algerian wines,

1010 A 2 A49

1910, A., ii, 443.

Dugoujon, Edgar. See Ernest Charon.
Duguet, Maurice, abnormality in melting points of amides derived from aliphatic sulphonic acids, 1906, A., i, 475.

Duhem, Pierre [Maurice Marie], permanent changes and thermodynamics. IX., 1903, A., ii, 529. euteetic and transition points in binary mixtures which yield mixed crystals, 1903, A., ii, 718.

fluidal metals, 1904, A., ii, 647.

propagation of "shocks" in fluids, 1909, A., ii, 974.

colloids and permanent chemical modifications, 1911, A., ii, 377.

Duke, W. W. See William Henry Howell.

Dukelski, M., preparation of oxychlorides of mercury, 1906, A., ii, 544. borates, 1906, A., ii, 610; 1907, A., ii, 542.

solubility of mercuric chloride in mixed solvents, 1907, A., ii, 463. sodium acetates at 30°, 1909, A., i,

equilibria in the system (CH₃CO)₂O -B₂O₃ - H₂O at 30°, 1909, A., ii, 390.

Dulk, Erich. See August Michaelis. Dumanski, A. V., coagulation of col-

loidal silver, 1904, A., ii, 560. colloidal ferric hydroxide, 1905, A., ii. 37: 1911, A., ii, 610.

ii, 87; 1911, A., ii, 610. colloidal ferric hydroxide. II. Influence of ammonium chloride, 1905, A., ii, 393. Dumanski, A. V., colloidal ferric hydroxide. III. Influence of various salts on the coagulation, 1905, A., ii, 714.

colloidal ferric hydroxide. IV. Preparation of colloidal ferric hydroxide in presence of barium nitrate, potassium chloride, and potassium nitrate, 1907, A., ii, 175.

colloidal ferric hydroxide and carb-

amide, 1907, A., ii, 778.

conductivity of electrolytes in aqueous solutions of gelatin, 1907, A., ii, 841. diffusion in colloidal media, 1909, A., ii, 25.

influence of centrifugal force on the equilibrium of chemical systems, 1910, A., ii, 112.

solutions of blue molybdenum oxide,

1910, A., ii, 716. colloidal arsenic trisulphide, 1912, A.,

ii, 153.

Dumas, Antoine, specific heat of ferromagnetic substances: alloys of iron and nickel, 1909, A., ii, 542.

Dumas, H. N. See William Henry Emerson.

Dumesnil, Ernest, compound of lithium with theobromine, 1906, A., i, 450. preparation of arsenic amalgam, 1911, A., ii, 403.

Dumesnil, P., preparation of asymmetric benzyldialkylacetic acids, 1911, A., i,

718.

Dumitrescou, G., and (Mlle.) E. Nicolau, detection of small quantities of manganese in foods, 1910, A., ii, 1001. detection and estimation of manganese

in wine, 1910, A., ii, 1114.

Dumitrescou, G., and D. M. Popescu, the refraction of the insoluble fatty acids of butter fat, 1910, A., ii, 556.

Dumont, Gustave, preparation of crystalline sodium alum, 1903, A., ii, 547.

Dumont, H., and Stanislaus ron Kostanecki, coumarone group, 1909, A., i, 320.

Dumont, H., and Josef Tambor, 1:3-dimethoxycoumaranone, 1910, A., i, 579.

Dumont, J., distribution of potassium in arable soil, 1904, A., ii, 286.

complete humic manure, 1904, A., ii, 637.

the agricultural value of humus matter, 1905, A., ii, 196.

mineralogical analysis of soils, 1905, A., ii, 485.

influence of light of various kinds on the migration of the proteins in wheat grain, 1906, A., ii, 117. Dumont, J., absorption of alkali carbonates by the mineral constituents of the soil, 1906, A., ii, 249.

phospho-humic compounds of the soil,

1906, A., ii, 626.

influence of light on the nitrogen of wheat, 1907, A., ii, 126.

rational use of superphosphates, 1909, A., ii, 609.

new method for the physical analysis of soil, 1912, A., ii, 108.

Dumont, J., and Ch. Dupont, cultivation of leguminous fodders, 1907, A., ii, 501,

Dunant, Georges. See Max Bodenstein and Herman Decker.

Dunbar, Paul B., and Raymond Foss Bacon, estimation of malic acid, 1912, A., ii, 699.

Dunbar, Paul B. See also Raymond
Foss Bacon and Harmon Northrop
Morse

morse.

Duncan, Jay, the fruit of Cornacea stolonifera, 1910, A., ii, 534.

Duncan, J. B., volumetric estimation of autimony, 1907, A., ii, 200.

Duncan, R. A. See J. T. Crawley.
Duncan, William, arsenious iodide, 1904,
A., ii, 148.

ferrous and ferric arsenates, 1905, A., ii, 167.

solubility of quinine in ammonia; testing of quinine sulphate, 1905, A., ii, 427.

Duncker, F., and Alb. Jodlbauer, the influence of poisons on the catalase and the so-called \(\psi\)-peroxydase content of the blood, 1911, A., ii, 756.

Dunger, Reinhold, Ehrlich's diazoreaction and Russo's methylene-blue reaction in urine, 1907, A., ii,

Dungern, Emil (Freiherr) von, and Coca, hæmolysis by snake poison, 1908, A.,

ii, 866.
Dunham, Edward Kellogg, isolation of carnaubic acid from ox-kidney, 1908, A., ii, 407.

Dunham, Edward Kellogg, and C. Alfred Jacobson, carnaubon, a glycerol-free phosphatide containing galactose, 1910, A., i, 215.

Dunham, Edward Kellogg. See also John Alfred Mandel.

Dunin-Borkowski, J., Gürber's phenomenon, 1908, A., ii, 708.

hemolytic action of mercury salts,

1908, A., ii, 1049. the absorption of hemolytic and agglutinating substances, 1911, A., ii, 212. Dunin-Borkowski, J., and Z. Szymanowski, agglutination and hæmolysis of red blood-corpuscles by salts of heavy metals, 1909, A., ii, 903.

Dunlap, Edward A. See Edward Mal-

linekrodt, jun.

Dunlap, Eugene E., comparison of two tests of red lead, 1908, A., ii, 537.

Dunlap, Frederick Levy, action of phenylsemicarbazide and semicarbazide hydrochloride on phthalic anhydride, 1905, A., i, 830. preparation of aldehyde-free alcohol

preparation of aldehyde-free alcohol for use in oil and fat analysis, 1906,

A., i. 393.

Dunlap, Frederick Levy, and Frederick W. Cummer, action of the sodium salts of dibasic acids on aniline hydrochloride, and of aniline on phthalyl chloride and succinyl chloride, 1903, A., i, 699.

Dunlap, Frederick Levy, and L. O. Gilbert, synthesis of fats by the action of enzymes, 1911, A., i, 1054.

Dunlap, Frederick Levy, and William Seymour, the hydrolytic enzyme, lipase, 1905, A., ii, 753.

Dunlop, Harry, the detection of beef fat in lard, 1906, A., ii, 502.

Dunlop, John Gunning Moore, a study of some dicyclic quaternary ammonium compounds, 1912, T., 1998; P., 230.

Dunlop, John Gunning Moore, and Humphrey Owen Jones, the action of ethylene dibromide on monomethylaniline, 1909, T., 416; P., 61.

Dunlop, John Gunning Moore. See also

Humphrey Owen Jones.

Dunn, Frederick Percy, Deniger's carbon monosulphide, 1910, P., 116.

the diphenylcarbamyloximes, preliminary note, 1911, P., 339.

Dunn, Frederick Percy. See also Martin Onslow Forster.

Dunn, John Shaw, the oxydase reaction in myeloid tissues, 1911, A., ii, 58.

Dunn, John Thomas. See John Pattinson. Dunningham, Alfred Charles, an exact investigation of the three component system: sodium oxide, acetic anhydride, water, 1912, T., 431; P., 16.

Dunoyer, Louis, emission of electric charges by the alkali metals, 1910,

A., ii, 253.

a new circumstance in the formation of cathode-rays, 1910, A., ii, 475.

fluorescence of the vapours of the alkali metals, 1911, A., ii, 832.

fluorescence of sodium vapour, 1912, A., ii, 406, Dunoyer, Louis, an apparatus for the rapid distillation of mercury in a vacuum, 1912, A., ii, 647.

the disruptive charge through pure sodium vapour, 1912, A., ii, 891.

Dunstan, Albert Ernest, the viscosity of liquid mixtures, 1904, T., 817; P., 117, 248; A., ii, 805; 1905, T., 11; 1906, P. # 89.

note on the formation of abnormal platinichlorides; a correction, 1907,

P., 296.

the application of viscometry to the measurement of the rate of reaction; preliminary note, 1910, P., 226.

Dunstan, Albert Ernest, and (Miss) Louisa Cleaverley, benzoflavol (2:8dihydroxy-5-phenyl-3:7-dimethyl-

acridine), 1907, T., 1619; P., 206. Dunstan, Albert Ernest, and John Theodore Hewitt, studies in the acridine series. Part III. The methylation of chrysaniline (2-amino-5-p-aminophenylacridine), 1906, T., 482; P.,

studies in the acridine series. Part IX. The methylation of chrysophenol,

1906, T., 1472; P., 243.

Dunstan, Albert Ernest, and Thomas Percy Hilditch, the action of bromine on 5-phenylacridine and its halogen derivatives, 1907, T., 1659; P., 206.

relations between viscosity and other physical properties. II. Influence of contiguous unsaturated groups,

1912, A., ii, 435.

Dunstan, Albert Ernest, Thomas Percy Hilditch, and Ferdinand Bernard Thole, the relation between viscosity and chemical constitution. Part VII. The effect of the relative position of two unsaturated groups on viscosity, 1912, P., 269.

Dunstan, Albert Ernest, and William Henry Coutts Jemmett, the viscosity of liquid mixtures, 1903, P., 215.

Dunstan, Albert Ernest, and Harold Langton, the viscometric determination of transition points, 1912, T., 418; P., 14. Dunstan, Albert Ernest, and Albert George

Mussell, the viscosity of certain amides, 1910, T., 1935; P., 201. the application of viscometry to the

measurement of the rate of reaction, 1911, T., 565; P., 59.

Dunstan, Albert Ernest, and Robert O'Field Oakley, derivatives of 5-phenylaeridine. I., 1906, A., i, 383. derivatives of 5-phenylacridine.

Halogen derivatives of the acridine group, 1906, A, i, 383.

Dunstan, Albert Ernest, and James Arthur Stubbs, derivatives of 5-phenyl-III. 5-p-Bromophenylacridine. acridine, 1906, A., i, 698.

the relation between viscosity and chemical constitution. Part III. The enol-ketonic tautomerism, 1908,

T., 1919; P., 224.

Dunstan, Albert Ernest, and Ferdinand Bernard Thole, note on the molecular complexity of liquids, 1907, P., 19.

the viscosity of aqueous pyridine solutions, 1908, T., 561; P., 59; discussion, P., 59.

the relation between viscosity and chemical constitution. Part II. The existence of racemic compounds in the liquid state, 1908, T., 1815; P., 213.

the relation between viscosity and chemical constitution. Part IV. Viscosity and hydration in solution,

1909, T., 1556; P., 219.

the existence of racemic compounds in solution, 1910, T., 1249; P., 146.

note on the preparation of the synaldoximes, 1911, P., 233.

the relation between viscosity and

chemical constitution. Part V. The viscosity of homologous series, 1912, P., 269.

the relation between viscosity and chemical constitution. Part VI. Viscosity an additive function, 1912, P., 269.

Dunstan, Albert Ernest, Ferdinand Bernard Thole, and John Samuel Hunt, the relation between viscosity and chemical constitution. Part I. The viscosity of pyridine solutions, 1907, T., 1728; P., 207.

Dunstan, Albert Ernest, and Robert William Wilson, the viscosity of liquid mixtures, 1906, P., 308;

1907, T., 83.

the viscosity of fuming sulphuric acid, 1908, T., 2179; P., 270; discussion, P., 270.

Dunstan, Albert Ernest. See also Thomas Percy Hilditch, Albert George Mussell, and George Young.

Rowland, Dunstan, Wyndham chemical reactions involved in the rusting of iron, 1903, P., 150.

occurrence of thorium in Ceylon, 1904,

A., ii, 744. the rusting of iron, 1907, P., 63.

note on the constituents of the seeds of the Para rubber tree (Hevea brasiliensis), 1907, P., 168.

Dunstan, Wyndham Rowland, mercuric zinc cyanide; a correction, 1908,

P., 135.

Dunstan, Wyndham Rowland, and Albert Edward Andrews, contributions to our knowledge of the aconite alkaloids. Part XVI. Indaconitine, the alkaloid of Aconitum chasmanthum, 1905, T., 1620; P., 233.

contributions to our knowledge of the aconite alkaloids. Part XVII. Bikhaconitine, the alkaloid of Aconitum spicatum, 1905, T., 1636;

P., 234.

Dunstan, Wyndham Rowland, and George Stanfield Blake, thorianite, a new mineral from Ceylon, 1905, A., ii, 833.

Dunstan, Wyndham Rowland, and Thomas Anderson Henry, cyanogenesis in plants. Part III. Phaseolunatin, the cyanogenetic glucoside of Phaseolus lunatus, 1904, A., ii, 71.

contributions to our knowledge of the aconite alkaloids. Part XVIII. The aconitine group of alkaloids, 1905,

T., 1650; P., 235.

the cyanogenetic glucoside of flax (linseed), 1907, A., i, 1063.

the chemical aspects of cyanogenesis in plants, 1907, A., ii, 983.

Dunstan, Wyndham Rowland, Thomas
Anderson Henry, and Samuel James
Manson Auld, cyanogenesis in
plants. Part IV. Occurrence of
phaseolunatin in common flax, 1906,
A., ii, 794.

cyanogenesis in plants. Part V. Occurrence of phaseolunatin in cassava, 1906, A., ii, 795.

cyanogenesis in plants. Part VI.
Phaseolunatin and the associated
enzymes in flax, cassava, and the
"Lima bean," 1907, A., ii, 572.

Dunstan, Wyndham Rowland, and John Robertshaw Hill, the aerial oxidation (rusting) of metals, 1911, T., 1835; P., 221.

the passivity of iron and certain other metals, 1911, T., 1853; P., 222. Dunstan. Wyndham Rowland, and Ber-

Dunstan. Wyndham Rowland, and Bernard Mouat Jones, variety of thorianite from Galle, Ceylon, 1906, A., ii, 554.

Dunstan, Wyndham Rowland, Hooper Albert Dickinson Jowett, and Ernest Goulding, the rusting of iron, 1905, T., 1548; P., 231.

Dunstan, Wyndham Rowland, and Henry Haliburton Robinson, official tests for arsenic, 1904, A., ii, 777. Dunstan, Wyndham Rowland. See also John Theodore Cash.

Duparc, Louis, a new variety of orthoclase, 1904, A., ii, 349.

analysis of chrome iron ore, 1904, A., ii. 592.

gabbro and iron-ore of the Jubrechkine Kamen, Northern Urals, 1909, A., ii, 65.

crystalline schists of the Urals, 1909, A., ii, 678.

the platiniferous deposits of the Urals, 1911, A., ii, 733.

Duparc, Louis, and Th. Hornung, new theory of uralitisation, 1904, A., ii, 621.

Dupare, Louis, and Alf. Monnier, identification of thujone in liqueurs, 1908, A., ii, 995.

some reactions and properties of essential oils, 1909, A., ii, 188.

Duparc, Louis, and Francis Pearce, soretite, a new variety of amphibole, 1904, A., ii, 494.

tschernichewite, a new amphibole, 1907, A., ii, 484.

[analyses of hornblende], 1909, A., ii, 60.

Duparc, Louis, R. Sabot, and Max Wunder, minerals from the pegmatites of Madagascar, 1910, A., ii, 221.

beryl from the pegmatites of Mada-

gascar, 1910, A., ii, 312.

beryl and rhodizite from the pegmatites of Madagascar, 1911, A., ii, 1105. beryl from Madagascar, 1912, A., ii, 360.

Dupare, Louis, and Max Wunder, serpentines of Krebet-Salatim (North Urals), 1911, A., ii, 405.

Duparc, Louis. See also Charles Couchet. Duperthuis, H., and Ernst Philippe, estimation of alcohol in wine by means of the critical temperature, 1911, A., ii, 662.

Duperthuis, H. See also Paul Dutoit and Ernst Philippe.

Dupont, Ch. See Pierre Paul Dehérain and J. Dumont.

Dupont, E., the natural citric acid of wine, 1908, A., ii, 904.

Dupont, François, estimation of saccharose in presence of dextrose and lævulose, 1905, A., ii, 558.

Dupont, Georges, n-butinene and some of its derivatives, 1909, A., i, 545.

stereochemical isomerides of Δγ-hexinene-βε-diol, 1910, A., i, 85.

isomerism of some Δγ-acetylenic glycols, 1910, A., i, 379.

oxidation of Δγ-acetylenic glycols; synthesis of α-hydroxy-acids, 1910, A., i, 456. Dupont, Georges, acetylenic pinacone [Be-dimethyl- Dy-hexinene-Be-diol],

1911, A., i, 173.

catalytic isomerisation of acetylenic pinacone [βε-dimethyl-Δγ-hexinene-Be-diol]; synthesis of 3-keto-2:2:5:5tetramethyltetrahydrofuran, 1911, A., i, 554.

catalytic preparation of substituted ketohydrofurans, 1911, A., i, 804.

hydroxyhydrofurans, 1912, A., i, 290. oxidation of some ketohydrofurans, 1912, A., i, 483.

the aci-nitro-derivative of ketotetramethyltetrahydrofuran, 1912, A., i, 483.

Dupont, Georges. See also Wladimir F. Luginin.

Dupont, Justin, and Louis Labaune, direct estimation of geraniol in essence of citronella, 1912, A., ii, 697.

Dupont, Justin. See also Roure-Bertrand

Dupouy, Raoul, influence of alkaloids on oxidation, 1903, A., ii, 676.

Dupré, August, obituary notice of, 1908, T., 2269.

Dupré, Frederick T. B., experiments of ionic reactions, 1904, A., ii, 229. standardisation of permanganate solu-

tions, 1904, A., ii, 591.

Dupré, Frederick T. B., and Joseph Bialas, determination of the solubility of magnesium oxide and zinc oxide in water, 1903, A., ii, 293.

Dupré, Frederick T. B., and Ernst Emil Müller, standardisation of potassium permanganate by means of oxalates,

1903, A., ii, 184. Dupré, Percy Vivian, ammonium oxalate; its formula and stability, 1905, A., i, 679.

new method of estimating moisture. with special application to moisture in cordite and other substances containing volatile matters other than water, 1906, A., ii, 626.

Dupuis, Pierre, action of phosphorus trichloride on guaiacol, 1910, A., i,

diguaiacylphosphoric acid, 1910, A., i,

Dupuis, Pierre. See also Victor Auger and Victor Thomas.

Dupuy, Eugène L. See Pierre Jolibois. Durand, E., estimation of malonic acid by means of potassium permanganate, 1903, A., ii, 767.

Durand, Ernest L. See Emil Briner. Durand, Huguenin & Co. See Farbwerke vorm. Durand, Huguenin & Co.

Duregger, W., an oxidation product of homohydroxysalicylic acid, 1905, A., i, 702.

Durham, Florence M., tyrosinase in the skins of some pigmented vertebrates, 1905, A., ii, 101.

melanins, 1907, A., i, 715. Durham, Herbert Edward, the urine in beri-beri, 1904, A., ii, 194. extraction apparatus and condensers,

1904, A., ii, 554.

Durham, Herbert Edward. See also Thomas Renton Elliott.

Durham, T. C. See Eugene C. Bingham. Durieu, analysis of a rhinolith, 1907, A., ii, 374.

Durig, Arnold, absorption of oxygen on alterations of its partial pressure in the alveolar air, 1904, A., ii, 270.

Du Roi and Robert Köhler, the "sinacid" butyrometer, 1905, A., ii, 125.

Durrant, Reginald Graham, green compounds of cobalt produced by oxidising agents, 1905, T., 1781; P., 251.

ionic migration in the natural diffusion of acids and salts; phenomena in the diffusion of electrolytes, 1907, A., ii, 234.

Duryea, Chester B., acid hydrolysis of starch granules, 1911, A., i, 711.

Duschak, Lionel Herman, mixed barium -strontium chromate precipitate, 1909, A., ii, 42.

Duschak, Lionel Herman, See also George Augustus Hulett.

Duschetschkin, A., action of sodium peroxide on vegetable fibres containing lignin, 1904, A., ii, 373.

biological absorption of phosphoric acid in soils, 1912, A., ii, 677.

Duschsky, J. E., behaviour of sucrose, and its decomposition products on heating, 1911, A., i, 607, 769.

behaviour of sucrose and its decomposition products on heating. IV. Reducing substances in the refinery products, 1912, A., i, 9.

Dushman, Saul, rate of the reaction between iodic and hydriodic acids,

1904, A., ii, 718.

the behaviour of copper anodes in chloride solutions, 1911, A., ii, 181. Dutilh, H., partial racemism, 1910, A.,

i, 188.

Dutoit, Paul, [physico-chemical volumetric analysis; precipitation and measurement of electrical conductivity], 1910, A., ii, 342.

Dutoit, Paul, and Henri Demierre, ionic reactions in acetone, 1907, A., ii, 75.

Dutoit, Paul, and Marcel Duboux. physico-chemical analysis of wines, 1908, A., ii, 781, 892.

physico-chemical estimation of the ash

of wine, 1910, A., ii, 552.

Dutoit, Paul, and H. Duperthuis, heats of dissociation of some electrolytes in organic solvents, 1909, A., ii, 120. viscosities and limiting conductivities, 1909, A., ii, 125.

Dutoit, Paul, and Arthur Fath, polymerisation and dissociating power of

oximes, 1904, A., ii, 387.

Dutoit, Paul, and Léon Gagnaux, kinetics of the transformation thiocarbimide ->ammonium thiocyanate in dilute aqueous solution, 1906, A., ii, 660.

Datoit, Paul, and Ernst Gyr, electrical conductivities of very dilute solutions in anhydrous sulphur dioxide, 1909, A., ii, 461.

Dutoit, Paul, and Alex. Levier, limiting conductivity of certain binary electrolytes in acetone, 1905, A., ii, 625.

Paul, and Pierre Mojoïu, Dutoit, capillary constants and molecular weights, 1909, A., ii, 470.

physico-chemical volumetric analysis. II. Estimation and separation of the alkaline-earth metals, 1910, A., ii, 343.

Dutoit, Paul, and H. Rappeport, limiting conductivity of some electrolytes in ethyl alcohol, 1908, A., ii, 924.

Dutoit, Paul, and Gottfried von Weisse, physico-chemical volumetric analysis. III. Precipitation followed by alteration in potential, 1911, A., ii,

physico-chemical volumetric analysis. Estimation and separation of the halogens, 1911, A., ii, 1130.

physico-chemical volumetric analysis. IV. Estimation of copper and silver, 1911, A., ii, 1137.

Dutoit, Paul. See also Marcel Duboux. Dutt, N. N. See Alan Wilfrid Cranbrook Menzies.

Dutta, Jatindra Mohan, and Edwin Roy Watson, some hydroxy-ketonic dyes, 1912, T., 1238; P., 106.

Dutta, Jatindra Mohan. See also Anakul Chandra Sircar and Edwin Roy Watson.

Duttenhöfer, Alfred. See Friedrich Kehrmaun.

Duuren, (Mlle.) J. van. See Octare Dony-Hénault.

Duval, Henri, nitric esters of hydroxyacids, 1903, A., i, 603; 1904, A., i, 11, 137.

Duval, Henri, reduction of derivatives of dinitrodiphenylmethane, 1905, A., i, 651.

reduction in the diphenylmethane series, 1906, A., i. 314.

a new type of bisazo-compounds, 1907,

A., i, 663.

reciprocal displacement of hydrocarbon groups in Friedel and Crafts' reaction, 1908, A., i, 277.

constitution of some derivatives of diphenylmethane and preparation of some o-diamino-compounds of the same series, 1908, A., i, 657.

bisazo-compounds, 1908, A., i, 706. attempts at benzidine formation in diphenyl, diphenylmethane, and diphenylethane series, 1909, A., i, 747.

researches in benzidine formation, 1910,

A., i, 559, 588, 646.

displacement of alkyl groups under the influence of aluminium chloride; acetyldiphenylmethanes and their derivatives; constitution of some derivatives of diphenylmethane, 1910, A., i, 684.

endobisazo-derivatives of diphenylmethane, 1910, A., i, 703.

action of sulphuric and hydrochloric acids on endobisazo-derivatives. I., 1910, A., i, 781.

molecular refraction of azo-compounds,

1911, A., ii, 1041.

endoazo-compounds, 1912, A., i, 398. Duvillier, Edouard [Charles Ernest], adimethylaminobutyric acid, 1906, A., i. 236.

Duyk, Maurice, use of pumice to facilitate the combustion of organic stances, 1904, A., ii, 685.

apparatus for the complete extraction of liquids containing "saccharin," 1906, A., ii, 407.

detection and estimation of small quantities of manganese, 1908, A., ii, 70.

Dvorschantschik, S. V. See Antony G. Doroschewsky.

Dyer, Brainerd. See Ellwood Barker Spear.

Garmt van, electrochemical equivalent of silver, 1905, A., ii, 137; 1907, A., ii, 8.

effect caused by heating the cathode of the silver voltameter to redness on the value of the electrochemical equivalent, 1905, A., ii, 625.

Dyk, Garmt van, and J. Kunst, determination of the electrochemical equivalent of silver, 1904, A., ii, 255. Dyke-Cruser, Frederick van, and Edmund Howd Miller, estimation of molybdenum in steel alloys, 1904, A., ii,

insoluble chromicyanides, 1906, A., i, 816.

Dyke-Cruser, Frederick van. See also Edmund Howd Miller.

Dykes, Robert, precipitation of gold in the crystalline form, 1905, A., ii, 396.

Dyson, Frank Watson, determination of wave-length from spectra obtained at the total solar eclipses of 1900, 1901, and 1905: 1906, A., ii, 713.

Dyson, Gibson, and Arthur Harden, the combination of carbon monoxide with chlorine under the influence of light,

1903, T., 201.

Dyson, William, cutaneous pigmentation in normal and pathological con-

ditions, 1911, A., ii, 307.

Dzierzbicki, Adam, influence of humus on the development of yeast and on alcohol fermentation, 1909, A., ii,

soil bacteriology, 1910, A., ii, 532.

Dzierzbicki, J. de, and Joseph de Kowalski, phosphorescence of organic substances at low temperatures, 1909, A., ii, 845.

Dzierzbicki, J. de. See also Joseph de Kowalski.

Dzierzgowsky, Semon Konr. See S. Dzierzgowsky.

Dzierzgowsky, W. S., Semon Konr. Dzierzgowsky, and (Mme.) Nadežda Sieber, action of nickel salts on the animal organism, 1907, A., ii, 117. Dzierzgowsky, W. S. See also (Mme.)

Nadežda Sieber.

Dziewoński, Karl, and Paul Bachmann, decacyclene (trinaphthylenebenzene) and dinaphthylenethiophen, 1903, A., i, 431.

Dziewoński, Karl, Paul Bachmann, and Eligio Dotta, decacyclene [trinaphthylenebenzene] and dinaphthylenethiophen. II., 1904, A., i, 84.

Dziewoński, Karl, and Eligio Dotta, phenylacenaphthylmethane, 1904.

A., i, 390.

synthesis of a new yellow hydrocarbon, tribenzyldecacyclene (tribenzyltrinaphthylenebenzene), and of a red thiophen derivative, dibenzyldinaphthylenethiophen, 1904, A., i, 803.

Dziewoński, Karl, G. Rapalski, and Z. Leyko, photochemical changes of acenaphthylene. I., 1912, A., i, 844.

Dziewoński, Karl, and Marcus Wechsler. constitution of \beta-phenylacenaphthylmethane and its oxidation products; 8-benzyl- and 8-benzoyl-naphthalic acids, 1904, A., i, 803.

Dziewoński, Karl. See also Paul Bach-

mann and Emilio Noelting.

Dziurzyński, Miecislas, transformation s-phenyldiphenylhydrazine by hydrogen chloride in benzene solution. 1908, A., i, 696.

Dziurzyński, Miecislas. See also Jósef

Buraczewski.

E.

Eakle, Arthur Starr, palacheite, 1903. A., ii, 490.

identity of palacheite with botryogen, 1904, A., ii, 49.

lawsonite, 1907, A., ii, 484.

neocolemanite, a variety of colemanite. and howlite from California, 1911, A., ii, 901.

Earl. John Campbell, certain relations between boiling points, 1909, A., ii.

new space representation of the benzene molecule, 1910, A., i, 104.

specific gravities at the melting point in relation to constitution, 1911, A., ii, 17.

Earle, Raymond Bartlett. See Charles

Loring Jackson.

Earle, Richard Blair, and H. Louis Jackson, action of pyridine on salicyl chlorides, 1906, A., i, 177.

Earle, Richard Blair. See also Julius

Stieglitz.

Easley, Charles W., substitute for forceps and for triangles in desiccators: article for general laboratory use, 1909, A., ii, 431.

atomic weight of mercury, 1909, A.,

ii, 1013; 1910, A., ii, 957. Easley, Charles W., and Bertrand F. Brann, study of the atomic weight of mercury through the analysis of mercuric bromide, 1912, A., ii, 257.

Easley, Charles W. See also Martin Andre Rosanoff.

Eason, John, paroxysmal hæmoglobinuria, 1906, A., ii, 296.

East, Edward Murray, estimation of potassium in the ash of plants, 1904, A., ii, 447.

East, Edward Murray. See also Cyril George Hopkins.

Eastburn, Wilfred James Stevenson. See George Gerald Henderson.

Easterfield, Thomas Hill, and Bernard Cracroft Aston, rimu resin, 1903, P., 190.

the karaka fruit, 1903, P., 191.

Easterfield, Thomas Hill, and George Bagley, the resin acids of the Coniferæ. Part I. The constitution of abietic acid, 1904, T., 1238; P., 112.

Easterfield, Thomas Hill, and James Bee, the resin acids of the Coniferæ. Part II. Matairesinol, 1910, T., 1028; P., 7.

Easterfield, Thomas Hill, and (Miss) Clara Millicent Taylor, the preparation of the ketones of the higher fatty acids, 1911, T., 2298; P., 279. asterfield, Thomas Hill. Se

See also Easterfield.

Oswald Silberrad.

Eastman, G. W. See Arthur Amos

Easton, Wm. H., reduction of nitric acid in metallic nitrates to ammonia by the electric current, 1904, A., ii, 84.

Eaton, F. Malcolm. See Miles Standish Sherrill.

Eaves, Elizabeth C., changes in the fats of the hen's egg during development, 1910, A., ii, 787.

Ebaugh, W. Clarence, and C. B. Sprague, the use of sodium carbonate and zinc oxide in sulphur and arsenic estimations, 1907, A., ii, 985.

Ebbecke, Ulrich, the elimination of nondialysable substances by the urine under normal and pathological conditions, 1908, A., ii, 874.

Ebbinghaus, Kurt. See Karl Beck. Eberhard, Gustav, spectrographical investigation of some thorium prepara-

tions, 1905, A., ii, 258.

spectrographic investigations of the Urbain-Lacombe, method for the separation of samarium, europium, and gadolinium, 1905, A., ii, 587.

spectroscopic investigation of Urbain's terbium preparations, 1906, A., ii,

the wide distribution of scandium in the earth, 1908, A., ii, 862; 1910, A., ii, 509.

are spectrum of yttrium, 1909, A., ii, 529.

Eberhardt, Ernst. See Otto Dimroth. Eberhardt, G., and Robert Behrend, monobenzoyl derivatives of the two dibenzylhydrazines, 1904, A., i, 346.

Eberhardt, Ph., new method of extracting star aniseed oil, 1906, A., ii, 246. Eberle, Fritz. See Roland Scholl.

Eberlein. Wilhelm. See Guido Bodlander.

Eberly, Charles F. See Alfred Newton Cook.

Ebert, Alfred, isopulegone, 1909, A., i, 246.

some mannas and related products, 1909, A., ii, 176.

Ebert, Alfred. See also Hans Rupe.

Ebert, Erich. See Hans Stobbe. Ebert, Georg, behaviour of lead chloride from pitchblende towards magnesium

phenyl bromide, 1911, A., ii, 244.

Ebert, M. See Ernst Beckmann. Eble, Max. See Otto Dimroth.

Ebler, Erich, gasometric estimation of copper with hydrazine salts, 1906, A., ii, 53.

gasometric and volumetric estimation of mercury by hydrazine salts and gasometric estimation of hydrazine by mercury salts, 1906, A., ii, 53.

general method for the separation of metals without using hydrogen sul-

phide, 1906, A., ii, 126.

amount of arsenic in the Max spring at Bad Dürkheim a. d. Haardt, 1907, A., ii, 485.

radioactivity of the Max spring at Bad Dürkheim a. d. Haardt, 1907,

A., ii, 923. separation of the metals of the ammonium sulphide group, 1908, A., ii, 987.

separation of the alkali earths, 1909, A., ii, 347.

attempts to prepare metallic radium, 1910, A., ii, 1024.

treatment of insoluble residues, 1911, A., ii, 932.

separation scheme without the use of hydrogen sulphide, 1911, A., ii, 932. determination of radium in minerals

and rocks, 1912, A., ii, 723.

Ebler, Erich, and M. Fellner, preparation of colloidal silicic acid, 1911, A., ii, 723.

the concentration and isolation of radioactive substances by "fractional adsorption," 1911, A., ii, 957.

the radioactivity of mineral springs, 1911, A., ii, 1049.

Ebler, Erich, and R. L. Krause, zinc hydrazide and a general method for the preparation of metal hydrazides, 1910, A., ii, 614.

zinc peroxite (zinc moloxide, zinc peroxydate), ZnO2, H2O, and a general method of preparing per-oxites, 1911, A., ii, 801.

Ebler, Erich, and Ehrhart Schott, hydroxylamine. I., 1908, A., ii,

1029.

Ebler, Erich, and Ehrhart Schott, action of zinc on hydrazine hydrate, 1909. A., ii, 234.

hydrazine silicofluoride and hydrazine titanofluoride, 1910, A., 1i, 605.

Ebrill, George. See Hugh Ryan. Ebsen, Josine. See Peter Rona.

Ebstein, Erich, influence of putrefaction on the amount of pentoses in animal organs, 1903, A., ii, 92.

Ebstein, Erich. See also Emil Abderhalden.

Ecalle, H., estimation of digitalin in official preparations of digitalis and digitalin, 1903, A., ii, 344.

Eccles, David Charles, action of isovaleraldehyde on antipyrine, 1903,

A., i, 289.

Echeandia, Eusebio. See Alfred Stock. Echtermeier, Percyral, essential oil of Achillea nobilis, 1905, A., i, 535. quinic acid, 1906, A., i, 367.

Eck, J. J. van, effect of heat on the peroxydase in cow's milk, 1911, A., ii,

1144.

Eck, Pieter Noach van, luminosity of derivatives of salicylic acid, 1907, A., ii, 728.

the reaction of sesame oil with furfuraldehyde, 1910, A., ii, 556. triboluminescence, 1911, A., ii, 563.

Eckardt, Moritz. See Karl Auwers, E. Collett, and Heinrich Goldschmidt.

Eckart, Carl, apparatus for the production of chlorine, carbon dioxide, hydrogen sulphide, etc., 1905, A., ii, 515.

Ecker, Oscar. See Fritz Straus.

Eckert, Alfred. See Hans Meyer and Hans Reckleben.

Eckert, Richard. See Hans Stobbe.

Eckmann, Gerhard, the migration and diffusion of radium-A atoms, 1912, A., ii, 620.

Eckstein, E. See Paul Friedländer.

Eckstein, Oskar, sulphonation of 1:8dinitronaphthalene, 1903, A., i, 20.

Eckstein, Oskar, dinaphthalene oxides, 1905, A., i, 885.

quinoline hydrochloride; action of acid chlorides on quinoline, 1906, A., i, 604.

Eckstein, Oskar. See also Arthur Michael.

Eddy, Ernest Arthur. See Frank Austin Gooch and Isaac King Phelps.

Edelmann, J., glycolysis, 1912, A., ii,

Edelstein, Anna, and Stanislaus von Kostanecki, 4'-hydroxyflavanol, 1905, A., i, 460.

Edelstein, Efraim. See Simon Löwen-

Edelstein, F., and F. von Csonka, the iron content of cow's milk, 1912, A., ii, 184.

detection and estimation of volatile fatty acids by steam distillation in

vacuum, 1912, A., ii, 872. Edelstein, F., and Ernst Welde, estimation of volatile fatty acids [in fæces].

1911, A., ii, 827. Eder, Josef Maria, absorption spectra of indigotin, diaminoindigotin, and tetra-azoindigotin, 1903, A., i, 344. double salts of cadmium iodide and

bromide, 1904, A., ii, 36.

Eder, Josef Maria, and Eduard Valenta, wave-length measurements in the visible region of the arc spectrum of Welsbach's elements, aldebaranium and cassiopeium, 1910, A., ii, 561.

the band spectrum of sulphur, 1912,

A., ii, 613.

Edgar, Arthur. See Gilbert Newton Lewis.

Edgar, Edward Charles, atomic weight of chlorine, 1908, A., ii, 577. Edgar, Edward Charles. See also

Harold Baily Dixon.

Edgar, Graham, estimation of vanadic and molybdic acids in the presence of one another, 1908, A., ii, 540.

estimation of iron and vanadium in the presence of each other, 1908, A.,

ii, 736.

iodometric estimation of chromic and vanadic acids in the presence of each other, 1908, A., ii, 989.

iodometric estimation of vanadic acid, chromic acid, and iron oxide in the presence of one another, 1909, A., ii. 269.

estimation of vanadic and arsenic acids and of vanadic and antimonic acids, when present together, 1909, A., ii, 441.

precipitation of vanadic acid as silver vanadate and estimation of phosphoric and vanadic acids in the presence of one another, 1911, A., ii, 71.

Edgar, Graham. See also Frank Austin Gooch and Ralph Gibbs van Name.

Edgerton, John Percy, a new method of preparing camphoric anhydride, 1909, P., 149.

Edie, Edward S., action of chloroform on proteins, 1905, A., i, 397.

glycosuria caused by excess of carbon dioxide in the respired air, 1906, A., ii, 786.

Edie, Edward S., W. H. Evans, Benjamin Moore, George Charles Edward Simpson, and A. Webster, the antineuritic bases of vegetable origin in relationship to beri-beri, with method of isolation of torulin, the antineuritic base of yeast, 1912, A., ii. 791.

Edie, Edward S., Benjamin Moore, and Herbert Eldon Roaf, studies on glycos-

uria, 1911, A., ii, 311.

Edie, Edward S., and David Spence, the sugar in blood and tissues, 1907,

A., ii, 184.

Edie, Edward S., and Edward Whitley, gain and loss of fixed alkali in the body; estimation of organic acids in urine, with reference to diabetes, 1906, A., ii, 185.

Edie, Edward S. See also John Oglethorpe Wakelin Barratt, Benjamin Moore, and Herbert Eldon Roaf.

Edinger, Albert [Paul], Bz-quinoline mercaptans, 1908, A., i, 363.

Edinger, Albert, and L. Bühler, Bzsulphoquinolinecarboxylic acids, 1910, A., i. 64.

Edinger, Albert, and Paul Clemens, importance of thio-compounds in the body, 1906, A., ii, 877.

Edinger, Albert, and John Bernard Ekeley, action of sulphur chloride on aromatic amines, 1903, A., i, 58.

Edinger, Albert, and Ipo Christiaan Ritsema, thioacridone and seleno-acridone, 1903, A., i, 719.

Edkins, John Sydney, chemical mechanism of gastric secretion, 1905, A., ii,

730; 1906, A., ii, 238.

Edkins, John Sydney, and (Miss) May Tweedy, chemical mechanism of gastric secretion, 1909, A., ii, 414.

Edlbacher, Siegfried. See Roland Scholl. Edlefsen, Gustav, excretion of B-naphthol in the urine after the administration of small doses of naphthalene, benzonaphthol, and β-naphthol, 1905, A., ii, 470.

estimation of creatinine in urine, 1909,

A., ii, 276.

Edlefsen, H. See Heinrich Biltz.

Edminson, Sydney Robert, and Thomas Percy Hilditch, the effect of contiguous unsaturated groups on optical activity. Part IV. Conjugated systems containing more than two unsaturated groups, 1910, T., 223; P., 10.

Edmunds, Arthur, effect of salts of potassium and ammonium and of bile salts on blood pressure, 1905, A., ii,

264.

Edmunds, Charles Wallis, physiological action of lobeline, 1904, A., ii, 431. influence of digitalis, strophanthus and adrenaline on the velocity of the blood stream, 1907, A., ii, 279.

Edmunds, Charles Wallis, and George B. Roth, action of curare and physostigmine [eserine] on nerve-endings: action of barium chloride on bird's

muscle, 1908, A., ii, 966.
Edmunds, Walter, the thyroid gland.
VIII., 1912, A., ii, 579.
Edner, J. See Alexander Tschirch. Eduardoff, Fritz, See Walther Dilthey.

Edwards, Charles Alfred. See John Andrew and Henry Harold Harold Carpenter.

Edwards, C. W. See Bergen Davis. Edwards, Gaston Holcomb. See Yandell Henderson.

Edwards, (Miss) Muriel Gwendolen. Ralph Eddowes Garrod, and Humphrey Owen Jones, the constitution of the aldol bases, 1912, T., 1376; P., 163.

Edwards, (Miss) Muriel Gwendolen, and Kennedy Joseph Previté Orton, the detection and estimation of small quantities of acetic anhydride in acetic acid, 1911, T., 1181; P., 121.

Edwards, (Miss) Muriel Gwendolen, See also Kennedy Joseph Previté Orton. Edwards, Vincent, and Dudley Chads,

Kjeldahl's process, 1911, A., ii, 437. Edwards, Walter Henry. See Edward

Charles Cyril Baly. Eeckhout, A. van der, hypnotic action of

the valeric acid group, 1908, A., ii, 55. Effront, Jean, action of abietic acid on ferments, 1903, A., ii, 565.

amylase, 1904, A., i, 1069.

action of amino-acids on amylase, 1905, A., i, 107.

estimation of ammonia and amides. 1905, A., ii, 60.

estimation of ammonia and proteinnitrogen in waters, 1905, A., ii, 68. autofermentation of beer yeast, 1905,

A., ii, 602. fermentation process with colophony,

1906, A., ii, 42.

development of amylase during germination, 1906, A., ii, 116.

action of beer yeast on acid amides, 1908, A., i, 491.

ammoniacal fermentation, 1909, A., ii,

the fermentation of amino-acids, 1909, A., ii, 690.

action of the Bulgarian ferment on proteins and amino-compounds, 1911, A., ii, 61.

Effront, Jean, the Bulgarian ferment, 1911, A., ii, 319.

estimation of the volatile fatty acids,

1911, A., ii, 547.

action of light and hydrogen peroxide on proteins and amino-acids, 1912, A., i, 521.

action of hydrogen peroxide on lactic acid and on dextrose, 1912, A., i, 534.

action of hydrogen peroxide glycerol, 1912, A., i, 675.

Efremoff, N. N. See Sergius F. Schemtschuschny.

Egeling, Cornelis Guldensteeden, colorimetric estimation of lead in drinking water, 1907, A., ii, 398.

Eger, Benno. See Ernst Deussen. Egerer, W. See Zdenko Hanns Skraup.

Egerton, Alfred Charles Glyn, divergence of the atomic weights of the lighter elements from whole numbers, 1909. T., 238; P., 26.

an addition to the Büchner funnel,

1911, P., 189.

Hofmann's method for the determination of vapour density, 1912, A., ii, 22.

a flame experiment, 1912, A., ii, 635.

Eggeling, Hans, and Julius Meyer, rubidium fluorides, 1905, A., ii, 707. Eggeling, Hans. See also Julius

Meyer.

Egger, A. See Alfred Werner.

Egger, Fritz. See Hartwig Franzen. Eggers, Harold Everett, dielectric constants of solvents and solutions,

1904, A., ii, 224.

rhythm of turtle's Sinus venosus in isotonic solutions of non-electrolytes, 1907, A., ii, 189.

Eggink, Berend Gerhardus, meltingpoint curves for the systems : bismuth + chlorine and bismuth + bromine,

1908, A., ii, 1043. Eggink, Berend Gerhardus.

Sybe Tymstra, jun. Egidi, Umberto. See Clemente Montemartini.

Egmond, A. A. J. van, the action of morphine on the heart, 1911, A., ii,

Egoroff, Iwan W., action of nitrogen peroxide on acids of the series $C_nH_{2n-2}O_2$. I., 1903, A., i, 789.

action of nitrogen peroxide on acids of the series $C_nH_{2n-2}O_2$. II. Action of nitrogen peroxide on crotonic and isocrotonic acids and on ethyl crotonate, 1903, A., i, 790.

Egoroff, Iwan W., action of nitrogen peroxide on acids of the series $C_nH_{2n-2}O_2$. III. Action of nitrogen peroxide on methylacrylic acid, 1903, A., i, 790.

action of nitrogen peroxide on acids of the series $C_n H_{2n-2} O_2$. IV. Action of nitrogen peroxide on allylacetic acid, its ethyl ester, and on propylideneacetic acid and its ethyl ester,

1904, A., i, 216.

action of nitrogen peroxide on acids of the series C, H_{2n-2}O₂. V. Action of nitrogen peroxide on oleic and elaidic acids, 1904, A., i, 217.

oxide from decamethyleneglycol, 1911,

A., i, 253.

Egorova, (Mlle.) V. I., action of magnesium tert.-butyl chloride on ethyl oxalate, 1910, A., i, 90.

isomerisation of unsaturated cyclic hydrocarbons, C₈H₁₂, 1911, A., i,

959.

Egorow, M., effect of carbon disulphide on soils and plants, 1908, A., ii, 421.

See Volkmar Kohl-Ehlers, Curt. schütter.

Ehlert, Hermann, and Walther Hempel, solubility of certain salts, 1912, A., ii, 905.

Ehlotzky, Fritz, new method of formation of phenolic ethers of glycerol,

1909, A., i, 786.

Ehrenberg, Paul, loss of nitrogen in putrefying peptone solutions; bacteriological soil investigation, 1905, A., ii, 750.

movement of ammoniacal nitrogen in

nature, 1908, A., ii, 60.

ammonia question, 1908, A., ii, 1068. actions of zinc in pot experiments; contribution to the ammonia question, 1910, A., ii, 236.

plasticity, especially of barium sulphate, 1911, A., ii, 972. Ehrenberg, Paul, and Hans Pick, pre-

paration of colloidal gold by means of solutions of humus, 1909, A., ii, 674.

Ehrenberg, Paul. See also Theodor Pfeiffer.

Ehrenfeld, Richard, decomposition of ethyl alcohol at high temperatures carbon, aluminium, with magnesium, 1903, A., i, 306.

formation of hydrogen ions from the methylene groups of succinic, o malonic, and glutaric acids, 1903,

A., i, 548.

velocity of reaction between potassium permanganate and oxalic acid, 1903, A., ii, 134.

Ehrenfeld, Richard, separation of hydrogen ions from methylene groups, 1904, A., i, 220.

change in the specific conductivity of solutions of salts produced by alkali hydroxides, 1904, A., ii, 157.

benzidine salts (hydrofluoride and hydrosilicofluoride), 1905, A., i. 474.

separation of hydrofluoric and sulphuric acids, 1905, A., ii, 417.

electrolytic reduction of carbonic acid,

1906, A., ii, 83.

reduction of arsenic tri- and pentasulphides to the disulphide, 1907, A., ii, 949.

molybdenum compounds of lecithin,

1908, A., i, 598.

volumetric estimation of bismuth,

1908, A., ii, 72.

oxidation by means of cuprous oxide in strongly alkaline solution, 1908, A., ii, 848.

Ehrenfeld, Richard, and A. Indra, volumetric estimation of bismuth, 1909, A., ii, 270.

quantitative separation of sulphates

and fluorides, 1909, A., ii, 435. Ehrenfeld, Richard, and Wilhelm Kulka, detection of phosphoric and phosphorous acids in organs, 1909, A., ii, 345.

the detection of phosphorous and hypophosphorous acids in organs after phosphorus poisoning. II., 1910,

A., ii, 59.

Ehrenfeld, Richard. See also Josef

Habermann.

Ehrenfreund, Bruno, condensation of isopropylacetaldehyde [isovaleraldehydel with acetaldehyde, 1905, A., i,

Ehrenpreis, A., action of potassium ferrocyanide on diazo-salts, 1907, A., i,

Ehrenreich, Franz, products of the condensation of 9-methylcarbazole and phthalic anhydride, 1912, A., i, 130.

See Leonor Mi-Ehrenreich, Moses. chaelis.

Ehrensperger, H. See Richard Escales. Ehrenstein, Richard. See Paul Rabe. Ehrenzweig, Egon. See Christian Seer.

Ehrhart, Oskar, See Karl Andreas Hofmann.

Ehrlich, Curt, preparation of carvacrolphthalein, 1911, A., i, 130.

Ehrlich, Felix, new nitrogenous constituents of sugar residues, 1903, A., i, 796.

naturally-occurring isomeride leucine. I., 1904, A., i, 560.

Ehrlich, Felix, behaviour of racemic amino-acids towards yeast; new biological method for resolving them, 1906, A., i, 807.

natural isomeride of leucine. II. Constitution and synthesis of isoleucine (a-amino-β-methylvaleric 1907. A., i. 592.

formation of fusel oil by yeast, 1907, A., ii, 44.

conditions of the formation of fusel oil and their connexion with the formation of proteins in yeast, 1907, A.,

synthesis of isoleucine, 1908, A., i,

396.

the production of succinic acid during alcoholic fermentation, 1908, A., ii,

fermentation of tyrosine to p-hydroxyphenylethanol (tyrosol), 1911, A., i, 127.

the formation of plasma protein by yeasts and moulds, 1911, A., ii,

tryptophol (\$\beta\$-indolylethyl alcohol), a new product of the fermentation of amino-acids by yeast, 1912, A., i, 500.

isolation of betaine hydrochloride from molasses residue, 1912, A., i, 835.

the formation of fumaric acid by

moulds, 1912, A., ii, 192. Ehrlich, Felix, and K. A. Jacobsen. the transformation of amino-acids into hydroxy-acids by moulds, 1911, A., ii, 520.

Ehrlich, Felix, and P. Pistschimuka, synthesis of tyrosol and its conversion into hordenine, 1912, A., i,

conversion of amines into alcohols by yeasts and moulds, 1912, A., ii, 590.

Ehrlich, Felix, and Adolf Wendel, resolution of racemic amino-acids by yeast. II., 1908, A., i, 268.

leucine fraction from protein hydrolysis, 1908, A., i, 302.

Ehrlich, Paul, the present state of chemo-therapeutics, 1909, A.,

Ehrlich, Paul, and Alfred Bertheim, p-aminophenylarsonic acid. 1907, A., i, 812.

diazo-reaction of atoxyl, 1909, A., ii

3:3'-diamino-4:4'-dihydroxyarsenobenzene hydrochloride (salvarsan) and allied substances, 1912, A., i,

Ehrlich, Paul, Alfred Bertheim, and Ernst Schmitz, reduction products of arsanilic acid and its derivatives. I. p-Aminophenylarsinic oxide, 1910, A., i, 451.

reduction products of arsanilic acid and its derivatives. II. pp'-Diaminoarsenobenzene, 1911, A., i,

593.

Ehrlich, Paul, and Ewald Franke, chemotherapeutic trypanosome studies, 1908, A., ii, 411.

Ehrlich, Paul, and Christian Archibald Herter, uses of naphthaquinonesulphonic acid, 1904, A., i, 598.

Ehrlich, Paul, and Franz Sachs, preparation of triphenylmethane dyes from magnesium dimethylaminophenyl bromide as a lecture experiment, 1904, A., i, 196.

Ehrlich, Paul. See also Heinrich Bech-

hold.

Ehrlich, Rudolf. See Robert Kremann. Ehrlich, Viktor, and Franz Russ, the oxidation of nitrogen by the electric discharge in the presence of ozone, 1912, A., ii, 41.

Ehrmann, Ed., new mordant dyes derived from gallic acid, 1911, A., i, 459.
Ehrmann, L., an electrically heated oven, with a liquid regulator, 1908,

A., ii, 1015.

Ehrmann, Rud., internal secretion of chromaffine tissue, 1909, A., ii, 909.

Ehrmann, Rud., and Richard Lederer, action of hydrochloric acid on the secretion of ferments of the stomach and pancreas, 1909, A., ii, 161.

Ehrmann, Rud., and Julius Wohlgemuth, diastases. IV. The question of the internal secretion of the pancreas, 1909, A., ii, 1037.

Ehrström, Robert, equilibrium in metabolism, 1907, A., ii, 370.

Ehrwein, R. See Timothée Klobb.

Eibner, Alexander, mechanism of Friedländer's reaction for converting diazotates [diazoxides] into hydrocarbons, 1903, A., i, 447.

replacement of bromine by chlorine in the benzene ring, 1903, A., i, 471.

the phthalones, 1903, A., i, 644. diphenamine [dianilino-] compounds of aldehydes, 1903, A., i, 750.

constitution of mixed azo-compounds. I. Knorr's phenylmethylpyrazoloneazobenzene, 1903, A., i, 871.

mechanism and limits of the phthalone reaction, 1904, A., i, 1049.

homologues of quinophthalone, 1905, A., i, 716.

Eibner, Alexander, a'-methyl-a-pyrophthalone, 1905, A., i, 928.

Gabriel's conversion of phthalides into indanediones, 1906, A., i, 588.

Eibner, Alexander, and Max Amann, existence of v. Miller and Plöchl's stereoisomeric anils, 1904, A., i, 36.

Eibner, Alexander, and Karl Andreas Hofmann, isopyrophthalone, 1904,

A., i, 921.

isoquinophthalone, 1904, A., i, 930. quinophthalone, isoquinophthalone, and quinophthaline, 1904, A., i, 931.

Eibner, Alexander, and Otto Laue, mixed azo-compounds. II., 1906, A., i, 613.

Eibner, Alexander, and Max Löbering, quinonaphthalone, 1906, A., i, 606. existence of isopyrophthalone, 1906, A., i, 700.

Eibner, Alexander, and Heinrich Merkel, constitution of quinophthalone; alkali derivatives of quinophthalone and of isoquinophthalone, 1904, A., i, 930.

Eichengrün, Arthur, aristochin, mesotan, helmitol, and theocine, 1903,

A., i, 195.

cellulose acetate, 1911, A., i, 712.

Bichholz, Wilhelm, behaviour of milk towards magenta-sulphurous acid solution and the detection of formaldehyde in milk, 1906, A., ii, 59.

Eichholz, Wilhelm. See also Emanuel

Merck. Eichhorn, W. See Ferdinand Henrich.

Eichler, Theodor. See Hartwig Franzen. Eichloff, Robert. See Wilhelm Lossen. Eichwald, Ernst. See Rudolf Schenck. Eichwede, Heinrich. See Georg Merling. Eickmann, Richard. See Alfred Wohl.

Eidmann, Wilhelm [Ernst Rudolf Johannes], and Ludwig Moeser, strontium ferrate, 1903, A., ii, 546.

Eidmann, Wilhelm. See also Alexander

Naumann. Eij-. See Ey-.

Eilles, S. See Otto Fischer.

Einbeck, Hans. See Emil Abderhalden, Herman Decker, Robert Pschorr, and Otto Ruff.

Einecke, Albert, relations between food fat, body fat, and milk fat, 1904, A.,

ii, 426.

Einecke, Albert, and Theodor Pfeiffer, action of alkalis on the development of plants, 1906, A., ii, 480.

Einecke, Albert. See also Otto Lemmermann and Theodor Pfeiffer.

Einhorn, Alfred, compounds of formaldehyde with amides of monobasic acids, 1905, A., i, 344. Einhorn, Alfred, acyl derivatives of benzylamine, 1905, A., i, 344.

hydroxymethyl derivatives of amides, 1905, A., i, 646; 1906, A., i, 486.

preparation of 5:5-dialkylbarbituric acids, 1906, A., i, 538; 1908, A., i, 464; 1910, A., i, 780.

preparation of 2-arylimino- and 2arylhydrazino-5:5-dialkylbarbituric acids, 1906, A., i, 538.

preparation of 3-amino-2-hydroxybenzylamine, 1906, A., i, 658.

preparation of dialkylaminoalkyl diaminobenzoates, 1908, A., i, 639.

preparation of salts of carbonatoguaiacol-mono- and -di-sulphonic acids, 1909, A., i, 225.

preparation of N-substituted aminomethyl derivatives of eugenol- and isoeugenol-acetamides, 1909, A., i, 508.

a new method for the alkylation of phenols, 1909, A., i, 568.

new method of ester formation by the action of chlorocarbonic esters on acids 1909 A i 645

acids, 1909, A., i, 645. new drugs. V., 1910, A., i, 170. preparation of acylsalicyclic [o-acyloxybenzoic] anhydrides, 1910, A., i, 741. preparation of alkyloxyacetyl deriva-

tives of menthols, 1911, A., i, 137.

Einhorn, Alfred, and Alexander von

Bagh. some derivatives of salicylic

acid, 1910, A., i, 259.

Einhorn, Alfred, Alexander von Bagh, Gustav Haas, Carl Ladisch, and Leo Rothlauf, acylated salicylosalicylic [o-2-acyloxybenzoyloxybenzoic] acids, 1911, A., i, 301.

Einhorn, Alfred, Eduard Bischkopff, Carl Ladisch, Theodor Mauermayer, Gustav Schupp, Eduard Spröngerts, and Bruno Szelinski, N-methylol compounds of the acid amides, 1906, A., i, 245.

Einhorn, Alfred, Jesaiah Cobliner, and Hermann Pfeiffer, pyrogallol, 1904, A., i, 238.

Einhorn, Alfred, and Heinrich von Diesbach, anhydrides of diethylmalonic acid, 1906, A., i, 398. reduction of diethylthiobarbituric

acid, 1908, A., i, 110.

Einhorn, Alfred, Heinrich von Diesbach, Richard Feibelmann, and Carl Ladisch, new drugs [derivatives of malonic acid], 1908, A., i, 312.

Einhorn, Alfred, Richard Feibelmann, and Maximilian Göttler, quinoline derivatives, 1910, A., i, 134. Einhorn, Alfred, Richard Feibelmann, Maximilian Göttler, Alexander Hamburger, and Eduard Spröngerts, N-methylol compounds of acid amides. II., 1908, A., i, 608.

Einhorn, Alfred, Karl Fiedler, Carl Ladisch, and Emil Uhlfelder, alkylaminoalkyl p-aminobenzoates, 1910,

A., i, 171.

Einhorn, Alfred, and Maximilian Göttler, benzylaminoacrylic acids (waminomethylcinnamic acids, 1910, A., i, 1911.

additive products of halogen acetamide with atropine, 1910, A., i, 131. action of formaldehyde and secondary

bases on isatin, 1910, A., i, 137.

Einhorn, Alfred, and Gustav Haas, carbonates of salicylonitrile and of salicylaldehyde, 1905, A., i, 894.

Einhorn, Alfred, and Alexander Hamburger, dimethylol compounds of carbamide, 1908, A., i, 141.

Einhorn, Alfred, and Hugo Hütz, glycine compounds of some phenols, 1903. A., i. 90.

1903, A., i, 90. Einhorn, Alfred, and Stephan Jahn, study of aminocamphor, 1903, A.,

i, 43. substituted aminoacetates of menthol and borneol, 1903, A., i, 351.

Einhorn, Alfred, and Carl Mettler, action of carbonyl chloride and pyridine on alcohol acids, 1903, A., i, 29.

dicresotides, 1903, A., i, 30.

action of carbonyl chloride and pyridine on acid amides, 1903, A., i, 30.

Einhorn, Alfred, and August Prettner, abnormal salt-formation in the case of the trialkyltrimethylenetriamines, 1904, A., i, 978.

Einhorn, Alfred, and Leo Rothlauf, effect of heating mixed esters of carbonic acid, 1911, A., i, 703.

bonic acid, 1911, A., i, 703.
Einhorn, Alfred, Leo Rothlauf, and
Rudolf Souffert, acylated salicylic
acids, 1912, A., i, 32.

Einhorn, Alfred, and Eduard Ruppert, new drugs. III. Methyl m-amino-phydroxybenzoate ("Orthoform neu"); 1903, A., i, 257.

Einhorn, Alfred, and Julius Schmidlin, study of carbonylsalicylamide, 1903,

Einhorn, Alfred, and Gustav Schupp, benzoylation of salicylamide, 1905, A., i, 778.

Einhorn, Alfred, and Rudolf Seuffert, esters of p-aminobenzoic acid, 1911, A., i, 45.

Einhorn, Alfred, and Rudolf Seuffert. acylated salicylic acid anhydrides,

1911, A., i, 53.

Einhorn, Alfred, and Emil Uhlfelder. diethylaminoethyl and piperidinoethyl p-aminobenzoates, 1910, A., i, 170.

esters and alkylamino-esters of 3:4diaminobenzoic acid, 1910, A., i, 172.

Einhorn, Max, simplification of the Jakoby-Solm's ricin method for the estimation of pepsin, 1909, A., ii, 196.

Einstein, Albert, connexion between the elastic properties and the specific heat of solid substances consisting of monatomic molecules, 1911, A., ii, 186.

Eisenach, Heinrich. See Ferdinand Henrich.

Eisenberg, Philipp, hæmolysis of formaldehyde, 1912, A., ii, 1065.

Eisenbrey, Arthur B. See Richard M. Pearce.

Eisenkolbe, P. See Oskar Kellner and Albin Köhler.

See Karl Bernhard Eisenlauer, Isidor. Lehmann.

Eisenlohr, Fritz, recalculation of atomic refractions, 1911, A., ii, 81.

spectro-chemistry of auxiliary valency, 1912, A., ii, 2.

recalculation of atomic refractions. II. The constants for nitrogen, 1912, A., ii, 401.

molecular refraction and dispersion as aids to the organic chemist, 1912, A., ii, 709.

Eisenlohr, Fritz. See also Karl Auwers, Heinrich Kiliani, and Julius Sand.

Eisenmann, Kurt, the spectral extension of ultra-red and ultra-violet vibrations and its relation to the different crystal systems, 1912, A., ii, 506.

Eisenreich, Kurt, and Fritz Foerster. employment of silver fluoride solutions in the silver coulometer, 1911, A., ii, 461.

Eisenschmidt, Carl. See August Michaelis.

Eisenstein, Alfred, and Friedrich Ziffer, apparatus for filtering at a constant temperature, 1910, A., ii, 153.

Eisenstein, Carl. See Josef Herzig. Eisleb, Otto. See Ludwig Claisen and Georg Schroeter.

Eisler, Michael von, hemagglutination and hæmolysis, 1909, A., ii, 159. the action of salts on bacteria, 1909,

A., ii, 920.

Eisler, Michael von, and Leopold (Ritter) von Portheim, influence of salts on the poisonous action of quinine on Elodea canadensis, 1909, A., ii, 925.

Eisner, Fritz. See Otto Ruff.

Eissing, William. See Alfred W. Bosworth.

Eissler, Bruno, and Alexander Pollak. condensation product of ethoxyacetaldehyde with acetaldehyde, 1907, A., i, 183.

Eissler, Franz. See Samuel Bondi.

Eitel, W. See Max Dittrich.

Ekbom, Alfred, o-aminobenzenesulphonamide and its derivatives and diazosulphonine compounds, 1903, A., i, 410.

action of reducing agents on cholic acid, 1907, A., i, 180.

Ekecrantz, Thor, the formation of resin by the action of alkali hydroxides on aliphatic aldehydes. I., 1912, A., i,

Ekecrantz, Thor, and Alfr. Ahlqvist, reaction between potassium cyanide and o-nitrobenzaldehyde, 1908, A., i, 347.

study of the benzoin condensation, 1908, A., i, 991.

existence of 2:2'-dinitrobenzoin, 1910, A., i, 859.

Ekecrantz, Thor, and S. Erikson, the correction-factor in the estimation of urea in urine, 1912, A., ii, 703. Ekecrantz, Thor, and E. Lundström,

wax oil, 1910, A., i, 805.

Ekecrantz, Thor, and H. Palme, apparatus for solubility determinations in the absence of atmospheric carbon dioxide, 1912, A., ii, 484.

Ekecrantz, Thor, and K. A. Söderman, a modification of Riegler's method of estimating urea in urine, 1912, A., ii,

212.

Ekeley, John Bernard, a second 1:4dihydroquinoxaline, 1906, A., i, 459. organic tungstates, 1909, A., i, 556.

Ekeley, John Bernard, and Paul M. Dean, action of acetic anhydride on benzylideneanthranilie some 1912, A., i, 211.

Ekeley, John Bernard, and Robert J. Wells, new series of dihydroquinoxalines, 1905, A., i, 613.

Ekeley, John Bernard. See also Albert Edinger.

See Alberda van Ekenstein. Ekenstein. Elborne, William, and C. M. Warren, estimation of lead in alloys, 1908, A.,

ii. 734. Elbs, Karl, accumulators of material other than lead, 1906, A., ii, 3.

Elbs, Karl, and Kurt Becker, electrochemical preparation of salts of hyposulphurous acid, 1904, A., ii, 556.

Elbs, Karl, and Kurt Brand, electrochemical reduction of ketones, 1903,

A., i, 99.

Elbs, Karl, and Jacob Forssell, behaviour of a lead anode in solutions of sodium hydroxide and the electrolysis of solutions of sodium hydroxide containing lead, 1903, A., ii, 5.

Elbs, Karl, and Willy Keiper, preparation of benzotriazoles, 1903, A., i,

662.

Elbs, Karl, and Wilhelm Kirsch, mazophenol, 1903, A., i, 539.

Elbs, Karl, and Robert Kremann, electrochemical reduction of stilbene deriva-

tives, 1903, A., i, 584.

Elbs, Karl, Fr. Mette, Aloys Schuster, and Karl Sinner, lactyl compounds of primary aromatic amines, 1911, A., i, 191.

Elbs. Karl, and Richard Nübling. plumbic salts, 1903, A., ii, 727.

Elbs, Karl, and Frederic William Rixon, cathodic deposition of lead, 1903, A., ii, 427.

Elbs, Karl, and Hugo Schlemmer, reactions of aromatic nitrothiocarb-

amides, 1903, A., i, 555. Elbs, Karl, and Edward Stohr, irregularities caused by the use of lead anodes in solutions of sodium carbonate, 1903, A., ii, 587.

Elbs, Karl, and Hermann Thümmel, anodic behaviour of tin, antimony, and

bismuth, 1904, A., ii, 541.

Elbs, Karl, and Alfred Wogrinz, electrochemical reduction of m-nitroacetophenone and of m-nitrobenzophenone, 1903, A., i, 635.

Elbs, Karl, and Theodor Wohlfahrt, electrolytic reduction of o- and pnitrobenzenesulphonic acids in alkaline solution, 1903, A., i, 80.

benzidines, 1903, A., i, 212.

Elder, Frank R., and William John Gies, enzymes as possible factors in the development of cedema. IV., 1912, A., ii, 1080.

Eldred, Frank R., percolator for use in assaying drugs, 1906, A., ii, 305.

Eldredge, C. G., and Leonard Merritt Liddle, fruit of Smilacina racemosa and S. bifolia, 1907, A., ii, 501.

Eldredge, C. G. See also Edith Stock-

Elektrochemische Werke, preparation of formates from alkali hydroxides and carbon monoxide at a high temperature under pressure, 1907, A., i, 378.

See Sigmund Frankel Elfer, Aladár. and Karl von Noorden, jun.

Elger, Franz. See Eugen Bamberger. Elias, G. J., anomalous magnetic rotation (of the plane) of polarisation of

the rare earths, 1908, A., ii, 549.

refraction and magnetic double refraction of solutions of the rare earths, 1911, A., ii, 81.

anomalous magnetic rotation dispersion and selective absorption, 1911, A.,

ii. 679.

Elias, G. J. See also Henri E. J. G. Du Bois.

Elias, Herbert. See Sigmund Frankel. Eliasberg, Oscar. See Herman Decker. Eliséeff, G. G., and W. A. Kurbatoff,

association of glycerol, 1910, A., ii, 103. Eliséeff, G. G. See also W. A. Kurba-

Elissafoff, G. von, influence of electrolytes on electric endosmosis, 1912. A., ii, 419.

Elisséeff, E. See E. Wosnessensky.

Ellenbeck, Hans, the pancreas reaction of Cammidge, 1910, A., ii, 358.

Ellenberger, Ernst. See Rudolf Schenck and Theodor Zincke.

Eller, Wilhelm. See Bruno Emmert. Ellermann, V. See H. J. Bing.

Ellerton, J. G., estimation and elimination of sulphur compounds in commercial benzene, 1912, A., ii, 300.

Ellett, Walter Beal, and Bernhard Tollens, estimation of methylpentosan in presence of pentosans, 1905, A., ii. 210.

Ellingen, K. See Paul Goerens.

Ellinger, Alexander, estimation of indican in urine, 1903, A., ii, 620.

indole formation and indican excretion in rabbits during inanition, 1903, A., ii, 670.

conversion of diaminopropionic acid into isoserine, 1904, A., i, 230.

constitution of the indole group in albumin (synthesis of the so-called scatolecarboxylic acid); source of kynurenic acid, 1904, A., i, 639.

estimation of indican in urine, 1904,

A., ii, 303.

constitution of the indole group in albumin. II. Synthesis of indole-3-propionic acid (Nencki's scatoleacetic acid), 1905, A., i, 827.

constitution of the indole group in III. Oxidation of tryptophan to indole-3-aldehyde, 1906,

A., i, 696.

pharmacodynamic characters of coumarin, 1908, A., ii, 1060.

production of putrefaction bases, 1910, A., i, 447.

Ellinger, Alexander, and Max Cohn, secretion of the human pancreas, 1905, A., ii, 643.

Ellinger, Alexander, and Claude Flamand, action of chloroform and potassium hydroxide on scatole [3methylindole], 1907, A., i, 153.

constitution of the indole group in albumin. IV. Synthesis of racemic tryptophan, 1907, A., i, 737.

synthetic tryptophan and some of its

derivatives, 1908, A., i, 378. a new class of dyes of biochemical importance; tri-indylmethane dyes, 1909, A., i, 846.

tri-indylmethane dyes, 1911, A., i,

329; 1912, A., i, 587.

Ellinger, Alexander, and Max Gentzen, tryptophan, the precursor of indole in protein putrefaction, 1903, A., i, 781.

Ellinger, Alexander, and Yashiro Kotake, synthesis of p-hydroxymandelic acid and its occurrence in the urine in cases of acute yellow atrophy of the liver, 1910, A., i, 384.

the partition of bromine in the organism after the administration of inorganic and organic bromine preparations, 1911, A., ii, 509.

Ellinger, Alexander, and Otto Riesser, action of benzovl chloride on hydroxyquinolines, 1909, A., i, 835.

formation of tribenzamide by the action of benzoyl chloride on urine, 1909, A., ii, 914.

Ellinger, Philipp. See Karl Auwers.

Elliot, Robert Henry, William Cameron Sillar, and George Scott Carmichael, action of krait venom, 1904, A., ii, 630.

Elliot, Robert Henry. See also Thomas Richard Fraser.

Elliot, T. Gifford, the volumetric estimation of sulphur in iron and steel, 1911, A., ii, 1131.

Elliott, A. H., analysis of illuminating gas, 1910, A., ii, 353.

Elliott, J. H., and H. S. Raper, a case of pentosuria presenting unusual features,

1912, A., ii, 466. Elliott, P. H., and Douglas McIntosh, heats of vaporisation of the liquid halogen hydrides and of hydrogen sulphide, 1908, A., ii, 354.

Elliott, Thomas Renton, action of the ileo-colic sphincter, 1904, A., ii,

[physiological] action of adrenaline, 1904, A., ii, 577; 1905, A., ii, 545. Elliott. Thomas Renton, action of adrenaline on the bladder, 1904. A., ii. 832.

the control by the splanchnic nerve of adrenaline secretion, 1912, A., ii.

the control of the suprarenal gland by the splanchnic nerves, 1912, A., ii, 781.

Elliott. Thomas Renton. and Herbert Edward Durham, subcutaneous injection of adrenaline, 1906, A., ii, 877.

William, and John George Addyman Gardner, cholesterol in heart muscle, 1909, A., ii, 252.

the origin and destiny of cholesterol in animals. IV. Cholesterol of eggs and chicks, 1909, A., ii, 498.

the origin and destiny of cholesterol in the animal organism. VI. The excretion of cholesterol by the cat, 1910, A., ii, 58.

the origin and destiny of cholesterol in the animal organism. VIII. The cholesterol content of the liver of rabbits under various diets and during inauition, 1912, A., ii, 275.

the origin and destiny of cholesterol in the animal organism. IX. The cholesterol content of the tissues, other than liver, of rabbits under various diets and during inanition, 1912, A., ii, 958.

Ellis, Henry Russell, reaction between titanium tetrachloride and ethyl ether, 1907, A., i, 580.

improved Liebig's condenser, 1907, A., ii, 160.

preparation of titanium tetrachloride

from rutile, 1907, A., ii, 270. experiments showing the formation of nitrides of barium, strontium, calcium, and aluminium, 1909, A.,

formation of graphite by the interaction of magnesium powder and carbonates, 1909, A., ii, 480.

silver cyanamide, 1909, A., ii, 1058. detection of nitrogen in organic sub-

stances, 1910, A., ii, 997.

lis, Henry Russell, and William Henry Collier, the interaction in Ellis, solution of ferrous sulphate and copper sulphate, 1907, P., 264.

Ellis, Henry Russell. See also Frank

Edwin Weston.

Ellis, Ridsdale, oil emulsions. I. The

electric charge, 1912, A., ii, 13. l emulsions. II. Stability and oil emulsions. II. size of the particles, 1912, A., ii, 1036.

Ellison, F. O'B., the relation between the physical, chemical, and electrical properties of nerves. V. The action of cinchonamine hydrochloride on frog's nerves, 1911, A., ii, 905.

Elmer, Morgan Shuit. See Treut

Baldwin Johnson.

Elsden, Alfred Vincent, note on the supposed permeability of glass, 1910, P. 7.

Elsdon, George Davidson, the estimation of nitrites in potable waters, 1912, A., ii, 683.

Elsdon, George Davidson, and Norman Evers, estimation of ammonia in carbonated waters, 1912, A., ii, 601.

Elsenbast, Arthur S. See George E.

Grant.

Elster, [Johann Philipp Ludwig] Julius, and Huns Geitel, radioactivity of soils and well sediments, 1904, A., ii, 695.

radioactivity of thorium, 1906, A., ii, 643.

diminution of the mobility of ions in fog, 1906, A., ii, 652.

radioactivity of lead. II., 1907, A., ii, 423.

separation of radioactive substances from ordinary lead, 1907, A., ii, 521. occurrence of radium -D., -E., -F., in

ordinary lead, 1908, A., ii, 449. influence of the polarisation of the exciting light on the emission of electrons at the surfaces of the alkali metals, 1909, A., ii, 716.

the radioactivity of potassium, 1910,

A., ii, 378.

coloured hydrides of the alkali metals and their photo-electric sensitive-

ness, 1910, A., ii, 379.

the nature of the coloured films formed on the alkali metals by electric discharges, 1910, A., ii, 1031.

Eltschaninoff, Eugen. See Petr. G.
Melikoff and Pavel Iw. PetrenkoKritschenko.

Elvert, Heinrich. See Wilhelm

Wislicenus.

Elvove, Elias, application of the Volhard method to the estimation of alkaloids, 1910, A., ii, 361.

assay of the halogen compounds of the United States Pharmacopæia with special reference to thymol iodide, 1910, A., ii, 905.

use of sulphur dioxide in checking strengths of volumetric solutions of iodine, alkali, and silver, 1911, A., ii, 148. Elvove, Elias, estimation of lactic acid, 1911, A., ii, 160.

estimation of formaldehyde, 1912, A., ii, 103.

Elvove, Elias. See also Joseph Hoeing Kastle.

Elworthy, Herbert Samuel, and Ernest Henry Williamson, preparation of methane, 1906, A., i, 225.

Elworthy, W., ozone apparatus, 1904,

A., ii, 478.

Elze, Fritz, dihydrocuminyl alcohol, nerol, and terpineol in bergamot oil, 1910, A., i, 495.

oil of savin, 1910, A., i, 628.

new components of oil of jasmine flower, 1910, A., i, 687.

[essential] oil of Robinia pseudacacia, 1910, A., i, 688.

nerol and farnesol in Java Canang oil, 1910, A., i, 688.

nerol and thymol in French lavender oil, 1910, A., i, 753.

spearmint oil, 1910, A., i, 865.

Elze, Fritz. See also Paul Rabe and Hugo von Soden.

Embden, Gustav, formation of sugar in artificial perfusion of the glycogenfree liver, 1904, A., ii, 829.

the behaviour of isomeric leucines in the liver, 1908, A., ii, 515.

Embden, Gustav, Karl Baldes, and Ernst Schmitz, the chemical mechanism of the formation of lactic acid from dextrose in the animal body, 1912, A., ii, 1073.

Embden, Gustav, and Hans Engel, formation of acetoacetic acid in the

liver, 1908, A., ii, 515.

Embden, Gustav, and Otto von Fürth, destruction of adrenaline in the organism, 1904, A., ii, 61.

Embden, Gustav, and Friedrich Kalberlah, acetone formation in the liver.

I., 1906, A., ii, 375.

Embden, Gustav, Friedrich Kalberlah, and Hans Engel, lactic acid formation in expressed muscle juice. II., 1912, A., ii, 1071.

Embden, Gustav, and Franz Knoop, the behaviour of albumoses in the alimentary wall and their occurrence in the

blood, 1903, A., ii, 86.

Embden, Gustav, and Friedrich Kraus, lactic acid formation in the artifically perfused liver. I., 1912, A., ii, 1070.

Embden, Gustav, and Leone Lattes, formation of acetoacetic acid in the liver of diabetic dogs, 1908, A., ii, 515.

Embden, Gastav, Hugo Lüthje, and Emil Liefmann, influence of external temperature on the sugar of the blood, 1907, A., ii, 889.

Embden, Gustav, and Alfred Marx, acetone formation in the liver. III., 1908, A., ii, 515.

glycine of normal urine, 1908, A., ii,

Embden, Gustav, and Louis Michaud, the degradation of acetoacetic acid in the animal body. I. and II., 1908, A., ii, 515, 967.

Embden, Gustav, and Max Oppenheimer, the degradation of pyruvic acid in the animal body, 1912, A., ii, 1075.

Embden, Gustav, and Heinrich Reese, amino-acids in normal urine, 1906, A., ii, 108.

Embden, Gustav, and Harry Salomon, feeding experiments on dogs without a pancreas, 1904, A., ii, 625, 827.

Embden, Gustav, Harry Salomon, and Franz Schmidt, acetone formation in the liver. II., 1906, A., ii, 375.

Embden, Gustav, and Ernst Schmitz, the synthetic formation of amino-acids in the liver, 1911, A., ii, 53; 1912, A., ii, 278.

Embden, Gustav, Ernst Schmitz, and Karl Baldes, the chemical mechanism of the formation of glyserol in the animal body, 1912, A., ii, 1076.

Embden, Gustav, and Hermann Tachau, occurrence of serine in human perspira-

tion, 1910, A., ii, 981.

Embden, Gustav, and Joseph Wirth, the inhibition of acetoacetic acid formation in the liver, 1910, A., ii, 789.

Embden, Gustav. See also Marco Almagia and Richard Claus.

Embleton, (Miss) Alice L. See Charles Edward Walker.

Embley, E. H., the action of ether on the circulation, 1910, A., ii, 228.

Embley, E. H., and Charles James Martin, action of chloroform on the blood-vessels of bowel and kidney, 1905, A., ii, 264.

Emde, Hermann, which substances contain a readily resolvable single carbon-nitrogen linking? 1908, A., i, 83.

ephedrine and ψ-ephedrine, a case of asymmetry due to dissimilar halves, 1908, A., i, 203.

isomerism of ephedrine and ψ-ephedrine, 1909, A., i, 177.

fission of quaternary ammonium salts by nascent hydrogen, 1909, A., i, 565. Emde, Hermann, doubly linked carbon atoms and the carbon-nitrogen linking. I., 1909, A., i, 708.

doubly linked carbon atoms and the carbon-nitrogen linking. III. Methylated benzylamines, 1909, A.,

i, 709.

doubly linked carbon atoms and the carbon-nitrogen linking. IV. Behaviour of quaternary ammonium compounds towards nascent hydrogen, 1909, A., i, 709.

detection of methylaniline and dimethylaniline in presence of each

other, 1909, A., ii, 274.

extraction of large quantities of heavy liquids with small quantities of light solvents, 1910, A., ii, 286.

the relation between chemical constitution and physiological action; substances with unstable carbonnitrogen linking, 1911, A., ii, 313.

the estimation of halogens according to the method of Baubigny and Chavanue, 1911, A., ii, 532.

estimation of cantharidin in cantharides and its tincture, 1911, A., ii, 669.

propenylbenzene from cinnamylammonium salts, 1912, A., i,

fission of phenylethyltrimethylammonium [chloride], 1912, A., i, 250.

doubly linked carbon atoms and the carbon-nitrogen linking. X. Degradation of quinoline and of isoquinoline by reduction, 1912, A., i, 801.

Emde, Hermann, and Max Franke, doubly linked carbon atoms and the carbon-nitrogen linking. II. Cinnamylamino-compounds, 1909, A., i, 708.

Emde, Hermann, and Ernst Runne, aminoaryl alcohols. I. Preparation of α-amino-α-phenylisopropyl alcohol, 1909, A., i, 300.

hol, 1909, A., i, 300.

aminoaryl alcohols. II. Formation of
a phenylglycol from the ammonium
base of a-amino-a-phenylisopropyl
alcohol, 1910, A., i, 479.

doubly linked carbon atoms and the carbon-nitrogen linking. VIII. Reduction of N-alkylated amino-ke-

tones, 1911, A., i, 714.

doubly linked carbon atoms and the carbon-nitrogen linking. IX. Arylamino-alcohols, 1911, A., i, 718. Emde, Hermann, and Hans Schellbach, doubly linked carbon atoms and the carbon-nitrogen linking. V. Fission of quaternary ammonium salts by nascent hydrogen. VI. Formation of mixed tertiary amines. VII. Relative mobility of allyl-, benzyl-, and cinnamyl- in the fission of quaternary ammonium salts by reducion, 1911, A., i, 281.

tetracinnamyl- and tetrabenzylammonium, 1911, A., i, 282.

Emde, Hermann, and Richard Senst, estimation of magnesium chloride in

water, 1909, A., ii, 940, 1053. Emde, Hermann. See also Ernst Schmidt. Emerson, Benjamin Kendall, helix chemica; study of the periodic relations of the elements and their graphic

representation, 1911, A., ii, 198. Emerson, Julia T., and William H. Welker, composition and toxicity of Ibervillea sonoræ, 1909, A., ii, 87.

Emerson, William Henry, solubility of stearic acid in ethyl alcohol at 0°, 1908, A., ii, 236.

Emerson, William Henry, and H. N. Dumas, esterification of certain fatty acids on evaporation of their alcoholic solutions, 1909, A., ii, 770.

Emery, Albert G., and Francis Gano Benedict, heat of combustion of compounds of physiological importance,

1911, A., ii, 857.

Emery, A. L., rapid volumetric method for estimating phosphoric acid fertilisers, 1903, A., ii, 41.

Emery, James Armitage, estimation of nicotine in presence of pyridine, 1904,

A., ii, 792.

Emich, Friedrich, determination of vapour densities at high temperatures, 1904, A., ii, 14. titanium and tin compounds, 1904,

A., ii, 741.

determination of vapour densities at high temperatures. II. Vapour density of carbon dioxide at 2000°,

1905, A., ii, 441.

determination of vapour densities at high temperatures. III. Disintegration of iridium by carbon dioxide; dissociation of carbon dioxide, 1905, A., ii, 803.

the hydrolytic decomposition of sodium chloride as a lecture experi-

ment, 1907, A., ii, 333.

pulverisation [volatilisation] of iridium in water vapour and carbon dioxide; experiments to determine the density of carbon dioxide by the method of diffusion, 1909, A., ii, 150.

Emich, Friedrich, a lecture experiment to demonstrate the velocity of the explosive wave in explosive mixtures of gases, 1909, A., ii, 656.

microchemistry with special reference to Behrens' work, 1910, A., ii,

237.

the boiling point of sodium chloride, 1910, A., ii, 846.

Emich, Friedrich, and Julius Donau, use of textile fibres in analytical microchemical analysis of inorganic substances, 1907, A., ii, 296.

a simple method of determining the colour of small amounts of slightly coloured liquids and its use in microchemical analysis, 1907, A., ii,

809.

manipulation of small precipitates; qualitative and quantitative microchemical analysis, 1910, A., ii, 152.

Emilio, Luigi d', jun., organic arsenic in therapeutics; cacodylic and methylarsinic acids and their salts, 1903, A., ii, 252.

Emmanuel, Emmanuel J., oleo-resin of Abies cephalonica, 1912, A., i, 372. Cretan ladanum, 1912, A., i, 372.

Emmerich, Fritz. See Hans Rupe.

Emmerich, Rudolf, W. Graf zu Leiningen, and Oskar Loew, injurious bacterial activity in soils, 1911, A., ii, 430.

Emmerich, Wilhelm. See Theodor Zincke.

Emmerling, [Friedrich Carl Julius August] Adolph, and Fritz Sieden, demonstration of the amount of clay in soils, 1906, A., ii, 494.

Emmerling, Oskar, decomposition of proteins by means of bacteria, 1903,

A., ii, 229.

formation of oxalie acid by moulds, 1903, A., ii, 447. origin of fusel oil, 1904, A., ii, 834;

1905, A., ii, 340.

euphorbone, 1908, A., i, 438.

fermentation of calcium tartrate, 1908, A., ii, 772.

hydrolysis of the phosphorescent in-fusoria of the North Sea (Noctiluca milaris), 1909, A., ii, 693.

Emmerling, Oskar, and Emil Abderhalden, a mould converting quinic acid into protocatechuic acid, 1903, A., ii,

Emmerling, Oskar, and Leo Kristeller, derivatives of ethyl propionylpropionate, 1906, A., i, 623.

[\beta-ethoxymethylacrylic acid], 1906,

A., i, 929.

Emmerling, Oskar. See also Emil Abderhalden.

Emmert, Bruno, formation of 1-phenyl-5-methylpyrrolidone by the simultaneous electrolytic reduction of lævulic acid and nitrobenzene, 1907, A., i, 339.

electrolysis of phenyltrialkylammonium iodides, 1909, A., i, 376.

electrolysis of quaternary pyridinium and quinolinium salts, 1909, A., i,

electrolysis of phenyldialkylhydroxyethylammonium iodides and some derivatives of choline, 1912, A., i, 252.

Emmert, Bruno, and Wilhelm Eller, organic-metallic ester compounds. I. Iodo-tin-ester compounds, 1911, A., i, 846.

Emmert, Bruno, and August Herterich. electrolytic reduction of chelidamic acid to 4-hydroxypiperidine-2:6-dicarboxylic acid, 1912, A., i, 384.

Emmert, Bruno. See also Julius Tafel. Emmes, Louis E., and J. A. Riche, the respiratory exchange as affected by body position, 1911, A., ii, 210.

Emmes. Louis E. See also Francis Gano Benedict.

Emmett, A. D., animal fæces. Estimation of fatty matter in animal fæces by ether and carbon tetrachloride, 1909, A., ii, 772.

Emmett, A. D., and E. C. Carroll, protein as a factor in the nutrition of animals. I. A study of the physical constants of fats from swine, 1911, A., ii, 411.

Emmett, A. D., and William John Gies. relation of collagen and gelatin, 1907,

A., i, 739.

Emmett, A. D., and Harry Sands Grindley, the presence of cotton-seed oil in lards from hogs fed on cottonseed meal, 1905, A., ii, 427.

study of the phosphorus content of flesh, 1906, A., ii, 242.

creatine and creatinine in meat and meat extracts, 1908, A., ii, 53.

influence of cold storage on flesh, 1909, A., ii, 503.

animal fæces. I. Comparison of the analysis of fresh and air-dried fæces, 1909, A., ii, 528.

Emmett, A. D., W. E. Joseph, and R. H. Williams, effect of the quantity of protein ingested on the nutrition VI. The chemical comof animals. position of the entire body of swine, 1912, A., ii, 366.

Emmett, A. D. See also Harry Sands

Grindley.

Emmett, William Gidley, and Humphrey Owen Jones, isomeric monothiophosphates, 1911, T., 713; P., 72.

Empson, John. See Karl Fries. Emrich. Richard. See Gustav Heller.

Emslander, Fritz, what is the cause of the separation of albumin in bottled beer which has been subjected to normal treatment in brewery and cellar ? 1911, A., i, 935.

Emslander, Fritz, and Herbert Freundlich, surface tension effects in beer and in connexion with the preparation

of beer, 1904, A., ii, 705.

Emslander, R. See Erich Müller. Emster, Konrad van, density and concentration of aqueous solutions of perchloric acid, 1907, A., ii, 253.

Emster, Konrad van. See also Emil Fromm.

Emszt, Koloman, See Hugo Böckh.

Ende, Carl L. von. See Gilbert Newton Lewis.

Ende, H. See Georg Lockemann.

Endell, Kurd, acid content of moor water, 1910, A., ii, 1005.

Endell, Kurd, and Reinhold Rieke, the melting point of spodumene, 1912, A., ii, 266.

Endell, Kurd. See also Reinhold Ricke. Endemann, Hermann, constitution of abietic acid, 1905, A., i, 525.

estimation of acids contained in hydrogen peroxide, 1909, A., ii, 432.

Endemann, Hermann, and John W. Paisley, manganese borate, 1903, A., ii, 215, 372.

Endler, Josef, the passage of salts through protoplasm. I. The influence of salts on the absorption of dyestuffs by the living cell, 1912, A., ii, 863.

the passage of salts through protoplasm. II. A method for estimating the isoelectric point of protoplasm, which depends on influence of the hydrogen and hydroxyl ions on the passage of dyes, 1912, A., ii, 1083.

Endo, Shigekiyo. See Nagamichi Shibata. Endres, Anton. See Wilhelm Wislicenus. Enell, Henrik, estimation of phosphorus

in phosphorised oil, 1905, A., ii, 763. Enfield, Ralph Roscoe, the reduction of chloric acid, 1910, T., 2441; P., 231.

Engel, A., Congo-copal and (white) Benguela-copal, 1908, A., i, 559.

Engel, Hans, time and fermentation laws of pancreas-steapsin, 1905, A., ii, 732.

Engel, Hans. See also Gustav Embden.

Engel, Rodolphe [Charles], fat in human milk, 1905, A., ii, 468.

the Baudouin reaction in the fat of human milk, 1906, A., ii, 243. action of acids and rennet on human

milk, 1908, A., ii, 873.

separation of caseinogen from human milk, 1909, A., ii, 195.

Engel, Stephan, and A. Bode, colostral

fat, 1911, A., ii, 1010.

Engel, Stephan, and A. Dennemark, the passage of colostrum into milk, especially in relation to nitrogenous substances (cow, sheep, mare), 1912, A., ii, 184.

Engel, Stephan, and Hans Murschhauser, the composition of human milk in nephritis, 1911, A., ii, 813.

the influence of urea on the blood and milk of suckling women, 1911, A.,

ii, 815.

Engel, Stephan. See also Julius Bauer. Engel, Walter. See Arnold Reissert. Engeland, R., distillation of creatinine,

1908, A., i, 958.

detection of organic bases in urine,

1908, A., ii, 1056. constituents of meat extract, 1909, A.,

i, 557.

hydrolysis of casein and the detection of the monoamino-acids formed, 1909, A., i, 856.

constitution of stachydrine, 1909, A.,

i, 952.

Liebig's extract of meat, 1909, A., ii, 71. the assimilation of carnitine in the animal body, 1909, A., ii, 71.

the diazo-reaction of normal urine,

1909, A., ii, 167.

carnitine; synthesis of γ-trimethylamino-β-hydroxybutyric acid, 1910,
 A., i, 824.

complete methylation of some amino-

acids, 1910, A., i, 843.

the betaines present in plants and stachydrine, 1910, A., ii, 885. Engeland, R., and Friedrich Kutscher,

Engeland, R., and Friedrich Kutscher, synthesis of γ-guanidinobutyric acid, 1910, A., i, 825.

a methylated aporrhegma from animal tissues, 1910, A., ii, 1090.

a second active ergot base, 1911, A., ii, 220.

some constituents of Extractum secalis cornuti, 1911, A., ii, 528.

Engeland, R. See also Dankwart
Ackermann.

Engelbertz, E. See Karl Fries. Engelbrecht, Curt. See Otto Wallach. Engelhardt, Alfred. See Withelm Traube. Engelhardt, Felix. See August Michaelis.

Engelhardt, K. von. See Heinrich Ley. Engelhardt, Theodor. See Ludwig Weiss.

Engelke, Ernst F. See Friedrich Kehrmann.

Engelmann, Max, synthesis of 1-methylxanthine, 1909, A., i, 192.

Engels, Ewald, tungsten bronzes, 1904, A., ii, 129.

Engels, Otto, estimation of nitrogen in foods with different amounts of substance, 1910, A., ii, 448.

action of some solvents on soil nutrients; phosphoric acid, potassium, and calcium in the original and absorptively combined condition,

1912, A., ii, 596.

Engels, Otto. See also Max Kling.
Engels, Paul, and William Henry Perkin, jun., brazilin and hæmatoxylin.
Part VII. Some derivatives of brazilein, 1906, P., 132.

Engels, Paul, William Henry Perkin, jun., and Robert Robinson, brazilin, hæmatoxylin, and their derivatives. Part IX. On brazilein, hæmatein and their derivatives, 1908, T., 1115; P., 148.

Engels, Wilhelm. See Lothar Wöhler. Engels, Wladimir, the tissues as waterreservoirs, 1904. A., ii, 750.

reservoirs, 1904, A., ii, 750. Engelsohn, J. W. See Stanislaus von

Kostanecki.

Engemann, Karl, the exfoliation of electrolytic nickel, 1911, A., ii, 1094. Enger, Frederic. See Francis J. Seiter. Engi, Gadient. See Fritz Ullmann.

Engle, S. G. See Charles Frederick

Burgess.

Engler, Carl [Oswald Viktor], the rendering active of oxygen. IX. and X. Autoxidation of cerous salts, 1904, A., ii, 165, 734.

ψ-conhydrine, 1909, A., i, 181.

formation of naphthenes in mineral oil,

1910, A., i, 2.

naphthene formation. VI. Possible formation of hydrocarbons in nature, and the origin of the optical activity of petroleum, 1910, A., i, 160.

the formation of the chief constituents of petroleum, 1912, A., i, 525.

Engler, Carl, and J. Bobrzynski, the origin of petroleum, 1912, A., ii, 850.

Engler, Carl, and Heinrich Broniatowski, the rendering active of oxygen. XI. Autoxidation of thiophenol, 1904 A., i, 870. Engler, Carl, and Adalbert Engler, condensation products from α-pyridyl methyl ketone with benzaldehyde and o-nitrobenzaldehyde, 1903, A., i, 113.

Engler, Carl, and Theoph. Ginsberg, the rendering active of oxygen. VIII. Autoxidation of cerous salts and indirect autoxidation, 1903, A., ii, 599.

Engler, Carl, and Béla Halmai, naphthene formation. V. The products of heating cylinder oil under pressure, 1910, A., i, 160.

Engler, Carl, and Reginald Oliver Herzog, biological oxidation, 1909, A., ii,

495.

Engler, Carl, and Oskar Routala, naphthene formation. II. Action of aluminium chloride on amylene at low and moderately high temperatures, 1910, A., i, 2.

naphthene formation. III. Products formed by heating amylene and hexylene under pressure, 1910, A.,

1, 2

naphthene formation. IV. Formation of naphthene from olefines and from artificial lubricating oil and the synthesis of the latter, 1910, A., i, 160.

Engler, Carl, and E. Severin, catalysis and the formation of petroleum, 1912,

A., i, 149.

Engler, Carl, and Herm. Sieveking, radioactivity of mineral springs and their sediments, 1907, A., ii, 218.

Engler, Carl, and Wilhelm Steinkopf, presence of cholesterol in Java naphthas, 1912, A., i, 149.

Engler, Harry. See Herman Decker.
Engler, P., and Julius Meyer, ethyl dicyanosuccinate, 1905, A., i, 631.

Engler, Wilhelm, influence of temperature on radioactive changes, 1908, A., ii, 650.

Enklaar, Cornelis Jacobus, ocimene and myrcene, 1906, A., i, 377.

aliphatic terpene alcohols, 1906, A., i, 377.

reduction of aliphatic terpene compounds, 1908, A., i, 664.

hydrogenation of linalool by means of nickel and hydrogen; synthesis of tetrahydrolinalool (βζ-dimethyloctan-ζ-ol), 1908, A., i, 934.

aliphatic terpenes and their derivatives. III., 1911, A., i, 111.

action of active copper on linalool, 1909, A., i, 690.

the essential oil of hyacinths, 1910, A., i, 122.

synthesis of an aliphatic terpene, 1912, A., i, 201.

Enklaar, Cornelis Jacobus, the essential oil of the catkins of wild myrtle (Myrica gale), 1912, A., i, 371.

Enklaar, Johannes Eliza, action of bases on chloral hydrate, 1905, A., i, 170, 741; 1906, A., i, 929; 1910,

A., i, 299.

abnormal action of the gas electrode in the determination of the concentration of hydrogen ions by electric measurement, 1910, A., ii, 819.

dissociation constants of oxalic acid,

1911, A., i, 419.

neutralisation curve of oxalic acid, 1911, A., i, 602.

dissociation constant K_2 of sulphuric acid and oxalic acid, 1911, A., ii, 1071.

neutralisation curve of sulphuric acid, 1912, A., ii, 239.

Enoch, Carl, detection and estimation of mercury in urine, 1907, A., ii, 816.

Enright, Bernard, rapid method for the estimation of lime in a cement, 1904, A., ii, 681.

Enriquez, and Hallion, [action of secretin], 1903, A., ii, 316.

Ensrud, Guth., atomic energy of gases, 1907, A., ii, 249.

Enz, H., detection of thujone [tanacetone] in absinthe, 1911, A., ii, 1040.

Ephraim, Fritz, regularities in the composition of halogen double salts, 1903, A., ii, 418, 538, 552.

constitution of vanadium double flu-

orides, 1903, A., ii, 487.

action of hydrochloric acid on vanadic acid; preparation of double compounds of vanadium pentoxide containing chlorine, 1903, A., ii, 487.

sodamide, 1905, A., ii, 317.

colloidal sodium chloride, 1906, A., ii, 351.

existence of compounds of sulphur and iodine, 1908, A., ii, 581.

new reaction of thallous salts, 1908, A., ii, 591.

double chlorides and bromides of zinc and the alkalis, 1908, A., ii, 693.

cobalto-oxalate-ammonia and ammonium cobalto-oxalate, 1909, A., i, 876

attempts to prepare optically active phosphorus compounds, 1911, A., i, 284.

diamidothiophosphoric acid, 1912, A., i. 26.

the nature of auxiliary valencies. I. Metal ammonias, 1912, A., ii, 546.

Ephraim, Fritz, and Paul Barteczko, fluoro-salts, 1909, A., ii, 226.

double fluorides and chlorides of univalent thallium, 1909, A., ii,

Ephraim, Fritz, and Max Brand, lithium molybdates, 1909, A., ii, 1001. lithium phosphomolybdates, 1910, A.,

ii, 207.

Ephraim, Fritz, and Hermann Feidel, arsenosomolybdates, 1910, A., ii, 301.

Ephraim, Fritz, and M. Gurewitsch. amides of sulphuric acid, 1910, A., ii,

Ephraim, Fritz, and Heinrich Herschfinkel, rubidium and cæsium molybdates, 1909, A., ii, 1003.

rubidium and casium phospho- and arseno-molybdates, 1910, A., ii,

208.

Ephraim, Fritz, and Leonid Heymann, double fluorides of univalent thallium,

1910, A., ii, 37.

Ephraim, Fritz, and Eduard Lasocki, nitrosulphamide and sulphohydrazide, 1911, A., ii, 276.

Ephraim, Fritz, and Etta Majler, selenophosphates, 1910, A., ii, 206.

some thiophosphates, 1910, A., ii, 206.

Ephraim, Fritz, and Franz Michel, the reaction between sulphuryl chloride and ammonia, 1909, A., ii, 994.

Ephraim. Fritz. and Samuel Model. double chlorides and iodides of zinc, 1910, A., ii, 850.

double bromides of manganese, 1910,

A., ii, 854.

Ephraim, Fritz, and Henryk Piotrowski, the action of sulphur dioxide on ammonia, 1911, A., ii, 274.

action of sulphur and of compounds containing sulphur on hydrazine, 1911, A., ii, 275.

Ephraim, Fritz, and M. Sackheim, hydrazidophosphoric acid, 1912, A.,

Ephraim, Fritz, and Theodor Schmidt, ammonia-additive products of the iodides of tin, 1909, A., ii, 1021.

Ephraim, Fritz, and Rebecca Stein, thiophosphates and thiophosphites, 1912,

A., ii, 42.

Ephraim, Fritz, and S. Weinberg, double halogenides of ter-, quadri-, and quinque-valent antimony, 1910, A., ii, 41.

Epiphanoff, Ph., hydroxybehenic acid, 1908, A., i, 244.

Eppelsheim, August! See August Klages.

Eppinger, Hans, theory of carbamide formation, 1905, A., i, 579. formation of allantoin in the animal

body, 1905, A., ii, 336.

fate of glyoxylic acid in the animal organism, 1905, A., ii, 543.

[detection of] glyoxylic acid, 1905, A., ii, 559.

acid poisoning. II., 1907. A., ii. 286.

melanuria, 1910, A., ii, 1092.

Eppinger, Hans, and Fritz Tedesko, acid poisoning. III., 1909, A., ii,

Eppinger, Paul. See Oskar Pilotv. Epps, Clarence van. See Elbert William Rockwood.

Epstein, Albert A., the theory of urea formation, 1910, A., ii, 143.

Epstein, Albert A., and Samuel Bookman, formation of glycine in the body. I., 1912, A., ii, 70.

Epstein, Albert A., and Hjalmar Olsan, the effect of lecithin on the fermentation of sugar by bacteria, 1912, A., ii, 588.

Epstein, F., and H. Polonyi, paraffins, 1912, A., ii, 695.

Epstein, Felix, condensation of p-hydroxybenzoic acid with formaldehyde, 1910, A., i, 117.

Epstein, Friedrich, and Richard Doht, the use of silver in the combustion of nitrogenous substances, 1908, A., ii, 132.

Epstein, Friedrich, and P. Krassa, conductivity of the inner cone of divided flames; the explosibility of gaseous mixtures, 1910, A., ii, 202.

Epstein, Friedrich. See also Georg Bredig.

Epstein, S. See Josef Herzig.

Epstein, Wilhelm, [derivatives of diaminodiphenylmethanel, 1903, A., i,

Epstein, Wilhelm. See also Eduard Ritsert.

Eras, Kurt. See Franz Kunckell.

Erba, Carlo, normal quinine hydrochloride, 1905, A., i, 151.

Erben, B., Fr. Prachfeld, and W. Vilikovsky, employment of nitrogenous manures for sugar beet, 1911, A., ii, 65.

estimation of urea Erben, Franz, in human urine, 1903, A., ii, 581.

proteolytic ferment in leucæmic blood, 1904, A., ii, 573.

estimation of amino-acids in urine, 1905, A., ii, 124.

Erben, Franz, composition of blood in cases of tuberculosis pulmonum, carcinoma ventriculi, diabetes mellitus, saturnismus chronicus, and typhus abdominalis; clinical method for determining the plasma conditions in the blood in crythema. Capillary pyknometer, 1905, A., ii, 741.

nephritis, 1905, A., ii, 742.

Erber, Josef. See Gustav Schultz.

Ercklentz, Wilhelm, diuresis; the influence on chlorate excretion by infusion of sodium chloride, 1903, A., ii, 33.

Ercolini, Guido. See Mario Giacomo

Levi and Giuseppe Magri.

Erculisse, P., variation of the cathode potential during electrolysis, 1912, A., ii, 204.

Erdélyi, Alexander. See Franz Tangl. Erdmann, C. C., the alleged occurrence of trimethylamine in urine, 1910,

A., ii, 792.

alkylamines as products of the Kjeldahl digestion, 1910, A., ii, 1008.

estimation of alkylamines obtained from urine after Kjeldahl digestion, 1911, A., ii, 551.

Erdmann, Ernest [Immanuel], oxidation products from p-phenylenediamine, I., 1904, A., i, 778, 935.

production of high vacua for chemical

distillation, 1904, A., ii, 20. composition and temperature of liquid

air, 1904, A., ii, 328.

a compound of mesityl oxide with mercuric chloride, 1905, A., i, 18. distillations in high vacua, 1906,

A., ii, 148.

preparation of a p-aminodiphenylaminesulphonic acid, 1907, A., i, 968.

ω-hydroxymethylfurfuraldehyde and its relationship to cellulose, 1910, A., i, 762.

gases containing helium from the German salt-beds, 1910, A., ii, 376. preparation of tri-iodo-derivatives of stearic acid, 1911, A., i, 601.

preparation and properties of alinolenic acid from linseed oil, 1911, A., i, 832.

autoxidation of trichloroethylene, 1912, A., i, 65, 597.

Erdmann, Ernst, and Fred Bedford, preparation and properties of liquid oxygen, 1904, A., ii, 328.

solubility of nitrogen in liquid oxygen,

1904, A., ii, 557.

Erdmann, Ernst, and Fred Bedf.rd, linolenic acid and linseed oil, 1909, A., i, 357; 1910, A., i, 810.

Erdmann, Ernst, Fred Bedford, and Fritz Raspe, constitution of linolenic

acid, 1909, A., i, 358.

Erdmann, Ernst, and Hugo Erdmann, tetraiodoethylene and di-iodoethylene, 1905, A., i, 165.

Erdmann, Ernst, and Curt Schaefer, destructive distillation of cellulose,

1910, A., i, 718.

Erdmann, Ernst, and Hugo Stoltzenberg, gas analysis by condensation, 1910, A., ii, 649.

Erdmann, Ernst. See also Edmund

Oskar von Lippmann.

Erdmann, Hugo, determination of vapour density under diminished pressure, 1903, A., ii, 62.

the nature of the metallic condition,

1903, A., ii, 67.

orthonitric acid and the compounds obtained from it by elimination of water, 1903, A., ii, 73.

the constitution of arsenious oxide,

1903, A., ii, 74.

orthonitric acid, 1904, A., ii, 26.

lecture experiments [liquid ozone; solid nitrogen], 1905, A., ii, 81.

addendum to the Sixth Report of the Committee [of the German Chemical Society] for fixing atomic weights, 1905, A., ii, 308.

some properties of liquid nitrogen,

1906, A., ii, 349. use of acetylene as a precipitant, 1907,

A., ii, 399.

yellow arsenic, 1908, A., ii, 275. thiozonides; sulphur and its cyclic

compounds, 1908, A., ii, 830.

Erdmann, Hugo, and Oskar Makowka, estimation of palladium and its separation from other metals by means of acetylene, 1904, A., ii, 594.

estimation and separation of copper by precipitation with acetylene, 1907, A., ii, 399.

separation and estimation of palladium by means of acetylene, 1907, A., ii, 403.

Erdmann, Hugo, and Theodor Nieszytka, naphthalenesulphonates of cerium, 1908, A., i, 621.

Erdmann, Hugo, and Rudolf Reppert, polymeric forms of metallic arsenic, 1908, A., ii, 584.

Erdmann, Hugo, and Heinrich van der Smissen, chemical properties of calcium, 1908, A., ii, 587. Erdmann, Hugo, and Max von Unruh, molecular weight determinations of solid and liquid substances in the Weinhold vacuum vessel, 1903, A., ii, 59.

yellow arsenic, 1903, A., ii, 73.

Erdmann, Hugo, and Fritz Wirth, rare earths, 1908, A., ii, 694.

Erdmann, L. See Edgar Wedekind.

Erdös, Geza. See Josef Herzig.

Eremie-Popa, Drusu. See Ernst Beckmann.

Erfle, Heinrich, optical properties and electron theory, 1908, A., ii, 77.

of quasi - elastic · bound electrons in the helium atom, 1908,

A., ii, 557. Erfurt, Friederich. See Emil Fromm. Erhard, H., and F. Zieglwallner, the appearance of glycogen after feeding on sugars and fat and morphological observations on the snail (helix pomatia), 1912, A., ii, 779.

Erhardt. E. See Hermann

Tappeiner.

Ericson, Eric John, volumetric estimation of lead, 1904, A., ii, 780.

Ericson-Aurén, Tycho, and Wilhelm Palmaer, dissolution of metals, 1903, A., ii, 718; 1906, A., ii, 839.

Erikson, Henry A., recombination of ions in carbon dioxide and hydrogen at different temperatures, 1912, A., ii, 518.

Erikson, S. See Thor Ekecrantz.

Eriksson, Anselm, the inhibition of the action of invertase, 1911, A., i, 698,

Eriksson, Ella, estimation of glycyrrhizin and sugars in liquorice root and extract, 1911, A., ii, 346.

Erlandsen, A., the lecithin-like substances from the myocardium and from striped muscle, 1907, A., i, 371. phloridzin diabetes, 1910, A., ii, 146, 329.

Erlanger, Joseph, and Donald Russell Hooker, the relation of blood pressure and pulse pressure to urinary secretion in a case of physiological albuminuria, 1904, A., ii, 194.

Erlenmeyer, [Richard August Carl] Emil. obituary notice of, 1911, T., 1649.

Erlenmeyer, [Friedrich Gustav Carl] Emil, jun., new synthesis of serine, 1903, A., i, 29.

a-hydroxyphenylbutyrolactone and its conversion into benzoylpropionic acid, 1903, A., i, 32.

a new method of separating racemic compounds into optically active components, 1903, A., i, 412.

Erlenmeyer, [Friedrich Gustav Carl] Emil, jun., direct migration of hydroxyl groups from the a- to ypositions, 1903, A., i, 419.

labile and stable crotonolactones,

1903, A., i, 676.

action of ammonia on a mixture of two a-oxy-acids, 1903, A., i, 677.

a new isomerism of ethylene deriva-

tives, 1903, A., i, 697.

formation and transformation of cinnamylformic acid [styrylglyoxylic acid], 1903, A., i, 698.

constitution of a-oxy-lactones, 1903,

A., i. 701.

synthesis of cystine, 1903, A., i, 791. conversion of cinnamylidenepyruvic acid into 8-benzylidenelævulic acid, 1904, A., i, 500.

isocinnamic acid, 1904, A., i, 892.

mechanism of the transformation of By-unsaturated a-hydroxy-acids into the isomeric y-ketonic acids, 1904, A., i, 892; 1910, A., i, 175.

a-ketonic acids and their transforma-

tions, 1904, A., i, 1015.

α-amino-acids, 1905, A., i, 131.

azlactones [alkylideneoxazolones] and their transformations, 1905, A., i, 237.

conversion of allocinnamic acid into Erlenmeyer's isocinnamic acid, 1905, A., i, 285.

formation of lævulic acid and of alcohol from sugars, 1905, A., i, 408.

formation of Liebermann's isocinnamic acid by the resolution of allocinnamic acid with brucine, 1905, A., i. 646.

condensation of a-keto-acids with aldehydes by means of hydrochloric acid or sodium hydroxide, 1905, A., i, 783.

preparation of as- and sy-unsaturated lactones, 1905, A., i, 785.

separation of cinnamic acid into stereoisomeric components, 1905, A., i, 892.

second stereoisomeric component of allocinnamic acid, 1905, A., i,

cinnamic acid from storax, 1906, A., i, 21.

stereochemistry of the cinnamic acids,

1906, A., i, 176, 274. remark on Biilmann's discussion of the isomeric cinnamic acids, 1909,

A., i, 155. identity of the solid distyrene, m. p. 124°, with stilbene, 1910, A., i,

309.

Erlenmeyer, [Friedrich Gustav Carl] Emil, jun., labile isomerides of the same structure, which can be converted one into another, 1911, A., i. 721.

theoretical considerations isomerism in ethylene derivatives,

1911, A., i, 780.

the isomeric acids of the cinnamic acid series, 1911, A., i, 782.

Erlenmeyer, Emil, jun., and Emil Arbenz, constitution of the acid C₁₆H₁₄O₃ obtained by the reduction of a-oxydiphenylbutyrolactone, 1903, A., i, 418.

a-oxylactones and their transformations; α-oxy-β-phenyl-γ-benzyl-, αoxy-βγ-diphenyl-, and α-oxy-βnitrophenyl-y-phenyl-butyrolact-

ones, 1904, A., i, 1015.

condensation of pyruvic acid with hippuric acid, 1905, A., i, 240.

Erlenmeyer, Emil, jun., and Alfred Arnold, stereochemical studies. New method of separating racemic compounds, 1905, A., i, 192.

new isomerism of ethylene derivatives,

1905, A., i, 193.

Erlenmeyer, Emil, jun., and Fritz Bade, synthesis of some α-amino-βhydroxy-acids, 1905, A., i, 131.

Erlenmeyer, Emil, jun., and Carl' Barkow, isomeric phenylserines, 1906, A., i, 237.

stereoisomeric cinnamic acids, 1906,

A., i, 429.

Erlenmeyer, Emil, jun., Carl Barkow, and Otto Herz, isomeric cinnamic acids, 1907, A., i, 318.

Erlenmeyer, Emil, jun., and Alfred Braun, condensation of phenylpyruvic acid with piperonaldehyde, cinnamaldehyde, and furfuraldehyde, 1904, A., i, 1016.

Erlenmeyer, Emil, jun., Karl Bube, Otto Herz, and Gustav Hilgendorff, differences in the cinnamic acids due to the synthetical materials used,

1909, A., i, 648.

Erlenmeyer, Emil, jun., and Otto Herz, separation of synthetic cinnamic acid into its isomeric components and their re-combination into the synthetic acid,

1909, A., i, 156.

Erlenmeyer, Emil, jun., Otto Herz, and Gustav Hilgendorff, salt formation and additive reactions of the isomeric acids obtained from synthetic cinnamic acid, and demonstration of their different chemical behaviour, 1909, A., i, 156.

Erlenmeyer, Emil, jun., Otto Herz, and Gustav Hilgendorff, cinnamic acids of different origin, 1909, A., i, 647.

Erlenmeyer, Emil, jun., and Gustav Hilgendorff, cinnamic acids, 1910.

A., i, 320.

transformation of synthetical and hetero-cinnamic acids into storax acid, 1910, A., i, 383.

the possibility of the existence of molecular asymmetric storax-cinnamic acids, 1911, A., i, 781.

the behaviour of certain mixtures of storax-cinnamic acid with certain substituted cinnamic acids, 1911, A., i, 782.

further experiments on the separation of heterocinnamic acid, 1911, A., i,

783.

induced molecular asymmetry in unsaturated compounds, 1912, A., i,

Erlenmeyer, Emil, jun., Gustav Hilgendorff, and Theodor Marx separation and transformation of the benzaldehydes, 1911, A., i, 784. Erlenmeyer, Emil, jun., and Carl

Kehren, two stereoisomeric a-oxy-8phenyl-y-p-isopropylphenylbutyrolactones and their transformations,

1904, A., i, 1015. Erlenmeyer, Emil, jun., and Adolf Kreutz, formation of aß-dihydrocinnamylidenemalonic acid and hydrocinnamylideneacetic acid, 1905, A., i, 897.

Erlenmeyer, Emil, jun., and Arthur Lattermann, α-oxy-β-phenyl-γ-methoxyphenylbutyrolactone and its trans-

formations, 1904, A., i, 1017. Erlenmeyer, Emil, jun., and Otto Matter, azlactones [alkylideneoxazolones] from cinnamaldehyde or cuminaldehyde and hippuric acid, 1905, A., i, 238.

Erlenmeyer, Emil, jun, and Felix Reis, α-oxy-β-phenyl-γ-benzylbutyrolactone and its transformations, 1904, A., i,

1018.

Erlenmeyer, Emil, jun., and Werner Stadlin, azlactones [alkylideneoxazolones] from furfuraldehyde or salicylaldehyde and hippuric acid, 1905, A., i, 238.

Erlenmeyer, Emil, jun., and Franz Stoop, synthesis of serine and cystine,

1905, A., i, 119.

Erlenmeyer, Emil, jun., and Fritz Wittenberg, azlactones [alkylideneoxazolones formed in the condensation of m-hydroxybenzaldehyde or anisaldehyde with hippuric acid, 1905, A., i, 240.

Erler, Arthur. See Emil Knoevenagel. Erler. Otto. See Heinrich Ley.

Erlwein, Georg, a new starting material (calcium cyanamide) for the preparation of alkali cyanides, 1903, A., i,

Erlwein, Georg, C. Warth, and Reinhard Beutner, decomposition of calcium carbide by heat, 1911, A., ii, 396.

Ermen, Walter F. A., some basic copper compounds, 1912, A., ii, 453.

Ernest, Adolf, [hydrolysis of] some celluloses, 1906, A., i, 401.

Ernest, Adolf, and Heinrich Berger, peroxydases from beetroot, 1908, A., i, 72.

Ernest, Adolf. See also Julius Stoklasa. Ernst. Hans W. See Fritz Ullmann.

Ernvei. Edmund, estimation of manganese in potable water, 1908, A., ii, 133.

Erochin, Peter, dispersion and absorption of mercury and tin for the visible and ultra-violet spectrum, 1912, A., ii,

Erp, Henri van, products of the bromination of o- and p-nitrophenol, 1910,

A., i, 618.

lecture apparatus for demonstrating, by means of the electric arc, the formation of oxygenated compounds from atmospheric air, 1911, A., ii, 35.

the reactions of 4-nitrosophenol, 2:6dibromo-4-nitrosophenol, and nitroso-m-cresol with bromine, 1912, A., i, 28.

Errera, Giorgio, synthetic preparations by means of indanedione (diketohydrindene), 1903, A., i, 265. derivatives of indanedione; synthesis

of a-di-o-benzylenepyridine, 1903, A., i, 854.

action of hydroxylamine on methenylbisindanedione, 1904, A., i, 173.

structure of phthalacene, 1908, A., i, 183.

structure of phenenyltribenzoic [1:3:5triphenylbenzene-2':2":2"-tricarboxylic] acid, 1908, A., i, 185.

isophthalacene group: structure of phthalacene. II., 1909, A., i, 103. peri-naphthindandione, 1911, A., i,

Errera, Giorgio, and E. Casardi, derivatives of indanedione, 1905, A., i, 446. Errera, Giorgio, and A. Cuffaro, hydr-

oxyketoperi-naphthindene (peri-naphthindandione), 1912, A., i, 273.

Errera, Giorgio, and L. Labate, action of ethyl ethoxymethyleneacetoacetate on monoalkylcyanoacetamides, 1904, A., i, 189.

Errera, Giorgio, and G. La Spada, new syntheses of derivatives of fluorene and of diphenyl, 1906, A., i, 277.

Errera, Giorgio, and Raffaele Maltese. derivatives of m-xylene, 1904, A., i,

oxidation of 4-nitro-6-amino-m-xyl-

ene, 1906, A., i, 84. Errera, Giorgio, and A. Vaccarino, derivatives of phenenyltribenzoic

[1:3:5-triphenylbenzene-2':2":2"-tricarboxylic] acid, 1909, A., i, 163.

Erthal, Br. See Josef Herzig.

Erve, J. van de, the rôle of the kidneys in the regulation of the concentration of the serum diastases, 1912, A.,

Escales, Richard, sulphonic acids of 2:4-dinitrostilbene, 1903, A., i, 81. 2:4:2':4'-tetra-aminostilbene, 1904, A., i, 1062.

action of azoimide on p-benzoquinone,

1905, A., i, 145.

Escales, Richard, and H. Ehrensperger, tetrathiocyanodiamminediaquochromic acid, 1903, A., i, 797.

Escales, Richard, and Georg Kling, action of boron trichloride on phenylhydrazine, 1903, A., i, 120.

purification of ammonium hydrogen salts of a-hydroxy-acids, 1912, A., i,

827.

Escales, Richard, and Hans Koepke, ammonium cyanate and carbamide, 1911, A., i, 530.

Escales, Richard, and Karl Wolgast, tetra-aminocarbazole, 1904, A., i, 1063.

Escard, Jean, new densivolumeter for determining the density of solids,

1912, A., ii, 1138.

Esch, P., the significance of the active constituent of the suprarenal capsules in conjunction with local anæsthetics, 1911, A., ii, 136.

Esch, Werner, application of the bromoderivative methods for the assay of vulcanised rubber wares, 1911, A., ii, 946.

Esch, Werner, and Abraham Chwolles, analysis of indiarubber wares, 1905, A., ii, 362.

Eschbaum. Friedrich, differentiation between the various sugars in urine, 1906, A., ii, 585.

preparation of hæmatoporphyrin and other blood derivatives, 1909, A., i, 538.

Escher, Heinrich H. See Richard Willstätter. Escher, Robert von. See Julius Schmidlin.

321

Escherich, F., and Martin Moest, electrolytic preparation of tetra-alkyldiaminobenzhydrols, 1903, A., i, 89.

Eschmann, M. See Max Le Blanc.
Eschweiler, Withelm, replacement of
hydrogen atoms, attached to a nitrogen atom, by methyl groups, by means
of formaldehyde, 1905, A., i, 328.

Escombe, Fergusson. See Horace Tab-

berer Brown.

Espil, R. L., velocity of reactions in a heterogeneous system, 1910, A., ii, 402.

new anhydrous selenites, 1911, A., ii, 279.

Esposito, Mario, contributions to the chemistry of the rare earths, 1906, P., 20; 1907, P., 64.

Esselen, Gustavus J., jun. See Latham Clarke.

Essner, Jules, Ulex's process for the estimation of nicotine in tobacco extracts and nicotine salts, 1911, A., ii, 943.

Esson, William. See Augustus George Vernon Harcourt.

Estes, Clarence, colorimetric estimation of phosphates in solution with other salts, 1909, A., ii, 266.

Estes, Clarence. See also Robert Banks

Gibson.

Estéva. G. See Alfred Guyot.

Estreicher von Rozbierski, Tadeusz [Kazimierz] (Ritter), the melting points of oxygen and nitrogen, 1904, A., ii, 477.

heat of vaporisation of oxygen and sulphur dioxide, 1904, A., ii, 478.

Estreicher, Tadeusz, and Al. Schnerr, the heat of vaporisation of certain liquefied gases, 1911, A., ii, 16.

Estreicher, Tadeusz, and M. Staniewski, calorimetric investigation of chlorine at low temperatures, 1911, A., ii, 16.

Estrup, Knud, a thiobasic mercuric sulphate, 1909, A., ii, 404.

adsorption experiments with varying degree of dispersion of the adsorbent, 1911, A. ii, 20.

adsorption, 1912, A., ii, 742.

negative adsorption isotherms, 1912, A., ii, 912.

Estrup, Knud, and Erik Buch Andersen, adsorption experiments with varying degree of dispersity of the adsorbent, 1912, A., ii, 435.

Estrup, Knud. See also Theodor Sved-

berg.

Etard, Alexandre [Léon], and Antony Vila, musculamine, a base derived from muscles, 1903, A., i, 110. Etard. Alexandre [Léon], and Antony Vila, presence of cadaverine in the products of hydrolysis of muscle, 1903, A., i, 589.

conditions of hydrolysis of protoplasmides, 1908, A., i, 68, 584. molecular analysis of proteins, 1909,

A., i, 124.

analysis of proteins, 1910, A., i, 598. Étard, Alexandre, and E. Wallee, pyrogenetic decomposition of laz resin, 1905, A., i, 604.

Ettinger, Jakob. See Ernst Laqueur. Ettinger, Leo, and Paul Friedländer, N-methyl derivatives of indigotin, 1912, A., i, 727.

6:6'-dibromoindirubin, 1912, A., i,

729

Ettinger, Leo. See also Josef Houben. Ettlinger, Friedrich. See Richard Willstätter.

Eucken, Arnold, permanent condition established between polarised hydrogen electrodes, 1907, A., ii, 425.

influence of the velocity of ionic reactions on the current potential

calculation of reaction velocities from

current potential curves, 1910, A., ii, 279.

the variation of the thermal conductivity of solid non-metals with the temperature, 1911. A., ii 485.

temperature, 1911, A., ii, 185. dependence of the thermal conductivity of certain gases on the temperature, 1912, A., ii, 17.

molecular heat of hydrogen at low temperatures, 1912, A., ii, 232.

Eucken, Arnold, and Georg Gehlhoff, electrical and thermal conducting power and the Wiedemann-Franz ratio for airtimony-cadmium alloys between 0° and -190°, 1912, A., ii, 319.

Euler, (Mme.) Astrid, and Hans von Euler, naphthaquinoneanils and their derivatives, 1906, A., i, 370. ferment reactions in the expressed juice of seedlings rich in fat, 1907, A., ii, 385.

Euler, (Mme.) Astrid. See also Hans

von Euler.

Euler[-Chelpin], Hans von, ethyl-Baminocrotonate and nitrous acid,

1903, A., i, 234. reaction between amines and nitrous acid, 1903, A., i, 298.

products from the hydrolysis of diazoethers, 1903, A., i, 722.

argentammonium bases and silver hydrocyanic acid, 1903, A., ii, 544.

Euler[-Chelpin], Hans von, complex silver ions, 1903, A., ii, 717.

diazo-ethers, 1904, A., i, 119.

aniline bases and nitrous esters in alkaline solution, 1904, A., i, 119. aliphatic amines, 1904, A., i, 229.

complex - formation. II. Pyridine complexes, 1904, A., i, 774. complex ions of zine and cadmium,

1904, A., ii, 11.

and metallo-ammonium ammonia bases. I., 1904, A., ii, 167.

theory of catalytic reactions, 1904, A., ii. 318.

formation of complex ions, 1904, A., ii, 379. lowering of solubility. I., 1904, A.,

ii. 542.

solutions of salts of ammonia and of amines, 1904, A., ii, 544.

electric potential of nickel and tellurium, 1904, A., ii, 699.

processes of assimilation, 1904, A., ii, 761; 1905, A., ii, 343.

catalases, 1905, A., i, 400.

enzymatic fermentation from the point of view of chemical dynamics, 1905, A., ii, 378.

catalysis by ferments, 1905, A., ii, 693. aldehydes as acids, 1906, A., i, 140.

formation of diazoxides and naphthaquinoneanils from nitrosobenzene, 1906, A., i, 369.

pseudo-acids, 1906, A., i, 415, 576. reaction between silver nitrate and organic halogen compounds, 1906,

A., i, 789.

fermentative decomposition of dipeptides, 1907, A., i, 574.

equilibrium and final condition of enzyme reactions, 1907, A., i, 808. alkaline digestion, 1907, A., i, 1098.

constitution of diazonium salts, 1909, A., i, 70.

the [carbon] assimilation process [in

plants], 1909, A., ii, 423.

the cleavage of lactic and pyruvic acids, 1911, A., ii, 452.

nomenclature of enzymes, 1911, A., i,

cellulase, 1912, A., i, 327.

the mode of action of phosphatese. III., 1912, A., i, 594.

biochemical reactions in light, 1912, A., ii, 112.

behaviour of yeast enzymes free and attached to protoplasm, 1912, A., ii, 193.

Euler, Hans von, and Helmer Bäckström, fermentation by yeast. II., 1912, A., ii, 589.

Euler, Hans von, and Ivan Bolin, oxidations of biological importance. I., 1908, A., ii, 1021. oxidations of biological importance.

The preparation of pure mediccago laccase and its chemical constitution. III., 1909, A., i, 863.

dissociation constants of the dihydroxybenzenes, 1909, A., ii, 374.

chemical composition and biological function of an oxydase, 1910, A., i, 84.

Euler. Hans von, and (Mmc.) Astrid Euler, action of amyl nitrite on ethyl \(\beta\)-aminocrotonate, 1904, A., i,

formation of reduced osotriazoles, 1904, A., i, 197.

ethyl a-isonitroso-β-nitrosoamino-

butyrate and its derivatives, 1904, A., i, 230.

platinum-ammonium compounds, 1904, A., ii, 569.

formaldehyde and formate formation, 1905, A., i, 633; 1906, A., i

processes of assimilation. II. densation products of formaldehyde, 1905, A., ii, 343.

formation of sugar from formaldehyde,

1906, A., i, 142.

formation of i-arabinoketose from formaldehyde, 1906, A., i, 143.

alcohols and resinous acids in the varnish from the leaves of Alnus glutinosa, 1908, A., i, 39.

Euler, Hans von, and Andor Fodor, yeast-gum, 1911, A., i, 607.

an intermediate product of alcoholic fermentation, 1911, A., i, 950.

Euler, Hans von, and Yngve Funke, hydrolysis of carbohydratephosphoric acid esters, 1912, A., i, 336.

Euler, Hans von, and David Johansson, enzymatic phosphate union, 1912, A., i, 750.

the influence of toluene on zymases and phosphatese, 1912, A., i, 817. formation of invertase in yeasts, 1912,

A., ii, 376.

destruction of sugar and formation of carbon dioxide in alcoholic fermentation, 1912, A., ii, 377.

chemical composition and formation of enzymes. IV. The adaptation of a yeast to galactose, 1912, A., ii,

590.

Euler, Hans von, and Sixten Kullberg, temperature-coefficient of the decomposition of invertase, 1911, A., i, 409.

Euler, Hans von, and Sixten Kullberg, preparation of pure invertase, 1911, A., i, 825.

the mode of action of phosphatese, 1911, A., i, 1051; 1912, A., i, 148. chemical composition and formation of

enzymes. III., 1911, A., ii, 320. the behaviour of veast enzymes when

free and united to protoplasm, 1911, A., ii, 817.

Fuler, Hans von, and E. Lindberg, biochemical reactions in light. I., 1912, A., ii. 407.

Euler. Hans von, E. Lindberg, and K. Melander, invertase, 1910, A., i, 907. Euler, Hans von, and Gunnar Lundeq-

vist, fermentation with yeast, 1911, A., ii, 640.

Euler, Hans von, and Hermann Meyer. chemical composition and formation of enzymes. V. Formation of invertase, 1912, A., ii, 793.

chemical composition and formation of enzymes. VI. Acid formation by certain micro-organisms, 1912, A., ii, 970.

Euler, Hans von, and Ebba Nordenson, carrotene from carrots and the substances which accompany it, 1908, A., ii, 724.

Euler, Hans von, and Hjalmar Ohslen, inversion of sucrose in ultra-violet radiation, 1911, A., i, 524.

the influence of temperature on the action of phosphatese, 1912, A., i, 61.

the mode of action of phosphatese. II., 1912, A., i, 403.

Euler, Hans von, and Björn Palm, chemical composition and formation of enzymes. VII. Development of yeasts in various nutrient solutions, 1912, A., ii, 1201.

Euler, Hans von, E. Thorin, and D. Johansson, behaviour of carbohydratephosphoric acid esters in the animal body, 1912, A., ii, 788.

Euler, Hans von, and Beth of Ugglas, chemical composition and formation of enzymes, 1910, A., i, 345, 796.

hydrolysis and reaction velocity in mixtures of alcohol and water, 1910, A., ii, 25.

Hans von. Euler, See also (Mme.) Astrid Euler.

Eumorfopoulos, Nicholas, the boiling point of sulphur on the constant pressure air thermometer, 1908, A., ii,

Eury, J., detection of formalin in milk. 1904, A., ii, 687.

Eury, J., compounds of pyrazolones with mercury oxide, 1909, A., i, 57.

Euwen, C. See Ernst Cohen.

Euwes, Pieter Christiaan Jan, sulphonation of naphthalene; quantitative examination, 1909, A., i, 707.

Euwes, Pieter Christiaan Jan. See also

Arnold Frederik Holleman.

Evans, C. A. Lovatt, catalytic decomposition of hydrogen peroxide by the catalase of the blood, 1907, A., i, 456.

the amyloclastic property of saliva, 1912, A., ii, 573.

method for the determination of amyl-

oclastic activity, 1912, A., ii, 573. fate of secretin in pancreatic diabetes, 1912, A., ii, 787.

the gaseous metabolism of the heart and lungs, 1912, A., ii, 1063.

Evans, C. A. Lovatt. See also Edmond William Wace Carlier.

Evans, (Miss) Clare de Brereton, traces of a new tin-group element in thorianite, 1908, T., 666; P., 60.

Evans, (Miss) Clare de Brereton. See

also Otto Brill.

Evans, Edgar. See Otto Wallach.

Evans, Evan Jenkin. See Walter Makower.

Evans, John William, chrysotile from Cyprus, 1906, A., ii, 457.

Evans, Laming, serum from typhoid convalescents, 1903, A., ii, 674.

Evans, Nevil Norton, native arsenic from Montreal, 1903, A., ii, 300. chrysoberyl from Canada, 1905, A., ii,

Evans, Nevil Norton, and J. Austen Bancroft, gedrite from Canada, 1908, A., ii, 604.

Evans, Percy Edwin. See Ralph Eddowes Garrod and Humphrey Owen Jones.

Evans, Percy Norton, adsorption of dissolved substances, 1906, A., ii, 429.

Evans, Percy Norton, and Jennie Tilt, benzophosphide, 1910, A., i, 908.

Evans, Thomas, and William C. Fetsch, magnesium amalgam as a reducing agent, 1904, A., i, 984.

Evans, Thomas, and Harry Shipley Fry, reducing action of magnesium amalgam on aromatic nitro-compounds, 1904, A., i, 985.

Evans, William Charles, the distillation of mixtures of enantiomorphously related substances, 1910, T., 2233; P., 251.

the tertiary acidic and alkyl derivatives of d-camphorimide, 1910, T.,

2237; P., 251.

Evans. William Charles. Sec also Kennedy Joseph Previté Orton.

Evans, W. H. See Edward S. Edie. Walter Herbert, electrolytic preparation of titanous sulphate, 1905, A., ii, 169.

Evans, William Lloyd, behaviour of benzovlcarbinol towards alkalis and oxidising agents, 1906, A., i, 269.

Evans, William Lloyd, and Benjamin T. Brooks, oxidation of m-nitrobenzoylcarbinol, 1908, A., i, 338.

Evans, William Lloyd, and Edgar John Witzemann, oxidation of m-nitrobenzoylformaldehyde, 1911, A., i,

oxidation of propylene glycol. I. The action of alkaline permanganate giving carbonic, acetic, and oxalic acids, 1912, A., i, 743.

Evans, W. W. See Charles Lathron

Parsons.

Eve, Arthur Stewart, comparison of the ionisation produced in gases by penetrating Röntgen and radium rays, 1904, A., ii, 797.

secondary radiation caused by the 8and y-rays of radium, 1905, A.,

properties of radium in minute quantities, 1905, A., ii, 367.

absorption of the γ-rays of radioactive substances, 1906, A., ii, 259.

measurement of radium in minerals by the γ -radiation, 1906, A., ii, 593.

relative activity of radium and thorium, measured by the y-radiation, 1907, A., ii, 62.

ionisation by spraying, 1907, A., ii,

amount of radium emanation in the atmosphere near the earth's surface, 1908, A., ii, 7, 919.

changes in velocity in an electric field of the a-, B-, and secondary rays from radio-active substances, 1908, A., ii, 555.

secondary \gamma-rays due to \gamma-rays of radium-C, 1908, A., ii, 795.

amount of radium present in sea-water, 1909, A., ii, 633.

ionisation in the atmosphere, 1909, A., ii, 636.

primary and secondary y-rays, 1909,

A., ii, 783. the effect of dust and smoke on the

ionisation of air, 1910, A., ii, 479. the ionisation of the atmosphere due to radioactive matter, 1911, A., ii,

89.

Eve. Arthur Stewart, the amount of radium and radium emanation present in the water and gases of the Caledonia Springs, near Ottawa, 1911, A., ii, 846.

the number of ions produced by the β- and γ-rays from radium-C, 1911,

A., ii, 956.

the coefficient of absorption by air of the B-rays from radium-C, 1912, A.,

a comparison of the ionisation within closed vessels due to Röntgen and

γ-rays, 1912, A., ii, 885.

Eve, Arthur Stewart, and Douglas McIntosh, amount of radium present in typical rocks in the immediate neighbourhood of Montreal, 1907, A., ii, 729.

the influence of acids and salts on the amount of radium emanation liberated from a solution of radium, 1911,

A., ii, 841.

the radium contents of specimens from a deep boring at Beechville, Ontario,

1911, A., ii, 846.

Everatt. Reginald William, the effect of constitution on the optical activity of nitrogen compounds, 1908, T., 1225; P., 148.

Everatt, Reginald William, and Humphrey Owen Jones, the effect of constitution on the rotatory power of optically active nitrogen compounds. Part · III., 1908, T., 1789; P., 212.

Everatt, Reginald William. See also Kennedy Joseph Previté Orton.

Everding, Willibald. See Franz Sachs. Everest, Arthur Ernest, optical activity of the asymmetric atom, 1910, A., ii, 6.

the molecular configuration of 1-methyleyclohexylidene-4-acetic acid and of the oxime of cyclohexanone-4carboxylic acid, 1911, P., 285.

Everest, Arthur Ernest, and Hamilton McCombie, the formation of glyoxalines from acyl derivatives of aketo-β-anilino-aβ-diphenylethane, 1911, T., 1746; P., 209.

the effect of heat on a mixture of benzaldehydecyanohydrin and aniline, 1911, T., 1752; P., 218.

Evers, Fritz. See Carl Dietrich Harries. Evers. Norman. See George Davidson Elsdon.

Eversheim, P., measurement of normal lines in the helium spectrum, 1910, A., ii, 369.

measurements of the wave-lengths of normal lines in the iron spectrum, 1912, A., ii, 110,

Evesque, E. Verdier, and Bretin, toxic Hungarian haricots, 1907, A., ii, 912.

Evieux. See Lio Vignon.

Ewald, C. See Alexander Gutbier.

Ewald, Walther, oxydases in blood, 1907, A., ii, 184.

Ewan, Thomas, estimation of cyanates, 1904, A., ii, 371.

evanogen bromide, 1907, A., i, 115. estimation of sulphide in cyanides, 1909, A., ii, 263.

Ewart, Alfred James, supposed extracellular photosynthesis of carbon dioxide by chlorophyll, 1908, A., ii, 217.

Ewbank, (Miss) Elinor Katharine. Edward Charles Cyril Baly.

Ewers, Erich, polarimetric estimation or starch, 1906, A., ii, 57.

polarimetric estimation of starch in cereals, etc., 1908, A., ii, 543.

Ewers, P., radiations emitted polonium and radiotellurium, 1906, A., ii, 322.

Ewert, Richard, physiological action of copper-lime mixture on plants, 1906, A., ii, 387.

Ewing, T. See S. G. Lusby.

Ewins, Arthur James, the action of phosphorus pentachloride on the methylene ethers of catechol derivatives. Part V. Derivatives of protocatechuyl alcohol and protocatechuonitrile, 1909, T., 1482, P., 210.

narcissine: an alkaloid from the bulb of the common daffodil (Narcissus pseudonarcissus), 1910, T., 2406; P., 296.

colour reactions of adrenaline and allied bases, 1910, A., ii, 557.

the synthesis of 3-\beta-aminoethylindole,

1911, T., 270; P., 20. some derivatives of 4(or5)-methylglyoxaline, 1911, T., 2052; P., 259.

the synthesis of damasceninic acid (2-methylamino-3-methoxybenzoic acid); preliminary note, 1911, P., 277.

the constitution and synthesis of damascenine, the alkaloid of Nigella damascena, 1912, T., 544; P., 38.

the constitution of cytisine, the alkaloid of Cytisus laburnum. Part I. The synthesis of a-cytisolidine and of \(\beta\)-cytisolidine, 1912, P.,

Ewins, Arthur James, and Harold King, the synthesis of some new dimethyltetrahydroquinolines, 1912, P., 328.

Ewins, Arthur James, and Patrick Playfair Laidlaw, the synthesis of 3-B-aminoethylindole and its formation from tryptophan; preliminary note, 1910, P., 343.

the alleged formation of adrenaline from tyrosine, 1910, A., i, 411.

the fate of p-hydroxyphenylethylamine in the organism, 1910, A., ii,

Ewins, Arthur James, and Frank Lee Pyman, experiments on the formation 4(or -5)-β-aminoethylglyoxaline from histidine, 1911, T., 339; P., 45.

Ewins, Arthur James. See also George Barger.

Exner, Alfred, effect of poisons after adrenaline injections, 1904, A., ii, 276.

Exner, Franz F., rapid precipitation of metals in the electrolytic way, 1903, A., ii, 756.

Exner. Franz F., and Eduard Hascheck, spectrum analysis, 1907, A., ii, 209.

Exner, Franz F. See also Edgar Fahs

Eydman, Frans Hendrick, jun., colorimetry and a colorimetric method for determining the dissociation constant of acids, 1905, A., ii, 688. absorption-spectra. III., 1911, A., ii 237.

See Volkmar Kohls-Evdmann, E. chütter.

Eyerman, John, mineralogical notes, 1906, A., ii, 774.

Eyk, Cornelis van, equilibria in the systems: TINO3-KNO3, TINO3-AgNO3, and TINO3-NaNO3, 1905, A., ii, 444.

Eyk, J. van, presence of nitrite and in well-water and its ammonia signification, 1908, A., ii, 983.

Eyken, Peter Anton August Frederik, rhubarb cultivated in Berne (Rheum palmatum B-tanguticum and Rheum officinale baillon), 1904, A., ii, 435.

presence of guaiol in an odoriferous wood from New Guinea, 1906, A., i, 295.

essence of the wood of Gonystylus miquelianus, 1906, A., i, 298. Eyken, Peter Anton August Frederik.

See also Alexander Tschirch.

Eykman, Johan Frederik, hydrides of cyclic hydrocarbons, 1904, A., i, 25. condensation of acetophenone with ethyl malonate, 1904, A., i, 589.

action of zinc chloride on acid esters of phenols; acetylcresols, 1904, A., i, 664.

326

Eykman, Johan Frederik, synthesis of aromatic fatty acids by means of lactones, 1904, A., i, 669.

boiling-point apparatus, 1904, A., ii,

158, 537.

synthesis of aromatic substituted homosuccinic acids by means of paraconic acids, 1905, A., i, 528.

hydrogenation of compounds containing the carboxyl group by the method of Sabatier and Senderens, 1907, A., i, 378.

synthesis of some aromatic acids,

1908, A., i, 22, 794.

refractometric researches, 1908, A., ii, 1; 1909, A., i, 718; 1912, A., ii, 310.

Eykman, Johan Frederik, F. Bergema, and J. Th. Henrard, action of zinc chloride on acid esters of phenols. II.2:4-Dihydroxy-1:5-diacetylbenzene, 1905, A., i, 359.

Eynon, Lewis, and Joseph Henry Lane, estimation of furfuraldehyde by means of Fehling's solution, 1912, A., ii,

305.

Eynon, Lewis, See also Arthur Robert Ling and Raphael Meldola.

Eyre, John Vargas. See Henry Edward

Armstrong and Raphael Meldola. Eyre, S. W. H., preparation of nutroseagar, 1904, A., ii, 363.

Eyssen, Hermann. See Max Guthzeit. Eyster, J. A. E., and H. E. Jordan, intravenous injection of pineal extracts, 1911, A., ii, 215.

Eyster, J. A. E. See also H. E. Jordan.

F.

Faber, Paul, colorimetric estimation of titanium in the presence of iron, 1907, A., ii, 305.

nature of sexavalent titanium, 1907,

A., ii, 557.

Fabinyi, Rudolf, exact estimation of nitrogen in certain organic com-

pounds, 1911, A., ii, 534.

apparatus for determining the melting point and molecular weight of organic compounds, 1912, A., ii, 329.

the colorimetric estimation of colchicine, 1912, A., ii, 503.

the estimation colorimetric morphine, 1912, A., ii, 504.

Fabinyi, Rudolf, and Ludwig Förster, changes in the properties of elements, especially chlorine, 1906, A., ii, 435.

Fabinyi, Rudolf, and Tiberius Széki. condensation of catechol ketones, 1905, A., i, 591.

condensation of pyrogallol with acetone and with methyl ethyl

ketone, 1905, A., i, 888.

condensation products of asaryl aldehyde, 1906, A., i, 422.

action of magnesium organic compounds on asaryl aldehyde, 1906,

A., i, 424.

action of nitric acid and of nitrous acid on asaronic acid, 1907, A., i. 45.

dinitro- and dibromo-2:2'-dihydroxydibenzylideneacetone, 1907, A., i,

transformation of asaryl an easv aldehyde into a triphenylmethane derivative, 1910, A., i, 837.
a nitroso-compound of dimethoxy-

phenol, and its derivatives, 1911,

A., i, 856.

Fabris, Ugo. See Maurizio Padoa.

Fabry, Charles, satellite rays in the cadmium spectrum, 1904, A., ii, 305. the spectrum of calcium fluoride in the

electric arc, 1904, A., ii, 601. spectra of the fluorides of the alkaline earths in the electric arc, 1905, A.,

ii, 217.

Fabry, Charles, and Henri Buisson, measurement of the wave-lengths of the iron spectrum for the establishment of a system of spectroscopic standards, 1906, A., ii, 641. presence of spark lines in arc spectra,

1908, A., ii, 334.

the mass of the particles which emit the two spectra of hydrogen, 1912, A., ii, 613.

Fabry, Charles. See also Henri Buisson. Facchinato, Arnaldo, degree of acidity and other analytical data of various wheaten flours, 1903, A., ii, 393.

Fachini, S., and G. Dorta, the fatty acids, 1910, A., i, 707; 1912, A., i,

Fagerlind, Oscar. See Peter Klason. Fages y Virgili, Juan, estimation of arsenic as magnesium pyroarsenate, 1905, A., ii, 652, 858.

action of sulphides on nitroprussides,

1906, A., i, 637.

detection and estimation of chlorates, 1909, A., ii, 179.

application of urine to the detection of oxidising substances, 1909, A., ii,

detection and estimation of chlorates in urine, 1909, A., ii, 433,

Fages y Virgili, Juan, toxicology of chlorates, 1909, A., ii, 753.

analysis of refined nitres, gunpowders, and explosives containing chlorates,

1910, A., ii, 347.

catalytic action of silver salts [on chlorates in presence of aniline hydrochloride], 1910, A., ii, 1107.

Fagetti, F. See Enos Ferrario.

Fahr, George, action of potassium chloride on muscular contraction, 1907, A., ii. 978.

the sodium of frog's skeletal muscle, 1909, A., ii, 330.

Fahrion, Wilhelm, colophony, 1904, A., i, 332.

the composition of linseed oil and the estimation of the saturated fatty acids, 1904, A., ii, 217.

estimation of saturated fatty acids,

1904, A., ii, 788.

drying process of linseed oil, 1905, A., i, 10.

fat analysis, 1906, A., ii, 402; 1907,

A., ii, 514. autoxidation of colophony, 1907, A.,

i, 329. a liquid resin, 1909, A., i, 317.

oleic acid, 1909, A., i, 357. Failyer, George Henry, barium in soils,

1911, A., ii, 146. Henry. See also Failver. George Frank Kenneth Cameron and Oswald

Fainberg, Salomon, and Stanislaus von Kostanecki, a second synthesis of

luteolin, 1904, A., i, 682.

Fairchild, John G., accurate volumetric estimation of phosphoric acid in phosphate rock, 1912, A., ii, 488.

some new features in the electrolytic estimation of lead, 1912, A., ii, 688. Fairhall, L. T., and Philip Bouvier

Hawk, studies in water drinking. XII. The allantoin output of man as influenced by water ingestion, 1912, A., ii, 465.

Fairlie, Dorian Macefield. See John

Norman Pring.

Fairlie, Frank Walter. See Thomas Stewart Patterson.

Faivre, P. See Pierre Genvresse.

Fajans. Kasimir, specific stereochemical behaviour of catalysts, 1910, A., ii, 599, 1052,

the branching of the radium disintegration series, 1912. A., ii, 824.

Fajans, Kasimir, and Walter Makower, the complex nature of radium-C. 1911, A., ii, 569.

Fajans, Kasimir, and Walter Makower. the growth of radium-C from radium-B, 1912, A., ii, 220.

Fajans, Kasimir. See also Georg Bredig

and H. G. J. Moseley.

Faktor, Franz [Josef], reactions with sodium thiosulphate, 1905, A., ii, 452, 812.

some reactions with magnesium, 1905,

A., ii, 455.

estimation of gold and platinum by means of magnesium, 1905, A., ii,

Falciola, Pietro, cryoscopic investigations on solutions of gases in liquids.

1908, A., ii, 1015.

ammonium salts of fatty acids (oleic, palmitic, stearic), and the separation of the saturated fatty acids (palmitic and stearic) from oleic acid. I.,

1911. A., i, 5.

separation of the liquid fatty acids (unsaturated) from the solid fatty acids (saturated) in natural mixtures of fatty acids, and the ammonium salts of some fatty acids. II., 1911, A., i, 174.

separation of saturated fatty acids (palmitic and stearic) from oleic

acid, 1911, A., ii, 77.

cryoscopic anomalies of elements of the fourth periodic group, 1911, A., ii, 370.

Falciola, Pietro, and Mario Corridi, estimation of the tannin in tanning liquids by means of the Zeiss immersion refractometer, 1911, A., ii, 163.

Falciola, Pietro. See also Felice Garelli. Falck, E., theoretical determination of the vapour pressure of solid and liquid carbon dioxide, 1908, A., ii, 662.

Falck, E. See also Ossian Aschan. Falcke, Victor. See Rudolf Schenck. Falckenstein, Kurt Vogel von, the equil-

ibrium of the Deacon process, 1907, A., ii, 19, 538.

the Deacon process, 1909, A., ii, 136. dissociation of hydrogen bromide and hydrogen iodide at high temperatures, 1910, A., ii, 27, 396.

Falco, Ferdinand, separation of manganese and chromium, 1910, A., ii, 76.

Falco, Ferdinand. See also Max Busch and Alexander Gutbier.

Falk, Franz. See Otto Kühling.

Falk, Fritz, the chemical composition of peripheral nerves, 1908, A., ii, 965. kephalin, 1909, A., i, 275.

Falk, Kaufman George, ignition temperatures of hydrogen-oxygen mixtures,

1907, A., ii, 18.

Falk. Kaufman George, calculation of some chemical equilibria, 1907, A., ii, 537.

ignition temperature of gaseous mixtures. II., 1907, A., ii, 946.

change in refractive index with tem-I. and II., 1909, A., ii, perature. 197. 629.

transference experiments with thallous sulphate and lead nitrate, 1911, A.,

ii, 90.

the electron conception of valence. II. The organic acids, 1911, A., ii,

711; 1912, A., ii, 930.

Kaufman George, and John Maurice Nelson, stereochemistry of indigotin, 1908, A., i, 107.

electron conception of valency, 1911,

A., ii, 104.

enzyme action. I. Some experiments with the castor bean lipase, 1912,

A., i, 522.

enzyme action. II. Hydrolytic action of some amino-acids and polypeptides on certain esters, 1912, A., i, 593.

Falk, Kaufman George, and Campbell Easter Waters, action of dry hydrogen chloride dissolved in anhydrous benzene on dry zinc, 1904, A., ii,

Falk, Kaufman George. See also John Maurice Nelson, Arthur Amos Noyes, and Johannes Thiele.

Falk, Leopold, basic lead carbonates, 1910, A., ii, 1067.

Falk, Milton J. See Edmund Howd

Miller and Henry Clapp Sherman. Falkner, Ernest Basil. See Charles

Weizmann.

Fallada, Ottokar, composition of beet leaves and heads stored by the Rosam process, 1904, A., ii, 144. composition of seed-beet shoots and of

beet seedlings, 1906, A., ii, 881. estimation of phosphoric acid by method, 1908, A., ii, Lorenz's

983.

Fallada, Ottokar. See also Friedrich

Strohmer.

Falloise, Arthur, influence of hydro-chloric acid introduced into the intestine on the secretion of bile, 1904, A., ii, 58.

action of chloral on the secretion of

bile, 1904, A., ii, 357.

Falta, Wilhelm, and Alfred Gigon, the influence of nitrogen-free sources of energy on the rate of protein decomposition by the organism, 1908, A., ii, 961.

Falta, Wilhelm, F. Grote, and Rud, Staehelin, metabolic and energy value of different foods, 1907, A., ii, 486.

metabolism in dogs without a pancreas,

1907. A., ii, 796.

Falta, Wilhelm, and Leo Langstein, production of homogentisic acid from phenylalanine, 1903, A., ii, 496.

Falta, Wilhelm, and C. T. Noeggerath. feeding with artificial nutriment, 1906,

A., ii, 102. Falta, Wilhelm, and James Lyman Whitney, metabolism, nitrogenous and inorganic, in pancreatic diabetes in dogs, 1908, A., ii, 213.

Falta, Wilhelm. See also Emil Abder-

halden and Otto Neubauer.

Faltis, Franz, opium alkaloids and the constitution of berberine and morphine, 1906, A., i, 979.

constitution and derivatives of berberine, 1910, A., i, 698.

alkaloids of pareira root, 1912, A., i,

796. See also Rudolf Weg-Faltis, Franz. scheider.

Fandre, A. See Timothée Klobb.

Fanto, Richard, estimation of glycerol in soap-lyes, 1903, A., ii, 515. silver iodide-nitrate and silver iodide,

1903, A., ii, 648.

theory of saponification, 1904, A., i, 843.

estimation of glycerol in fats, 1904, A., ii, 451.

Fanto, Richard, and Milan Josef Stritar, theory of saponification, 1907, A., i, 277; 1908, A., i, 499.

clearing of emulsions, 1910, A., ii, 600. Fanto, Richard. See also Milan Josef

Stritar and Simon Zeisel.

Faraday, Michael, presentation of bust of, by Professor Emerson Reynolds, 1908, P., 233.

Farbenfabriken vorm. Friedrich Bayer & Co., hydroxybenzyl haloids from negatively substituted phenols, 1903, A., i, 338.

preparation of alkyloxymethyl esters, salicylic acid, 1903, A., i, 485.

tertiary bases of the anthraquinone series, 1903, A., i, 498.

preparation of p-chloronitro- and pbromonitro-anthraquinones, 1903, A., i, 498.

menthyl glycollate, 1903, A., i, 501. preparation of atropinium alkyl nitrates, 1903, A., i, 512.

salicylyl derivatives of the cinchona alkaloids, 1903, A., i, 513.

Farbenfabriken vorm. Friedrich Bayer & Co., [methylated indoles and their sulphonic acids], 1903, A., i, 516.

asymmetric alkylated diaminoacridine

dyes, 1903, A., i, 518.

preparation of theophylline and its alkali-derivatives, 1903, A., i, 527. compounds of nucleic acid and its derivatives with formaldehyde, 1903,

A., i, 543.

preparation of alkaline additive produets of aromatic polyhydroxycompounds, 1903, A., i, 558.

preparation of derivatives of anthraquinone, 1903, A., i, 564, 640; 1910, A., i, 396; 1911, A., i, 884, 1026; 1912, A., i., 140, 141, 1020.

preparation of a vellow acridine dve.

1903, A., i, 584.

4:4'-diaminodiphenylcarbamidedisulphonie acid, 1903, A., i, 584.

nitro-derivatives of a-arylaminoanthraquinones, 1903, A., i, 770.

preparation of alkylaminoanthraquinones, 1903, A., i, 839; 1904, A., i, 434; 1907, A., i, 224; 1909, A., i, 243.

preparation of hydroxyanthraquinones, 1904, A., i, 176.

preparation of 4:5-diamino-2:6-dihydroxypyrimidine, 1904, A., i, 195. alkyloxyalkyl esters of salicylic acid,

1904, A., i, 318.

halogen derivatives of tertiary bases of the anthraquinone series, 1904, A., i, 325.

compounds of anthraquinone with aromatic amines, 1904, A., i, 326.

oxidation products of quinizarin, 1904, A., i, 327.

preparation of \(\psi\)-ionone, 1904, A., i, 425.

condensation products from anthraquinone- 8-sulphonic acid and primary aromatic amines, 1904, A., i, 433.

1-nitro-5- and -8-aminoanthraquinones, 1904, A., i, 434.

preparation of formyl-4:5-diamino-2:6dihydroxy-1:3-dimethylpyrimidine,

1904, A., i, 454. preparation of anthraquinone-a-sul-

phonic acid, 1904, A., i, 513. 3-amino-6-hydroxytoluene-w-sulph-

onic acid, 1904, A., i, 579. preparation of methylenecitric acid, 1904, A., i, 649; 1908, A., i, 604.

trisazo-dyes from 2:4-diaminoacetanilide, 1904, A., i, 700.

[benzorhodamines; basic dyes of the triphenylmethane series], 1904, A., i, 700,

Farbenfabriken vorm. Friedrich Baver & Co., preparation of trichloroisopropyl alcohol, 1904, A., i, 794.

cyanoacetylcyanamide, 1904, A., i, 800.

amino-derivatives of hydroxybenzyl alcohols, 1904, A., i, 810.

bromo-derivatives of arylaminoanthraquinones], 1904, A., i, 813.

introduction of amine residues into hydroxyanthraquinones, 1904, A., i, 814.

a-derivatives of geraniol, 1904, A., i.

842; 1905, A., i, 147. acetyl derivative of cellulose, 1904, A., i, 853.

sulphonic acids of p-diamineanthrarufin dialkyl ethers], 1904, A., i,

oxazine derivatives of anthraquinone, 1904, A., i, 934.

preparation of hydroxy-derivatives of 1-amino- and 1-alkylamino-anthraquinone, 1904, A., i, 1032.

[alkyl ethers of o-tolylcarbinol], 1905,

A., i, 128.

preparation of methylaminoanthraquinones, 1905, A., i, 145.

sulphonic acids of p-aminohydroxyanthraquinones, 1905, A., i, 146. a new a-sulphonic acid of purpurin,

1905, A., i, 146.

derivatives. 2-alkyloxypyrimidine 1905, A., i, 159.

thio-derivatives of pyrimidine, 1905, A., i, 245.

preparation of aldehydes, 1905, A., i, 355.

disulphonic acids of anthraquinone, 1905, A., i, 361.

nitro-derivatives of alkylaminoanthra-

quinones, 1905, A., i, 361. methyl ethers of hydroxyanthraquinones, 1905, A., i, 362.

preparation of m-tolvlsemicarbazide. 1905, A., i, 383, 949; 1906, A., i, 459.

1:2:5-trihydroxyanthraquinone, 1905, A., i, 532.

dyes from quinolinium compounds, 1905, A., i, 548.

2:4-di-imino-6-hydroxy-5:5-dialkylpyrimidines, 1905, A., i, 671.

di-iminothiopyrimidine and its alkyl derivatives, 1905, A., i, 671.

[azine derivatives of anthraquinone], 1905, A., i, 720; 1907, A., i, 1085. [1:4-dibromo-2-aminoanthraquinone],

1905, A., i, 797.

aryl ethers of anthraquinone derivatives, 1905, A., i, 797.

Farbenfabriken vorm. Friedrich Bayer & Co., 2-bromo-a-aminoanthraquinone, 1905, A., i, 910.

elimination of the sulpho-group from anthraquinone derivatives, 1905,

A., i, 911.

compounds of azines of the anthraquinone series [with formaldehyde], 1905, A., i, 946.

triacetylcellulose, 1906, A., i, 6.

vellow disazo-dyes, 1906, A., i, 121. blue and green anthracene dyes, 1906, A., i, 293.

preparation of aminohydroxyanthraquinonesulphonic acids, 1906, A., i. 293.

preparation of 1:4:8-trihydroxyanthraquinone, 1906, A., i, 294.

azo-dyes from aminoanthraquinonesulphonic acids, 1906, A., i, 323.

[1-hydroxy-4-diazoanthraquinone],

1906, A., i, 323.

benzyl isovalerate, 1906, A., i, 498. preparation of 5:5-dialkylbarbituric acids, 1906, A., i, 461, 538, 703, 704, 987; 1907, A., i, 972, 1084; 1908, A., i, 292.

preparation of amino-, alkylamino-, and arylamino-anthraquinones and their derivatives, 1906, A., i, 519;

1907, A., i, 224, 942.

preparation of hydroxyanthraquinonesulphonic acids, 1906, A., i, 519, 866.

acyl derivatives of cyanamide and carbamide, 1906, A., i, 634. preparation of tertiary alcohols, 1906,

A., i, 660.

anthraquinone-a-sulphonic acids, 1906, A., i, 677.

preparation of the carbamates of the nitroaminoanthraquinones, 1906, A., i, 677.

a new derivative of anthraquinone, 1906, A., i, 678.

[sulphonation of a-hydroxyquinizaringreen], 1906, A., i, 679.

preparation of dialkylbarbituric acids and dialkyloxypyrimidine deriva-

tives, 1906, A., i, 704. conversion of anthracene derivatives into azipes and dihydroazines, 1906,

A., i, 707. preparation of the chloride of methionic

acid, 1906, A., i, 787. preparation of the urethanes of polynitroaminoanthraquinones, 1906, A., i, 863.

bluish-green colouring matters of the anthracene series, 1906, A., i, 867.

Farbenfabriken vorm. Friedrich Bayer & Co., preparation of p-nitro-derivatives of the a-hydroxyanthraquinones, 1906, A., i, 868.

preparation of 1:2:2':1'-anthrazine,

1906, A., i, 868.

[action of alkyl sulphates and sulphonates on quinoline bases], 1906, A., i, 885.

preparation of an oxidation product of alizarin-blue, 1906, A., i, 889.

preparation of 4:6-dioxy-2-thiopyrimidine and its 5-alkyl substituents, 1906, A., i, 893.

[hydroxynaphthiminazoles and their azo-derivatives], 1906, A., i,

preparation of pyrazoles from anthraquinone derivatives, 1906, A., i, 904.

preparation of azines of the anthraquinone series, 1906, A., i, 905.

preparation of amino-alcohols, 1906, A., i, 936.

preparation of diamino-alkyl esters, 1906, A., i, 936.

production of alkali nitrites, 1906, A., ii, 611.

preparation of cyanoacetylcarbamide and its alkyl and amyl derivatives, 1907, A., i, 195.

[dianthraquinonylamine], 1907, A., i, 226.

preparation of 4:6-di-imino-5:5-dialkyl-2-cyanoiminopyrimidines, 1907, A., i, 361.

hydrogen iodide additive compounds of oleic, elaidic, and brassidic acids,

1907, A., i, 380.

[4:4'-diaminodi-p-phenoxybenzene and its azo-derivatives], 1907, A., i, 568.

preparation of 8-arylamino-a-naphtholsulphonic acids, 1907, 914.

preparation of aromatic monoacetyltriamines, 1907, A., i, 977.

[preparation of salts of iodinated fatty acids], 1907, A., i, 1002; 1909, A., i, 204.

preparation of iodobehenie acid, 1907, A., i, 1002.

preparation of bromo-aliphatic acids, 1907, A., i, 1003.

preparation of methylenecitryl haloids, 1907, A., i, 1006.

preparation of methylenecitrylsalicylic acid, 1907, A., i, 1045.

preparation of 4-benzoylaminoaceto-1:2-dialkyloxybenzenes, 1907 A., i, 1049.

Farbenfabriken vorm. Friedrich Bayer & Co., preparation of 1:2:5-trihydroxyanthraquinone and 1:2:5-trihydroxyanthraquinone-3-sulphonic acid, 1907, A., i, 1057.

preparation of coeroxonium and coerthionium derivatives, 1907, A., i, 1067. colouring matters of the indanthren

series, 1907, A., i, 1084.

magnesium, calcium and strontium salts of the higher brominated fatty acids, 1908, A., i, 122.

the addition of hydrogen iodide to the unsaturated fatty acids, 1908, A., i,

123

[4-chloro-5-nitro-2-aminophenol and its diazo-oxide], 1908, A., i, 230.

preparation of 3-aminoacetylcatechol, 1908, A., i, 262.

preparation of mixed alkyl aromatic ethers, 1908, A., i, 263.

preparation of the alkyl esters of the higher iodated fatty acids, 1908, A., i, 310.

soluble silver compounds of nucleic acids and their derivatives, 1908, A., i, 376.

preparation of methylenecitryloxytoluic acids, 1908, A., i, 421.

preparation of alkyloxyacetyl derivatives of the hydroaromatic alcohols, 1908, A., i, 429.

preparation of anthraquinone derivatives containing nitrogen, 1908, A., i, 456; 1910, A., i, 396.

preparation of hydroxyalkyl derivatives of xanthine bases, 1908, A., i, 475, 703.

preparation of soluble and stable additive compounds of thiocarbamide and silver salts, 1908, A., i, 613.

preparation of 4-chloro-2-aminophenyl-5-sulphonic acid, 1908, A., i, 629.

preparation of anthracene derivatives containing nitrogen, 1908, A., i, 699, 1010.

[preparation of 3-chloro-4-amino-dimethylaniline], 1908, A., i, 779.

preparation of succinylsalicylic acid and its methyl homologues, 1908, A., i, 798.

the replacement of a sulphonic group by hydroxyl in anthraquinone-αsulphonic acid and its derivatives, 1908, A., i, 807.

preparation of 1:5- and 1:8-hydroxyanthraquinonesulphonic acids, 1908, A., i, 807.

preparation of p-dibromoanthrarufinand dibromochrysazin-disulphonic acids, 1908, A., i, 808. Farbenfabriken vorm. Friedrich Bayer & Co., preparation of diaminoanthrarufindisulphonic acid, 1908, A., i, 808.

preparation of the anhydrides of acylsalicylic acids, 1908, A., i, 984.

preparation of a derivative of gallocyanin, 1908, A., i, 1001.

preparation of ethyl glyoxylate by the reduction of ethyl oxalate, 1909, A., i, 204.

preparation of anthranol and its derivatives from the corresponding anthraquinones by reduction with metals and acid, 1909, A., i, 225.

preparation of halogenated anthraquinones, 1909, A., i, 242.

replacement of halogen by hydroxyl in substituted anthraquinones, 1909, A., i, 242.

preparation of thiocyanogen derivatives of anthraquinone, 1909, A., i, 244.

the preparation of mixed carbonates from hydroaromatic alcohols and ethyl salicylate, 1909, A., i, 244.

preparation of santalyl ethers, 1909, A., i, 247.

preparation of santalyl haloids, 1909, A., i, 247.

[preparation of pyridones of the anthracene series], 1909, A., i, 256.

preparation of amino-, alkylamino-, or arylamino-anthrapyridones, 1909, A., i, 263.

[production of iminazoles from 1:8-naphthylenediamine], 1909, A., i, 263.

preparation of o-diaminopyrimidines containing halogenated acyl groups, 1909, A., i, 270.

preparation of 5-oximino-4-iminopyrimidine derivatives, 1909, A., i, 270.

production of azoxy- and azo-compounds of the benzene series, 1909, A., i, 272.

preparation of alkyl- and aryl-aminoanthraquinones, 1909, A., i, 310.

preparation of O-acetyl derivatives of the aminophenols and aminonaphthols, 1909, A., i, 339.

preparation of mercaptans of the anthracene series, 1909, A., i, 496.

preparation of mercaptans of the anthraquinone series, 1909, A., i, 496.

[preparation of anthrapyridones], 1909, A., i, 524.

preparation of 2-alkyloxy-1-alkylpyrimidines, 1909, A., i, 527. Farbenfabriken vorm. Friedrich Bayer & Co., preparation of nitro-1:8naphthasultamsulphonic acid and 2:4-dinitro-1:8-naphthasultam, 1909, A., i, 711.

preparation of phthalimidocatechol ethers, 1909, A., i, 712.

preparation of pyrimidine derivatives, 1909, A., i, 746. preparation of basic purine derivatives,

1909, A., i, 746.

preparation of alkyl methylenecitrates, 1909, A., i, 880.

preparation of isopropyl p-aminobenzoate, 1909, A., i, 921.

preparation of dithioanthraquinones, 1909, A., i, 941.

[preparation of acyl-3-nitro-p-phenylenediamines], 1909, A., i, 964.

preparation of halogenated nitroanthraquinones, 1910, A., i, 49.

[preparation of thioglycine derivatives of anthraquinone], 1910, A., i, 49.

preparation of xanthine and guanine derivatives containing substituents in position 8, 1910, A., i, 78.

preparation of salts of dibromobehenic acid, 1910, A., i, 215.

of dianthraquinonylpreparation phenylenediamine, 1910, A., 281.

preparation of \(\beta\)-methyltetramethylenediamine, 1910, A., i, 303.

preparation of halogen and aminoderivatives of aromatic ethers, 1910, A., i, 312.

preparation of aminoacylcatechols,

1910, A., i, 313.

[preparation of aldehyde derivative of hydroxy-aromatic acids], 1910, A., i, 321.

preparation of sulphur derivatives of anthraquinone, 1910, A., i, 325.

preparation of sulphur and nitrogen derivatives of anthraquinone, 1910, A., i, 338.

[preparation of amino-derivatives of aromatic ethers], 1910, A., i, 373.

preparation of isobutyl p-aminobenzoate, 1910, A., i, 381.

preparation of salts of m-aminobenzaldehyde in the presence of anhydroo-aminobenzaldehyde, 1910, A., i, 390.

preparation of halogen anthraquinonesulphonic acids, 1910, A., i, 396.

[preparation of aldehyde condensation products], 1910, A., i, 428.

preparation of substituted halogen iminodialkylpyrimidines, 1910, A., i, 444.

Farbenfabriken vorm. Friedrich Bayer & Co., preparation of anthrapyrimidines and of anthrapyrimidones, 1910, A., i, 445; 1911, A., i, 167.

preparation of \(\beta\)-methyladipic acid, 1910, A., i, 650.

preparation of methylene ketones, 1910, A., i, 652.

preparation of dinitronaphthylpyridinium derivatives], 1910, A., i, 696. preparation of keto-alcohols, 1910, A.,

i, 706.

preparation of derivatives of 88-dialkylpropionic acids, 1910, A., i, 707.

preparation of aromatic alkyl ethers.

1910, A., i, 726.

preparation of aminoanthraquinone thio-ethers], 1910, A., i, 750. [preparation of benzoylaminoanthra-

quinones], 1910, A., i, 751. preparation of phenoxozone, 1910, A.,

i. 7.64.

preparation of formyl derivatives of morphine alkaloids, 1910, A., i, 765.

preparation of a dihydroxycarbazoledisulphonic acid, 1910, A., i. 774.

preparation of pyrimidine derivatives containing mercury, 1910, A., i, 804. preparation of a double salt of zinc hyposulphite with sodium sulphite, 1910, A., ii, 411.

preparation of octan-yn-dione-a-ol and its homologues, 1911, A., i, 102.

preparation of octendione and its homologues, 1911, A., i, 114.

preparation of a-bromo-a-ethylbutyrylcarbamide, 1911, A., i, 118.

preparation of santalyl alkylaminoacetates, 1911, A., i, 137.

preparation of derivatives of \$\beta\$-dialkylpropionic acids, 1911, A., i, 259.

preparation of p-hydroxy-β-phenylethylamine and its derivatives, 1911, A., i, 437.

preparation of nitrothioxanthones and their derivatives, 1911, A., i, 450.

[preparation of diaminocarboxydiphenyl ethers], 1911, A., i, 456. [preparation of triphenylmethane de-

rivatives], 1911, A., i, 458.

preparation of chloro-substitution products of anthraquinones and of halogenated anthraquinones, 1911, A., i, 466.

preparation of methoxyanthraquinones and their derivatives, 1911, A., i,

the halogenation of indanthren, 1911, A., i, 504.

Farbenfabriken vorm. Friedrich Bayer & Co., preparation of azines, 1911. A., i, 504.

preparation of tetramethylenediamine [αδ-diaminobutane], 1911, A., i,

526.

preparation of soluble compounds hydroxymercuricarboxylic acids, 1911, A., i, 594.

preparation of olefine alcohols of the general formula OH . CHMe . CR; CH, 1911, A., i, 598.

preparation of quaternary ammonium bases, 1911, A., i, 609.

preparation of hydroxyphenylethyldialkylamines, 1911, A., i, 629.

preparation of hydroxyphenylethylamines and their alkyl ethers, 1911, A., i, 629.

preparation of sulphaminobenzoylaminonaphthols and their sulphonic acids, 1911, A., i, 630.

preparation of phenyl esters of iodoparaffin acids, 1911, A., i, 630.

preparation of mixed formic acetic esters of aloins, 1911, A., i, 659. preparation of formyl derivatives of

morphine alkaloids, 1911, A., i, 668.

preparation of esters of cinnamic acid, 1911, A., i, 858.

preparation of m-hydroxy-\beta-phenylpropionic acid alkyl ethers and their salts, 1911, A., i, 865.

[preparation of anthracene derivatives].

1911, A., i, 903.

[preparation of methylindanthren],

1911, A., i, 925.

preparation of iminoalkyl derivatives of azimino-o-toluidides, 1911, A., i, 928.

the partial or total replacement of halogens by hydrogen in polyhalogenated aminoanthraquinones, 1911, A., i, 995.

preparation of substances resembling caoutchouc, 1911, A., i, 1003.

preparation of 1-aryl, alkyl, or alkylaryl substituted hydrastinines, 1911, A., i, 1015.

preparation of nuclear substituted mercury derivatives of halogenated or nitrated phenols, or halogenated

nitrophenols, 1911, A., i, 1056. preparation of benzoylaminohydroxyanthraquinones, 1912, A., i, 118.

preparation of epichlorohydrin from dichlorohydrin and alkalis, 1912, A., i, 155.

preparation of bromoacylisocarbamide ethers, 1912, A., i, 169

Farbenfabriken vorm. Friedrich Baver & Co., preparation of cinnamic esters of polyatomic alcohols, 1912, A., i,

preparation of o-aminodianthraquinonylamine types of compounds, 1912. A., i, 198.

preparation of hydrocarbons with two double and one triple linking, 1912, A., i, 329.

preparation of methyleneacetone [A abuten-y-one] and its derivatives, 1912, A., i, 414.

preparation of bromo-a-ethylbutyrylcarbamide, 1912, A., i, 422.

preparation of triphenylmethane derivatives], 1912, A., i, 459.

preparation of pentachlorobenzaldehyde, 1912, A., i, 473.

preparation of triarylmethane derivatives], 1912, A., i, 474.

preparation of acylarylaminonaphtholsulphonic acids, 1912, A., i, 552. preparation of homopiperonylamine, 1912, A., i, 553.

preparation of glycol esters, 1912, A.,

i, 554, 973.

preparation of carboxylic acid esters containing mercury and the products of their hydrolysis, 1912, A., i, 596, 754.

preparation of By-dimethyl-Day-butadiene, 1912, A., i, 741.

preparation of isoprene, 1912, A., i, 742.

preparation of erythrene and isoprene, 1912, A., i, 742, 821.

preparation of derivatives of 3-maminophenylacetyl-5-formyldiaminobenzoic acid], 1912, A., i, 768.

preparation of amides, carbamides, or esters of cinnamic acids containing iodine in the side-chain. their homologues, and substitution products, 1912, A., i, 772.

preparation of compounds from alkylarylbarbituric acids and cinchona alkaloids, 1912, A., i, 798.

preparation of aminobenzoyl pounds, 1912, A., i, 856. com-

preparation of a-bromo-a-ethylbutyrylcarbamide, 1912, A., i, 953.

preparation of amides and carbamides of higher bromo- or iodo-fatty acids, 1912, A., i, 954.

preparation of di- and poly-hydroxybenzene derivatives, 1912, A., i,

preparation of acids containing an aryl group in the a-position, 1912, A., i, 974.

Farbenfabriken vorm. Friedrich Bayer & Co., preparation of derivatives of a-aryl acids, 1912, A., i, 974.

preparation of dihalogenated nitroanthraquinones, 1912, A., i, 995. preparation of arylaminoanthraquin-

one derivatives, 1912, A., i, 995. preparation of substituted 2:3-di-

phenylquinoline-4-carboxylic acid, 1912, A., i, 1018.

preparation of pyrazolone derivatives in the benzene series containing a free hydroxyl group, 1912, A., i,

preparation of derivatives of barbituric acid, 1912, A., i, 1024, 1025.

preparation of mono- and di-alkylbarbituric acids, 1912, A., i, 1025. Farbwerke vorm. L. Durand, Huguenin

& Co., [action of formaldehyde on gallocyanin], 1906, A., i, 873.

Farbwerke vorm. Meister, Lucius, & Brüning, preparation of anilinoacetonitrile and its derivatives, 1903, A., i, 475.

phthalylhydroxylamic acid, 1903,

A., i, 491.

preparation of a cyclogeraniolanehydroxycarboxylic acid, 1903, A., i, 502.

preparation of alkyl and aryl derivatives of chloroaminofluoran, 1903, A., i, 509.

acyl derivatives of aminocaffeine, 1903,

A., i, 512.

compounds of dimethylaminophenyldimethylpyrazolone with camphoric acid, 1903, A., i. 530.

separation of glycine and its homologues from inorganic compounds,

1903, A., i, 607.

preparation of a cyclogeraniolenecarboxylic acid, 1903, A., i, 627.

electrolytic preparation of azobenzene, 1903, A., i, 662.

preparation of phenylglycine-o-carboxylic acid, 1903, A., i, 754, 832. cyclogeraniolenealdehyde, 1903, A., i,

[substituted phenyl benzyl ethers],

1903, A., i, 817.

dinitrosulphonic acids of the dialkyl ethers of anthrachrysone, anthraflavic acid, and isoanthraffavic acid, 1903, A., i, 840.

preparation of dimethyl- and diethylaminophenyldimethylpyazolone,

1903, A., i, 866.

preparation of anthranilie acid and N-alkylated anthranilic acids, 1904, A., i, 50

Farbwerke vorm. Meister, Lucius, & Brüning, sulphonic acids of phenyland naphthyl-anthranilic 1904, A., i, 51.

preparation of bromoindigotin, 1904,

A., i, 57, 167, 500.

o-methoxyanthraquinonesulphonic acids, 1904, A., i, 68.

preparation of caffeine-ethylenediamine, 1904, A., i, 85.

azo-compounds from aziminonaphthal-

enesulphonic acids, 1904, A., i, 123. phenylene- and tolylene-diglycines, 1904, A., i, 153.

preparation of N-arylanthranilic acids, 1904, A., i, 159.

preparation of indoxyl from formylmethylanthranilic acid, 1904, A., i, 167.

preparation of diphenylamine-2:2'dicarboxylic acid, 1904, A., i, 168.

preparation of alkylated 4-amino-1phenyl-2:3-dimethyl-5-pyrazolones, 1904, A., i, 196.

[B-naphtholazo-a-naphthol-5-sulphonic acid], 1904, A., i, 207.

azo-compound from 3:6-diaminoquinol dialkyl ethers and 1:8-dihydroxynaphthalene-3:6-disulphonic ["chromotrope" acid], 1904, A., i, 208.

electrolytic preparation of fatty amines, 1904, A., i, 295.

preparation of hydroxydiaryl sulphides, 1904, A., i, 313. preparation of diphenylaminedicarb-

oxylic acids, 1904, A., i, 317. preparation of ethyl 2:6:6-trimethyl-

cyclo-\(\Delta^2\)-hexen-4-one-1-carboxylate, 1904, A., i, 317,

reduction of indigotin and its bromoderivatives, 1904, A., i, 318.

benzeneazodiphenylamine-o-carboxylic acid and its homologues, 1904, A., i,

preparation of 2:6-tetrazophenol-4sulphonic acid, 1904, A., i, 353. neutral soluble silver compounds of

gelatoses, 1904, A., i. 357.

preparation of chlorinated toluene-wsulphonic acids, 1904, A., i, 390.

[cyclohexane derivatives], 1904, A., i, 411.

soluble crystalline derivatives of aminocarboxylic esters, 1904, A., i, 413.

preparation of leucohydroxyanthraquinones, 1904, A., i, 434.

preparation of amino-5- and -8-hydroxyanthraquinones, 1904, A., i, 435,512. blue dyes of the anthracene series, 1904, A., i, 439.

Farbwerke vorm. Meister, Lucius, & Brüning, disazo-compounds from 2:6-diaminophenol-4-sulphonic acid, 1904, A., i, 459.

preparation of indigotin, 1904, A., i,

500.

4-nitroalizarin 2-alkvl ethers, 1904, A., i, 513.

[azo-compounds of phenylmethylpyrazolone], 1904, A., i, 538.

of phenylaminoacetopreparation nitrile, 1904, A., i, 572.

bromo-derivatives of indigotin, 1904, A., i, 586.

[azo-derivatives of phenylanthranilic acid], 1904, A., i, 637.

5-nitro-2-aminotoluene-ω-sulphonic acid, 1904, A., i, 662.

polyhydroxyanthraquinonequinolines, 1904, A., i, 686.

electrolytic oxidation of organic compounds, 1904, A., i, 813.

a chloro-1:8-dihydroxynaphthalene-3: 6-disulphonic acid, 1904, A., i, 862.

[aminotolylthiocarbamide], 1904, A., i, 869.

alkylamino-o-dihydroxyacetophenones (alkylaminoacetocatechols), A., i, 873.

[o-glycollylaminobenzoic acid and the synthesis of indigo], 1904, A., i, 881.

bromination of indigotin, 1904, A., i,

894, 1019. preparation of acridinium dyes, 1904,

A., i, 927. 5-chloro-4-amino-1-phenyl-3-methyl-

pyrazole, 1904, A., i, 940. [1-acetylamino-2: 4-diaminonaphtha-

lene], 1904, A., i, 943. diazotisation of sulphonated m-di-

amines, 1904, A., i, 953. [coloured quinoline derivatives], 1904,

A., i, 1048. [hydroxyphenyl derivatives of 4:4'diaminodiphenylamine], 1904, A.,

i. 1061. faction of sulphur on tolylenedicarbamide], 1904, A., i, 1062.

o-chloro-m-nitrotoluene-w-sulphonic acid, 1905, A., i, 124.

aminoacetyleatechol, 1905, A., 127.

dialkyl ethers of anthrachrysone de-

rivatives, 1905, A., i, 146. p-nitrobenzeneazo-o-tolueneneazo-\betanaphthol, 1905, A., i, 162.

4:4'-diaminoformyl-(acetyl) -diphenylamine, 1905, A., i, 191. [2:2'-diamino-4:4'-oxalotoluidide],

1905, A., i, 249.

Farbwerke vorm. Meister, Lucius, & Brüning, amino-alcohols of the formula C6H3(OH)2 CH(OH) CH2-NX₂, 1905, A., i, 436. amino-derivatives of anthraquinone,

1905, A., i, 447.

indophenol derivatives from p-chlorophenol, 1905, A., i, 530.

sulphur dye from 2:2'-diamino-4:4'oxalotoluidide, 1905, A., i, 540.

purification of o-nitrotoluene, 1905, A., i, 639.

condensation products of primary aromatic amines with formaldehyde, 1905, A., i, 643.

hydroxyanthraquinoneglycollic Tanthraquinoneoxyacetic] acids and their esters, 1905, A., i, 648.

cyclogeraniolideneacetone, 1905, A., i, 653.

dinitrodiaminoanthraquinonedioxamic acids, 1905, A., i, 653.

1-hydroxyanthraquinone-5-sulphonic acid, 1905, A., i, 653.

preparation of o-dimethoxyanthraquin-

ones, 1905, A., i, 654. oxidation of aromatic hydrocarbons by means of cerium peroxide, 1905, A., i, 697.

methoxy-derivatives of anthraquinone], 1905, A., i, 709.

[azo-dyes from β-diketones and β-ketonic esters], 1905, A., i, 723.

tetrazophenolsulphonic acid, 1905, A., i, 725.

red sulphur dyes from resorcinol, 1905, A., i, 913.

aminoazo-dyes from chlorochromotropic acid, 1905, A., i, 953.

soluble preparations of o-nitrophenyl-B-lactomethylketone, 1906, A., i, 97. preparation of a-methyl-B-naphthol, 1906, A., i, 257.

[3:5-dichloro-4'-dimethylamino-4hydroxydiphenylamine], 1906, A., i, 308.

stable compounds of hyposulphites with ketones, 1906, A., i, 400.

preparation of blue and violet dyes by oxidation, 1906, A., i, 444.

azo-dye from m-aminobenzeneazo-mtoluidine, 1906, A., i, 466.

sulphonation of 2-chloro-5-nitrobenzaldehyde with alkali sulphates, 1906, A., i, 512.

preparation of indoxyl and its homologues, 1906, A., i, 534, 749.

preparation of diaminodinaphthazines, 1906, A., i, 543.

preparation of a-nitro-\(\beta\)-methoxyanthraquinones, 1906, A., i, 677.

Farbwerke vorm. Meister, Lucius, & Brüning, stable derivatives of the active base of the extract of suprarenal glands, 1906, A., i, 691.

colourless soluble salts of rosaniline,

1906, A., i, 712.

[colouring matters of the cyanine series], 1906, A., i, 716.

zinc formaldehydesulphoxylate, 1906,

A., i, 802.

preparation of the alkamine esters of o- and m-aminobenzoic acids, 1906, A., i. 845.

preparation of N-alkylated alkamine esters of o- and m-aminobenzoic acids, 1906, A., i, 846.

preparation of the alkamine esters of p-aminobenzoic acid, 1906, A., i,

the employment of vanadium salts in the electrolytic oxidation or reduction of organic compounds, 1906, A., i, 862.

preparation of chlorinated quinizarins,

1906, A., i, 867.

colouring matters of the quinolinium series, 1906, A., i, 886.

preparation of 5:5-dialkylbarbituric acids, 1906, A., i, 894; 1907, A., i,

preparation of alkylated aryl-p-diaminoanthraquinonesulphonic acid, 1906, A., i, 968.

preparation of 2-arylimino-5:5-dialkylbarbituric acids, 1906, A., i, 987.

of substituted aromatic oxidation hydrocarbons, 1907, A., i, 202.

mixed anhydrides of tannic and cinnamic acids, 1907, A., i, 232. preparation of o-hydroxyazo-deriva-

tives, 1907, A., i. 263. [an azopyrazolone derivative], 1907,

A., i, 264.

preparation of phenylglycine and its homologues. I. and II., 1907, A., i,

preparation of green triphenylmethane derivatives, 1907, A., i, 355.

[azo-derivative of anthranilic acid], 1907, A., i, 362.

preparation of azo-derivatives of the pyrazolone group, 1907, A., i, 363.

preparation of the alkylamino-esters of p-aminobenzoic acid, 1907, A., i,

preparation of formaldehydesulphoxylates, 1907, A., i, 1009.

preparation of leucohydroxyanthraquinone, 1907, A., i, 1057.

preparation of alkylated 4:8-diaminoanthrarufins, 1907, A., i, 1057.

Farbwerke vorm. Meister, Lucius, & Brüning, preparation of ω-dihydroxydimethyl-2:6-anthrachrysone, 1907, A., i, 1057.

[preparation of w-dianilinodimethyltetrahydroxyanthraquinone and pptetramethyldiaminodibenzyltetrahydroxyanthraquinone], 1907, A., i, 1085.

preparation of 4-antipyryldimethyl-

amine, 1907, A., i, 1086.

[combination of o-diazo-oxides with 1:8-dihydroxynaphthalene-3:6-disulphonic acid], 1907, A., i, 1090.

production of a sparingly soluble [basic] zinc formaldehydesulphoxylate, 1908, A., i, 133.

preparation of 5-nitro-2-aminophenol-

4-sulphonic acid, 1908, A., i, 157. preparation of benzoylalkylamino-

alcohols, 1908, A., i, 167.

preparation of alkylaminoalkylaminocinnamates, 1908, A., i, 169.

preparation of alkylaminoalkyl esters of salicylic acid, 1908, A., i, 176.

[preparation of amino-derivatives of anthrachrysone], 1908, A., i, 192. [thio-derivatives of anthraquinone],

1908, A., i, 192.

interaction of sodium sulphide and the hydroxyphenazines, 1908, A., i, 219.

[preparation of safraninones containing aliphatic groups], 1908, A., i,

preparation of alkylaminoalkyl benzoates, 1908, A., i, 266.

preparation of quinoline derivatives of the anthraquinone series, 1908, A., i. 365.

preparation of aromatic ethanolamines, 1908, A., i, 418.

preparation of dimethyl ether of pnitrochrysazin, 1908, A., i, 428.

preparation of 4-dimethylamino-1phenyl-2:3-dimethyl-5-pyrazolone, 1908, A., i, 471.

preparation of alkylamino-alkyl paminobenzoates, 1908, A., i, 638.

preparation of methylthiosalicyclic [o-methylthiolbenzoic] acid, 1908, A., i, 648.

preparation of w-nitroacetocatechol, 1908, A., i, 655.

preparation of 3-nitro-6-aminophenol-4-sulphonic acids, 1908, A., i, 785.

preparation of alkylthiosalicyclic [oalkylthiolbenzoicl acids, 1908, A., i, 797; 1909, A., i, 232.

[preparation of 8-carboxymethylthiolnaphthoic acid], 1908, A., i, 797.

337

Farbwerke vorm. Meister, Lucius, & Brüning, preparation of hydroxyanthrarufin and hydroxychrysazin I. and II., 1908, A., i, 807.

preparation of phenanthroanthraquinone, 1908, A., i, 808.

preparation of red colouring matters of the thioindigo-red series, 1908, A., i. 987.

preparation of 3-oxythionaphthen, 1908, A., i, 1003.

preparation of a dihydroxythionaphthencarboxylic acid, 1908, A., i, 1004. preparation of crystalline salts of

o-dihydroxyphenylethanolmethylamine, 1909, A., i, 229.

preparation of 2-nitro-4-aminobenzoic

acid, 1909, A., i, 230. preparation of o-alkylthiolbenzoic acids and their derivatives, 1909, A., i,

231, 923. preparation of substituted o-carboxyphenylthioglycollic acids, 1909, A.,

preparation of 5-alkyloxy-2-acetylphenyl mercaptan, 1909, A., i, 240.

[preparation of alkylaminoanthraquinone derivatives], 1909, A., i, 243.

preparation of leuco-derivatives diaminoanthraquinones from corresponding hydroxylic pounds], 1909, A., i, 243.

preparation of arylaminoanthraquinones, 1909, A., i, 243.

preparation of leuco-derivatives; sub-

stituted "thioindigotin," 1909, A., i, 251.

preparation of 1-aryl-2:4-dialkyl-3halogenmethyl-5-pyrazolones, 1909, A., i, 257.

preparation of anthrapyrimidones, 1909, A., i, 263, 264.

preparation of hydroxyarylarsinic

acids, 1909, A., i, 279.

preparation of p-arylglycinearsinic acids, 1909, A., i, 280.
preparation of sulphur derivatives of p-aminophenylarsinic acid, 1909, A., i, 280.

preparation of o-nitro-p-cresol, 1909, A., i, 299.

separation of o- and p-chlorobenzaldehydes, 1909, A., i, 307.

preparation of arsenophenols, 1909, A., i, 347; 1911, A., i, 1055.

preparation of derivatives of phenylarsenious oxide and arsenobenzene, 1909, A., i, 347.

preparation of m-aminophenylarsinic acid (m-arsanilic acid), 1909, A., i, 448.

Farbwerke vorm. Meister, Lucius, & Brüning, preparation of ketonesulphoxylates, 1909, A., i, 455, 699. preparation of leuco-derivatives of

hydroxyanthraquinones, 1909, A., i,

preparation of 1-arvl-5-halogenmethyl-2:4-dialkyl-3-pyrazolones, 1909, A., i, 523.

preparation of a-3:4-trihydroxyphenylethylamines, 1909, A., i, 569.

[production of aromatic nitrobenzoyldiamines and their azo-derivatives], 1909, A., i, 606.

preparation of acid chlorides and an-

hydrides, 1909, A., i, 693. preparation of o-dihydroxyphenylethanolamine, 1909, A., i, 792. preparation of substituted alkylthiol-

benzoic acids, 1909, A, i, 797. preparation of xanthopurpurin, 1909,

A., i, 941.

preparation of 1-p-dialkylaminophenyl-2:4-dimethyl-3-hydroxymethyl-5pyrazolones, 1910, A., i, 78.

preparation of derivatives of phenylarsenious oxideand of arsenobenzene, 1910, A., i, 84.

preparation of hydroxyarylarsenious oxides, 1910, A., i, 148.

preparation of carbamide and of thiocarbamide derivatives of p-aminophenylarsinic acids, 1910, A., i, 148.

preparation of 1-naphthylamine-4:7disulphonic acid and -2.4:7-trisulphonic acid from 1:8-dinitronaphthalene, 1910, A., i, 240.

preparation of o- and peri-thiophenolcarboxvlic acids, 1910, A., i, 262. preparation of dianthraquinone oxide,

1910, A., i, 271.

preparation of carboxyarylsulphoxidoacetic acids, 1910, A., i, 320.

preparation of \$\beta\-naphthindoxyl, 1910, A., i, 337.

preparation of 1.p-dialkylaminophenyl-2-alkyl-3-hydroxymethyl-5-pyrazolones, 1910, A., i, 340.

preparation of optically inactive odihydroxyphenylalkylamines, 1910, A., i, 372.

preparation of arylsulphoxidoacetic acids, 1910, A., i, 379.

[preparation of halogen "thioindigotins"], 1910, A., i, 410.

preparation of arsenoaryl-glycollic and -thioglycollic acids; [arsenoaryloxy- or -thio-acetic acids], 1910, A., i, 452.

preparation of homologues of p-aminophenylarsinic acid, 1910, A., i, 531. Farbwerke vorm. Meister, Lucius, & Brüning, [preparation of 5-nitro-manisidine], 1910, A., i, 664.

preparation of optically active o-dihydroxyphenylalkylamines, 1910,

A., i, 664.

[preparation of halogen derivatives of 6-amino-3-keto-(1)-thionaphthen and nitroisatins], 1910, A., i, 693.

of acetylchloroaminopreparation anthraquinones, 1910, A., i, 750.

preparation of \$\beta\anthraquinonylcarbimide from B-aminoanthraquinone, 1910, A., i, 750.

the nitration of diazonium compounds,

1910, A., i, 791.

preparation of amino-derivatives of hydroxyarylarsinic acids and their reduction products, 1910, A., i,

preparation of compounds of unsaturated acids with aldehydes, ketones, and formic acid, 1911, A., i, 107.

preparation of nitrophenyl mercaptans, 1911, A., i, 441.

preparation of o-chlorobenzotrichlor-

ide, 1911, A., i, 445. preparation of 1:2-1:2-diaminoanthra-

quinone, 1911, A., i, 469. preparation of arylanthraquinonyl-

carbamides, 1911, A., i, 469, 995. preparation of naphtha-anthraquinone-

azines, 1911, A., i, 509. preparation of anthraquinonylglycines,

1911, A., i, 548.

preparation of a nitro-1-aminophenyl-4-arsinic acid, 1911, A., i, 594, 760.

preparation of 2:2'-dianthraquinonylcarbamide, 1911, A., i, 655.

preparation of phenylbenzyldimethylammonium disulphonic acid, 1911, A., i, 852.

preparation of 1:4-dihydroxynaphthalene monalkyl ethers, 1911, A., i,

preparation of p-dialkylaminobenzyl-1-aminoanthraquinone, 1911, A., i, 995.

preparation of aminohydroxyarylarsenious oxides, 1911, A., i, 1055.

preparation of nitrohydroxyarylarsenic acids, 1911, A., i, 1056.

preparation of dianthraquinonyl- or polyanthraquinonyl-carbamides, 1912, A., i, 119.

preparation of 1-p-dimethylaminophenyl-2:3:4-trimethyl-5-pyrazolone, 1912, A., i, 135.

[preparation of substituted pyrazolones], 1912, A., i, 136.

Farbwerke vorm. Meister, Lucius, & Brüning, preparation of anthraquinone derivatives containing sulphur, 1912, A., i, 197.

[preparation of benzoylaminoanthraquinone derivatives], 1912, A., i,

197.

preparation of a-hydroxyanthraquinalkyl ethers, 1912, A., i, 476.

preparation of mercaptans in the anthraquinone series, 1912, A., i,

preparation of isatin-naphthalides. their homologues and substitution products, 1912, A., i, 500.

preparation of derivatives of 4-methylamino-1-phenyl-2:3-dimethyl-5pyrazolone, 1912, A., i, 516.

preparation of phenylbenzyldimethylammoniumsulphonic acid, 1912, A.,

preparation of aminoanthraquinonyltriazoles, 1912, A., i, 588.

preparation of nitrohydroxyarylarsinic acid, 1912, A., i, 595.

preparation of neutral aqueous soluble derivatives of 3:3'-diamino-4:4'dihydroxyarsenobenzene, 1912, A., i, 595.

preparation of 5-nitro-2-aminophenyl-1-arsinic acid, 1912, A., i, 595.

preparation of p-amino-m-hydroxyarylarsinic acids, 1912, A., i, 596.

preparation of aminohydroxy-derivatives and homologues of arsenobenzenes, 1912, A., i, 596.

preparation of p-nitroacetoacetanilide, 1912, A., i, 759.

[preparation of 14-chlorocoeramidonine and allied compounds], 1912, A., i,

[preparation of benzoyl-a-isatinanilide], 1912, A., i, 801. preparation of hydroxyanthrimides,

1912, A., i, 996.

preparation of 1-p-dimethylaminophenyl-3:4:4-trimethyl-5-pyrazolone, 1912, A., i, 1033.

preparation of 2:5-diaminophenyl-1arsinic acid, 1912, A., i, 1044.

preparation of neutral readily soluble derivatives of 4-4'-dihvdroxy-3:3'diaminoarsenobenzene, 1912, A., i,

preparation of pure nitric oxide by an electrolytic method, 1912, A., ii,

Farcy, L., estimation of nitrates by Grandval and Lajoux's method, 1909, A., ii, 615.

Farcy, L., influence of bromides and iodides in the estimation of nitrates in waters, 1909, A., ii, 616.

estimation of small quantities of nitrates, 1909, A., ii, 758.

modification of the Grandval and Lajoux process for the estimation of nitrates in waters charged with chlorides, 1910, A., ii, 71.

influence of nitrites on the estimation of nitrates by Grandval and Lajoux's

process, 1910, A., ii, 72.

influence of chlorides on the estimation of nitrates, 1910, A., ii, 72. Farcy, L. See also Gustav Perrier.

Fardon, Harold Joseph, action of drugs on the mammalian uterus, 1908, A., ii, 1055.

Farkas, B. See Geza Mansfield.

Farkas, Géza, concentration of hydroxyl ions in blood-serum, 1903, A., ii, 736.

Farkas, Géza, and Elemér Scipiades, molecular concentration of bloodserum in pregnancy, and of amniotic fluid, 1903, A., ii, 736.

Farkas, Koloman, chorionin, 1903, A.,

ii, 741.

Farkas, Koloman, and Michael Korbuly, calorimetry of urine, 1904, A., ii, 753.

Farkas, Milan. See Otto Diels.

Farmer, Chester J. See Otto Folin and Arthur I. Kendall.

Farmer, John Bretland, John E. Salvin-Moore, and Charles Edward Walker, behaviour of leucocytes in malignant growths, 1905, A., ii, 845.

Farmer, Robert Crosbie, acid salts of monobasic acids, 1903, T., 1440;

P., 274.

a graphic method for the correction of gas volumes, 1910, A., ii, 686.

Farmer, Robert Crosbie, and Frederick John Warth, the affinity constants of aniline and its derivatives, 1904, T., 1713; P., 244.

Farmer, Robert Crosbie. See also

Oswald Silberrad.

Farnau, Earl F., electrolytic reduction of nitrobenzene without a diaphragm, 1912, A., i, 436.

Farnsteiner, K., separation of unsaturated fatty acids, 1903, A., ii, 394. organically combined sulphurous acid in foods, 1904, A., ii, 443.

the lithium method of separating saturated fatty acids, 1904, A., ii, 788.

a method for estimating the true alkalinity of ashes, 1907, A., ii, 396.

Farnsteiner, K., formation of aldehydes or ketones during acetic fermentation, 1908, A., i, 318.

the quantity of formic acid in honey,

1908, A., ii, 639.

Farnsteiner, K., Karl Lendrich, and Paul Buttenberg, composition of the fat of pigs fed on oil meals, 1906, A., ii, 205.

Farnsteiner, K., and W. Stüber, composition of orange juice, 1905, A., ii,

52.

Farr, C. Coleridge, and D. C. H. Florance, radium content of certain igneous rocks from the sub-antarctic islands of New Zealand, 1909, A., ii, 953.

Farr, Edward Henry, and Robert Wright, estimation of morphine in opium and tincture of opium, 1907, A., ii, 318.

Farr. Fr. See Theodor Zincke.

Farr, Henry V. See Launcelot Winchester Andrews.

Farrar, Edward K., assay of perborates, 1910, A., ii, 452.

Farrell, F. S. See Arthur Amos Noyes.
Farrington, Oliver Cummings, free phosphorus in the Saline Township meteorite, 1903, A., ii, 304.

[martite from Mexico], 1905, A., ii,

398

the Rodeo meteorite, 1905, A., ii, 726.

zoisite from lower California, 1906, A., ii, 775.

the South Bend meteorite, 1906, A., ii, 775.

analyses of iron meteorites, 1907, A., ii, 706.

a new Pennsylvania meteorite, 1910, A., ii, 420.

meteorite studies. III., 1911, A., ii, 407.

analyses of stone meteorites, 1912, A., ii, 361.

Farrow, Frederick Denny, the viscosity of aqueous solutions of sodium palmitate and the influence of electrolytes on the same. 1912. T. 347: P. 19.

on the same, 1912, T., 347; P., 19.
Farrow, Frederick Denny. See also
Roland Edgar Slade.

Farsöe, V., iodometric estimation of chromic acid, chloric acid, manganese peroxide, and lead peroxide, 1907, A., ii, 583.

Farup, Peder, composition of the fatty oil of Aspidium spinulosum, 1904, A., ii, 283.

velocity of electrolytic reduction of azobenzene, 1906, A., ii, 153.

Farup, Peder, rate of action of oxygen, carbon dioxide, and water vapour on carbon, 1906, A., ii, 745.

Farup, Peder. See also Jacobus Henri-

cus van't Hoff.

Fasal, Hugo, a colorimetric method for the estimation of tryptophan, and the tryptophan content of horny substances and their proteins, 1912, A., ii, 1220.

Fassbender, Heinrich, influence of the silent discharge on explosive gaseous

mixtures, 1908, A., ii, 561.

Fasson, R. R., Constant Wells Ponder, and German Sims Woodhead, the importance of the temperature factor in the determination of the rate of the activity of certain disinfectants, 1911, A., ii, 63.

Fath, Arthur. See Paul Dutoit.

Faubel, Otto, the ferment law of trypsin. 1907, A., ii, 635.

Faucon, A., vapour density of propionic acid, 1908, A., i, 310.

heat of vaporisation of propionic acid,

1908, A., ii, 257. solidification of mixtures of water and soluble fatty acids, 1909, A., i,

solidification of mixtures of water and n-butyric acid, 1909, A., i, 356.

rotatory power of camphor in carbon tetrachloride solution, 1912, A., i,

Faucon, A. See also Gustave Massol. Faure, G. See Enrico Pantanelli.

Faure, J., 4-p-hydroxyphenylsalicylic

acid, 1905, A., i, 350.

Fanst, Edwin Stanton, acocantherin: African arrow poisons, 1903, A., i,

active components of the secretions of the skin glands of the toad, 1903, A., ii, 313.

chronic oleic acid poisoning, 1908, A.,

ii, 1062.

crotalotoxin from the venom of the North American clapper snake (Crotalus adamanteus), 1911, A., ii, 316.

Faust, Otto, chemistry of the iron electrode of the Jungner-Edison accumulator, 1907, A., ii, 426.

viscosity of liquid mixtures, their dependence on the temperature and the relationship between the vapour pressure and the viscosity of liquids, 1912, A., ii, 333.

the structure, recrystallisation, and strength of electrolytic copper, 1912,

A., ii, 1173.

Faust, Otto, and Gustav Tammann. torsional elasticity and its connexion with viscosity, 1910, A., ii, 189.

method for determining the lower and upper limits of elasticity; the hardening of metals, 1910, A., ii,

Faust, R., what is radium? The composition of metals calculated and established, 1908, A., ii, 245.

Fausti, Giuseppe. See Demetrio Helbig

and Richard Lorenz.

Fauvel, Pierre, influence of chocolate and coffee on uric acid [excretion], 1906, A., ii, 564.

excretion of endogenous purine substances and uric acid, 1906, A., ii,

action of sodium salicylate on the urie excretion, 1907, A., ii, 493.

effects of chocolate and coffee on uric acid and the purines, 1909, A., ii,

Favre, W., the inhibitory action of inorganic salts on catalase, 1911, A., i.

Favrel, Georges, action of diazo-chlorides on y-chloroacetylacetic esters, 1907, A., i, 796.

action of diazo-chlorides on a- and ybromoacetoacetic esters, 1908, A., i, 209.

detection of citric acid in wine, etc., 1908, A., ii, 640.

estimation of the acidity of wines, 1908, A., ii, 903,

indirect estimation of the acidity of wines, 1908, A., ii, 903.

estimation of iodine in alcoholic solutions, 1911, A., ii, 150.

Favrel, Georges, and Léon Garnier, the proportion of dextrose to lævulose in certain preserved fruits, 1911, A., ii, 1036.

Fawcett, John, and Arthur Edwin Boycott, pseudo-lipæmia, 1905, A., ii, 49.

Faworsky, Alexei E., action of potassium hydroxide on mixtures of ketones with phenylacetylene, 1905, A., i,

conversion of ethylene glycol into acetaldehyde, 1907, A., i, 274. Faworsky, Alexei E., and I. Borgmann,

isomeric rearrangement; methylenecyclohexane, 1908, A., i, 15.

Faworsky, Alexei E., and W. Boshowsky, possible existence of cyclic hydrocarbons containing nuclear triple linkings, 1912, A., i, 616.

Faworsky, Alexei E., Ernest Fritzmann, Leon Kutscheroff, Nicolas Sokownin, Vadim Tolstopjatoff, and Saul Zinewsky, equilibrium isomerism on heating bromides of the compositions $C_nH_{2n+1}Br$ and $C_nH_{2n}Br_2$, 1907, A., i. 741.

Fawsitt, Charles Edward, decomposition of carbamide, 1903, A., ii, 15. the decomposition of methylcarbamide, 1904, T., 1581; P., 203.

on the relation between the chemical composition of some organic substances and the density of their solutions, 1904, P., 42.

the decomposition of the alkylureas; preliminary note, 1904, P., 126.

the amide group, 1904, A., ii, 323. studies in viscosity, 1904, A., ii, 469.

the kinetics of chemical changes which are reversible; the decomposition of as-dimethylearbamide, 1905, T., 494; P., 115.

electric measurements on metals, 1906,

A., ii, 328.

relation of solution pressure to surface condition in metals, 1907, A., ii, 66.

the viscosity of solutions, 1908, T.,

1004; P., 121.

viscosity determinations at temperatures, 1908, T., 1299; P., 146; A., ii, 358.

Fawsitt, Charles Edward. See also Edward Provan Cathcart and G. J.

Fawssett, T., molecular compounds of alcohol and water, 1910, A., i, 533.

Fay, Henry, tellurium-tin alloys, 1907, A., ii, 880.

Fay, Irving Wetherbee, and Albert F. Seeker, reducibility of some metallic oxides by hydrogen and carbon monoxide, 1903, A., ii, 597.

Fay, Irving Wetherbee, Albert F. Seeker, Frederick H. Lane, and George E. Ferguson, initial temperatures at which oxides of metal give up oxygen to reducing gases, 1910, A., ii, 711.

Fayolle, Marcel. See Antoine Villiers. Fazio, F. See Francesco Carlo Palazzo. Fecht, Hermann, semialdehyde of maleic acid, 1905, A., i, 407.

spirocyclanes, 1907, A., i, 906.

p-aminocinnamylideneacetic acid, 1907, A., i, 926.

quinone formation; constitution of triphenylmethane dyes, 1907, A., i,

theory of coloured salts, 1908, A., ii, 916.

Fecht, Hermann, See also Robert Pschorr.

Feder, Erich, influence of alkaloids on certain processes of oxidation, 1905, A., i, 150.

estimation of picric acid, 1906, A., ii, 809.

a new mercury solution as a reagent for aldehydes, especially formaldehyde, 1907, A., ii, 405.

detection of hydrogen peroxide in milk,

1908, A., ii, 318.

Feder, Erich. See also Th. Schumacher. Federer, Max. See Carl Neuberg.

Federlin, Wilhelm, reaction between potassium persulphate, hydrogen iodide, and phosphorous acid, 1903, A., ii, 14.

oxymethylenecamphor and mesityloxidoxalic esters, 1907, A., i, 1005.

Federoff, A., cryoscopic observations on solutions of oxalic acid in presence of neutral salts, 1904, A., i, 220.

coefficient of distribution of oxalic acid between water and ether in presence of neutral salts, 1904, A., i, 221.

electrical conductivity of solutions of oxalic acid in presence of neutral salts, 1904, A., ii, 157.

Fedoroff, A.S. See Georgii I. Petrenko. Fedoroff, Eugraph Stepanowitsch von, kedabekite and violaite, 1903, A., ii,

two polymorphous modifications of iodine, 1907, A., ii, 539.

nepheline bed on the White S. a. 1907, A., ii, 562.

crystallography of pyridine derivatives. 1909, A., i, 254.

the practice of crystallochemical analysis, 1912, A., ii, 772.

Fedoroff, Eugraph Stepanowitsch von. and D. N. Arteméeff, crystallography of two xanthogenamides (thiourethanes), 1909, A., i, 245.

Fedotéeff, P. P., ammonia-soda process from the standpoint of the phase

rule, 1904, A., ii, 730. the formation of cuprous iodide from the physico-chemical standpoint, 1911, A., ii, 42.

a special case of heterogeneous equilibrium, 1912, A., ii, 146.

Fedotoff, S. See Nikolai Schiloff.

Feenstra, Rudolf. See Alfred Werner. Fehrlin, H. C., compounds of catechol monoalkyl ethers with proteins, 1906, A., i, 467.

Febrsen, Alex. O M., blood of the new born, 1904, A., ii, 55.

Feibelmann, Richard. See Alfred Ein-

Feidel, Hermann. See Fritz Ephraim. Feige, André. See Edouard Urbain and Albert Verley.

Feige, Kurt. See Rudolf Friedrich

Weinland.

Feigel, Heinrich. See Karl Andreas Hofmann.

Feigl, Johann, physiological action of periplocin, 1907, A., ii, 118.

influence of therapeutic agents in the gastric secretion, 1907, A., 891.

action of therapeutic agents on the gastric secretion. III. Action of iodine in the promotion of secretory activity, 1908, A., ii, 311.

Feigl, Johann, and Hugo Meier, biochemical studies on chloroform, 1906,

A., ii, 876.

Feigl, Johann, and Adolf Rollet, biochemistry of colloids, 1908, A., ii, 312.

the influence of drugs on gastric secretion. Part IV. Inorganic and organic arsenic compounds, 1909, A., ii, 683.

Feigl, Johann. See also Peter Bergell. Feild, Alexander A. See James Munsie

Bell.

Feilitzen, Hjalmar von, manurial experiments with calcium cyanamide on mineral and on peaty soils; decomposition of calcium eyanamide in different soils, 1906, A., ii,

is a favourable stimulating effect on the development of crops by small amounts of manganese salts observable in the field ? 1908, A., ii, 61.

manurial trials with calcium eyanamide and (Swedish) calcium nitrate,

1908, A., ii, 890.

plot experiments on the new nitrogenous manures, 1908, A., ii, 981. humus-silicic acid, 1909, A., ii, 178.

action of calcium nitrate and calcium cyanamide on peat soils, 1909, A.,

can calcium cyanamide with a large amount of calcium carbide act injuriously on vegetation ? 1909, A., ii, 430.

manurial experiments on peat soil with "Palmaer phosphate," a new manure prepared by an electrolytic process, 1910, A., ii, 538.

after-effect of Palmaer phosphate, basic slag, and superphosphate on

peat soil, 1912, A., ii, 85.

Feilitzen. Hjalmar von, and Ivar Lugner, amount of nitrogen in rainwater collected at Flahult, Sweden. 1910, A., ii, 444.

Feilmann, Martin Ernest, colloidal barium sulphate, 1909, A., ii, 482. the tendency of atomic weights to

approximate to integral and semiintegral values, 1912, P., 283.

Feilmann, Martin Ernest. See also John Golding.

Feinschmidt, J., the sugar-destroying ferment in organs, 1904, A., ii,

the agglutination of lecithins and lecithin-protein mixtures by acids, 1912, A., i, 156.

Feise, Martin. See Walther Borsche. Feiser, Jacob Plummer. See Frank

Austin Gooch.

Feiss, Henry O., and Wilhelm Cramer, nerve degeneration, 1912, A., ii, 664.

Feist, Franz, acetylacetonedioxime from sorbic acid, 1904, A., i, 852. ethyl tetrolate, 1906, A., i, 332.

brominated 4-pyrones and their hydroperbromides, 1906, A., i, 974.

hydroperbromides of negatively-substituted 4-pyrones, 1907, A., i,

stereochemistry of the glutaconic acid group, 1910, A., i, 7.

ring synthesis of pyromellitic acid, 1911, A., i, 133.

the condensation products of chloral with acid amides, 1912, A., i, 420.

Feist, Franz, and Erich Baum, bromoderivatives of 4-pyrone and the stability of halogen derivatives of 2- and 4-pyrones, 1905, A., i, 914.

Feist, Franz, and Otto Beyer, ethylcarbacetoacetate and ethyl isodehydroacetate, 1906, A., i, 334.

B-methylglutaconic acid and aB-dimethylglutaconic acid, 1906, A., i,

Feist, Franz, and Georg Pomme, stereoisomeric a-methylglutaconic acids, 1910, A., i, 9.

β-phenylglutaconic acid, 1910, A., i,

Feist, Franz, and Rudolf Reuter, aydimethylglutaconic acids, 1910, A., i,

Feist, Karl, alkaloids and bitter principles of calumba root. VIII., 1908, A., i, 100.

of amygdalin decomposition emulsin, 1908, A., i, 437, 903.

optically active benzaldehydecyanohydrin, 1909, A., i, 589,

Feist. Karl, carbonates of some heavy metals, 1909, A., ii, 1007.

decomposition of amygdalin, 1910, A.,

resolution of racemic cyanohydrins by emulsin, 1910, A., i, 402.

injury to pines by furnace gases, 1911, A., ii, 326.

tannin, 1912, A., i, 566.

Feist, Karl, and Heinrich Haun, the tannin of Chinese galls, 1912, A., i,888.
 Feist, Karl. See also Otto Bobertag.

Feit, Wilhelm, terbium, 1905, A., ii, 251.
Feit, Wilhelm, and Karl Przibylla,
monazite earths, 1905, A., ii, 250.

determination of the atomic weights of the elements of the rare earths, 1906, A., ii, 754.

Feld, Walther, behaviour of magnesium chloride in a steam boiler, 1903, A.,

estimation of sulphides and haloids in presence of each other, 1904, A., ii, 205.

estimation and separation of cyanogen compounds and the impurities contained therein, 1904, A., ii, 215.

preparation of hydrogen cyanide from ferrocyanides, 1906, A., i, 486.

the formation of iron disulphide in solutions, and some reactions of thionates, 1911, A., ii, 289.

sodium thiosulphate as the standard substance in alkalimetry, 1911, A., ii, 769.

the absorption of ammonia, alone or with hydrogen sulphide, by sulphurous acid, with formation of ammonium sulphate and free sulphur, 1912, A., ii, 448.

Feldhaus, Julius, quantitative investigation of the distribution of the alkaloids in the organs of Datura stramonium, 1905, A., ii, 648.

Feldhofen, A. See Adalbert Kolb.

Feldman, Israel, and Leonard Erskine Hill, influence of inhalation of oxygen on the lactic acid produced during hard work, 1911, A., ii, 738.

Feldmann, Leon. See Eduard Buchner. Feldmann, Paul, new method for the estimation of tannins, 1903, A., ii, 519.

Feldscharek, H. See Jacques Pollak.
Feliciani, C., conductivity of nitrogen dioxide for heat, 1905, A., ii, 144.

Felipe, Blas Cabrera, conductivity of sulphuric acid at different temperatures, 1905, A., ii, 669.

Felix, A., and Paul Friedländer, indigoid dyes. VI. 1910, A., i, 278.

Felle, Eberhard. See Paul Rabe.

Fellenberg, Theodore von, action of magnesium methyl iodide on mesityl oxide and phorone, 1904, A., i, 961.

action of magnesium benzyl chloride on mesityl oxide and phorone, 1906, A., i, 567.

Komarowsky's colour reaction, 1910, A., ii, 805.

estimation of salicylic acid in jams, etc., 1910, A., ii, 906.

detection of boric acid in preservatives, 1911, A., ii, 657.

colour reactions of aromatic aldehydes and their application in the analysis of spirits, 1911, A., ii, 667.

Fellenberg, Theodore von. See also Herman Decker and Ernst Philippe. Fellmann. Martin. See Augustin

Bistrzycki.

Fellner, Bruno. See Franz Müller.

Fellner, Hanni, the synthetic formation of amino-acids in the liver. IV. The formation of alanine from glycogen, 1912, A., ii, 279.

Fellner, M. See Erich Ebler.

Fellner, Richard. See Ernst Freund. Fels, Albert. See Walther Borsche.

Fels, Bruno, derivatives of quinolinic acid, 1904, A., i, 617.

derivatives of cinchomeronic acid, 1904, A., i, 618. indicators for acids and alkalis, 1904,

A., ii, 320.

Fels, G., anorthite bomb from St. Christ-

opher, West Indies, 1903, A., ii, 557. Felser, Heinrich. See Herman Decker

and Hermann Leuchs.

Felsinger, Leonhard, the fixation and release of nitrogen, 1912, A., ii, 473. Fenaroli, Pietro, gravimetric estimation

of ozone; ozone numbers of oils, 1906, A., ii, 896.

Fenaroli, Pietro. See also Ettore Molinari.

Fenby, Alaric Vincent Colpoys, apparatus for demonstrating the volumetric compositions of gases, 1910, T., 1200; P., 134.

Fendler, Georg, oil from the seeds of Calophyllum inophyllum, 1905, A., ii, 277.

cachalot oil, 1905, A., ii, 491.

detection of foreign colouring matters in fats, 1906, A., ii, 58.

detection of boric acid, 1906, A., ii,

the estimation of caoutchouc as tetrabromide, 1910, A., ii, 552.

examination of raw caoutchoue; reply to Harries, 1911, A., ii, 545.

Fendler, Georg, and O. Kuhn, fatty oil from the seeds of Manihot glaziovii,

1906, A., ii, 482.

Fenger, Frederic, the presence of active principles in the thyroid and suprarenal glands before and after birth, 1912, A., ii, 660, 782.

Fenner, Clarence N., crystallisation of a basaltic magma from the standpoint of physical chemistry, 1910, A., ii,

313.

Fenner, G. See G. Butzbach.

Fenton, Henry John Horstman, a reagent for the identification of carbamide and certain other nitrogen compounds, 1903, T., 187.

decomposition of hydrogen peroxide under the influence of radium

bromide, 1904, A., ii, 477.

further studies on dihydroxymaleic acid, 1905, T., 804; P., 168.

attempted synthesis of uric acid, 1905, A., i, 267.

an indicator for strong acids and bases,

1906, A., ii, 489. the reduction of carbon dioxide to

formaldehyde in aqueous solution, 1907, T., 687; P., 83.

delicate reaction for carbohydrates,

1907, A., ii, 308.

titani-dihydroxymaleic acid, and the detection of titanium, 1908, T., 1064; P., 133.

ω-hydroxy-s-methylfurfuraldehyde,

1910, A., i, 869.

reaction of titanium, 1910, A., ii, 244.

Fenton, Henry John Horstman, and Guy Barr, some colour reactions of organic acids with phenols, 1908, A., ii, 438.

Fenton, Henry John Horstman, and Fred Robinson, homologues of furfuraldehyde, 1909, T., 1334; P., 193.

Fenton, Henry John Horstman, and Henry Arnott Sisson, action of metallic magnesium on certain aliphatic acids and the detection of formic acid, 1908, A., i, 243.

Fenton, Henry John Horstman, and William Arthur Reginald Wilks, isoiminazolone, 1909, T., 1329; P.,

method of characterising certain ureides [carbamides], 1911, A., i, 269.

colloidal form of Nastvogel's osazone, 1911, A., i, 324.

studies on certain aliphatic hydroxyacids, 1912, T., 1570; P., 187.

Fenyvessy, Béla von, hæmolytic action of bile acids and bile salts, 1907, A., ii, 792.

Fenyvessy, Réla von, See also Leo von Liebermann.

Ferchland, Paul, electrolytic chlorine, 1906, A., ii, 842.

Féré, Ch., physiological action of sodium bromovalerate, 1903, A., ii, 442.

Ferentzy, Josef von, estimation of tartaric acid in the presence of malic and succinic acids, 1907, A., ii. 991, changes in the properties of chlorine,

1908, A., ii, 371.

Ferguson, Alfred L. See Richard C. Tolman.

Ferguson, Alexander Robert, See Robert

Ferguson, George E. See Irving Wetherbee Fay.

Ferguson, L. Ray, actinic influence on electrochemical action, 1909, A., ii, 372.

Ferguson, William Cashman [Augustine], methods employed in preparing the tables of specific gravity of sulphuric, nitrie, and hydrochloric acids and ammonia, 1905, A., ii, 632.

Ferié, Fritz. See Alfred Partheil.

Fermi, Claudio, method for the study of proteolytic and gelatinolytic enzymes, 1906, A., i, 392.

action of various chemical reagents on the virus of rabies, 1908, A., ii, 412.

Fermor, Lewis Leigh, manganese in India, 1907, A., ii, 700.

gibbsite from India, 1909, A., ii, 57. group of manganates, comprising hollandite, psilomelane, and corona-

dite, 1909, A., ii, 153. alum from Mormugao, India, 1909,

A., ii, 411.

three new manganese minerals: vredenburgite, sitaparite, and juddite, 1909, A., ii, 491.

Fernandez, Enrique, the pancreas of the elephant, 1910, A., ii, 427.

Fernandez, Obdulio, Spanish oil of turpentine, 1910, A., i, 399.

a reaction of nopic acid, 1910, A., ii, 1119.

Fernau, Albert, analysis of galactose, 1909, A., ii, 625.

iodometric estimation of sugar in urine, 1911, A., ii, 664.

Fernbach, Auguste, composition of potato-starch, 1904, A., i, 294.

influence of the reaction of the medium on the activity of diastases, 1906, A., i, 327.

biological degradation of carbohydrates, 1911, A., ii, 62.

new form of soluble starch, 1912, A., i, 832.

Fernbach, Auguste, and A. Lanzenberg, action of nitrates in alcoholic fermenta-

tion, 1910, A., ii, 1097.

Fernbach, Auguste, and Marcel Schen, influence that the reaction [of the medium] exerts on certain properties of malt macerations, 1911, A., i, 98.

the mechanism of proteoclastic en-

zymes, 1911, A., i, 824. saccharification of starch by dilute acids, 1912, A., i, 336.

production of levulose by biochemical methods, 1912, A., ii, 793.

Fernbach, Auguste, and Jules Wolff, coagulation of starch, 1904, A., i, 374.

amylocellulose formed by the action of diastase, 1904, A., i, 374.

diastasic coagulation of starch, 1905,

A., i, 164.

analogy between starch coagulated by amylocoagulase and pea starch, 1905, A., i, 574.

influence of liquefaction of starch on its transformation by saccharifying diastases, 1905, A., i, 624.

the almost complete conversion into maltose of the dextrins obtained by the saccharification of starch, 1906, A., i, 484.

mechanism of the influence of acids, bases, and salts in the liquefaction of starch paste, 1906, A., i, 804.

saccharification of soluble starch by extract of barley, 1907, A., i, 750. diastasic liquefaction of starch, 1907,

A., i, 1012.

eatalytic transformation of starch paste, 1911, A., i, 356.

Fernbach, Auguste. See also Léon Maquenne and Jules Wolff.

Fernekes, Gustave, action of sodium and potassium amalgams on various aqueous solutions, 1904, A., ii, 163. action of amalgams on solutions,

1905, A., ii, 33.

potassium mercuric ferrocyanide, 1906, A., i, 149.

ferricyanides of mercury, 1906, A., i, 487.

Fernekes, Gustave, and Arthur Alexander Koch, volumetric methods for estimating copper, 1905, A., ii, 860.

Ferns, John, and Arthur Lapworth, the preparation and properties of sulphonic esters, 1912, T., 273; P., 18, 263.

Ferns, John. See also (Miss) Mary Elizabeth Dobson.

Ferraboschi, Frederic, double sulphate of gnanidine and aluminium, 1908, A., i, 720, Ferraboschi, Frederic, the oxidation of mucic acid in presence of iron, 1909, T., 1248; P., 178.

the production of ozone in the interaction between hydrogen dioxide and sulphur dioxide; preliminary note, 1909, P., 179.

Ferrari, C., relation between the utilisation of reserve carbohydrates and the flowering of Ranunculus velutinus.

1909, A., ii, 697.

Ferrari, Eugenio. See Giuseppe Oddo. Ferrari, G. See Giuseppe Carrara. Ferrari, L. See Giuseppe Bruni.

Ferrari, Ugo. See Carl Dietrich Harries: Ferrario, Enos, new synthesis of citric acid, 1908, A., i, 758.

mixed anhydrides, 1910, A., i, 707. phenothioxin, 1911, A., i, 555.

Ferrario, Enos, and F. Fagetti, hydrocarbons, C₅H₁₂; new synthesis of tetramethylmethane [dimethylpropane], 1909, A., i, 77.

Ferrario, Enos, and M. Neumann, 3:6dimethylfluoran, 1910, A., i, 59. the Grignard reaction; syntheses of

fluoran, 1911, A., i. 316.

Ferrario, Enos, and H. Vinay, action of haloid derivatives of sulphur on organo-magnesium compounds, 1910, A., i, 604.

Ferrario, Enos. See also Herman Decker. Ferraro, Annibale, estimation of phosphates in urine, 1908, A., ii, 733.

microscopic analyses of soluble, crystallicable substances [salicylic acid, caffeine], 1909, A., ii, 191.

Ferraro, Annibale, and Arturo Carobbio, modified Bettendorf's reagent, 1906, A., ii, 490.

Ferratini, Adolfo, double salts of hydrazine, 1912, A.. ii, 345.

Ferrer Hernández, Jaime, action of hydrogen peroxide on metallic sulphides, 1909, A., ii, 147.

simple method of applying Boedeker's reaction, 1911, A., ii, 226.

microchemical investigation of alcohols, 1912, A., ii, 607.

Ferrer Hernández, Jaime, and Angel del Campo y Cerdan, Delepine's phosphorescent esters, 1911, A., i, 174.

analytical application of certain xanthates, 1911, A., ii, 825.

Ferrer Hernandez, Jaime. See also Angel del Campo y Cerdan.

Ferreri, G. See G. Charrier.

Ferrero, Efisio, and Mario Nozari, absorption spectra of solutions of chrome alum, 1905, A., ii, 493,

Ferrero, R. See Angelo Angeli and Vincenzo Castellana.

William Ferris. See Oswald Schreiner.

Ferrulli, Felice. See Luigi Francesconi and Gaetano Minunni.

Ferry, Edna L. See Thomas Burr Osborne.

Ferry, Paul, improved apparatus for the volumetric estimation of nitrogen, 1912, A., ii, 486.

Ferry, Paul. See also Georges Arth. Fersen, G. G. von, action of magnesium on a mixture of allyl bromide and pulegone (synthesis of 1-methyl-3allyl-4-isopropylidenecyclohexan-3-ol),

1910, A., i, 863.

Fersmann, Alex., stolpenite from the Rhone, 1907, A., ii, 561. paligorskite group, 1908, A., ii, 603.

erystallography of p-dithymolylamine dimethyl ether, 1909, A., i, 224.

Russian zeolites: leonhardite and laumontite from the Crimea, 1912, A., ii, 176.

quantitative composition of the earth's crust in percentage numbers of atoms, 1912, A., ii, 447.

Féry, Charles, heat and light radiations of certain oxides, 1903, A., ii, 124.

determination of boiling points of copper and zine, 1903, A., ii, 293. the temperature of flames, 1904, A.,

ii, 13.

a new pyrometer, 1904, A., ii, 467. Féry, Charles, and C. Chéneveau, melting point of platinum, 1909, A., ii,

Féry, Charles, and Eugène Tassilly, a new spectrophotometer and its application in analytical chemistry, 1912, A., ii, 1000.

Fester, Gustav. See Otto Dimroth.

Fetsch, William C. See Thomas Evans. Fetterolf, Daniel W., the Lloyd reaction as applied to heroine and vera-

trine, 1907, A., ii, 825.

Fettweis, F., influence of phosphorus on the solubility of carbon in iron, 1906,

A., ii, 232.

Fetvadjian, Aram. See Fritz Ullmann. Fetzer, K. See Edgar Wedekind.

Feuchter, Heinrich. See Otto Dimroth. Fenerstein, Wladyslaw, and Kurt Brass, dihydroxycoumaranone, 1904, A., i,

products of condensation of dihydroxycoumaranone and aldehydes, 1904, A., i. 336.

gallorubin, 1904, A., i, 344.

Feuillié. See Alexandre Desgrez.

Feulgen, R., behaviour of the true nucleic acids to dyes. I., 1912, A., i. 926.

Feyerabend, Reinhard, See Ludwig Claisen.

Feytis, (Mlle.) E., magnetism of some complex salts, 1911, A., ii, 367.

magnetic study of the rôle of water in the constitution of solid hydrates, 1911, A., ii, 1058.

Fichtenholz, (Mlle.) A., detection of arbutin in plants, 1908, A., ii, 995.

retarding influence of certain compounds on hydrolysis of glucosides by emulsin, 1909, A., i, 862.

glucoside of Pyrola rotundifolia, 1910.

A., ii, 889.

the application of biochemical methods in the analysis of the bilberry (whortleberry), 1912, A., ii, 108.

Fichtenholz, (Mile.) A. See also Emile Bourquelot.

Fichter, [Carl] Fritz [Rudolf], [stability of Schönbein's gun-cotton]; a correction, 1904, A., i, 375.

aluminium nitride, 1907, A., ii, 691. capillary electrical precipitation of positive colloids, 1911, A., ii, 100. electrolytic oxidation of ammonia,

1912, A., ii, 936.

Fichter, Fritz, Eugen Alber, Gustav Füeg, Wilhelm Latzko, Karl Philipp, Ernst Preiswerk, Georg Rosenberger, Ernst Tschudin, and Reinhard Vortisch, unsaturated acids, 1907, A., i,

Fichter, Fritz, and Theodor Beck, electrolytic reduction of nitrated phenyl thiocyanates, 1912, A., i,

105.

Fichter, Fritz, and Bernhard Becker, the formation of symmetrical dialkylcarbamides by heating the corresponding carbamates, 1912, A., i,

the formation of carbamide by heating ammonium carbamate, 1912, A., ii, 45.

Fichter, Fritz, and Alfred Beisswenger, reduction of glutaric anhydride to δ-valerolactone, 1903, A., i, 459.

Fichter, Fritz, and Walter Bernoulli, electrolytic reduction of p-toluenesulphonyl chloride, 1907, A., i, 690.

electrolytic reduction of 2-nitrotoluene-4-sulphonyl chloride, 1910, A., i,

Fichter, Fritz, and Rudolf Boehringer, quindoline, 1907, A., i 92.

Fichter, Fritz, and Paul Dieterle, 3:8diaminodiphenyleneazone, 1904, A., i, 631.

Fichter, Fritz, and Jaroslav Fröhlich, formazyl dyes, 1903, A., i, 722.

Fichter, Fritz, Jaroslav Fröhlich, and Marx Jalon, 2-amino-1-methylphenylene-4:5-dithiol [2-amino-4:5-dithiol-toluene] and sulphineazo-dyes, 1907, A., i, 1030.

 Fichter, Fritz, and Rudolf Gageur, 8amino-1-naphthol, 1906, A., i, 839.
 Fichter, Fritz, and Erwin Gisiger, β-

methylpentenoic acids, 1910, A., i, 88.
Fichter, Fritz, Heinrich Glaser, Max
Jetzer, Hans Kappeler, and Eugen
Weiss, synthetical p-dialkylated dihy-

droxyquinones, 1908, A., i, 658. Fichter, Fritz, and Max Goldhaber, ethylmalic acid, 1904, A., i, 648.

Fichter, Fritz, and Ernst Grether, a new synthesis of the benzene ring, 1903, A., i, 481.

Fichter, Fritz, Markus Guggenheim, and Ludwig Brasch, action of phenylhydrazine on dibromopyrotartaric acid, 1908, A., i, 105.

Fichter, Fritz, and Hans Kappeler, electrolytic oxidation of ammonium carbonate, 1910, A., ii, 98.

Fichter, Fritz, Albert Kiefer, and Walter Bernoulli, remarkable transformation of β-dialkylated acrylic acids when boiled with sulphuric acid, 1910, A., i, 88.

Fichter, Fritz, and Theodor Kühnel, 8amino-1-naphthol. II., 1910, A., i, 107.

Fichter, Fritz, and Hans P. Labhardt, decomposition of crotonic acid by heating with ammonia, 1910, A., i, 89.

Fichter, Fritz, and Hermann Müller, measurements of affinity of monobasic unsaturated fatty acids, 1906, A., i, 622.

Fichter, Fritz, and Hans Obladen, αethylpentenoic acids and xeronic anhydride, 1910, A., i, 87.

Fichter, Fritz, and G. Oesterheld, mercurous chromate, 1912, A., ii, 766.

Fichter, Fritz, and Alfred Pfister, pentenoic and hexenoic acids, 1904, A., i, 547.

measurements of conductivity of unsaturated acid, 1904, A., i, 965.

Fichter, Fritz, and Hans Probst, methylquindolanol, 1907, A., i, 977.

conductivity measurements with dibasic unsaturated structure-isomeric acids, 1910, A., i, 217. Fichter, Fritz, and Franz Rohner, oxidation of iodine by ozone, 1909, A., ii, 991.

some derivatives of quindoline, 1911, A., i, 85.

Fichter, Fritz, and Ernst Rudin, amethylparaconic acid, 1904, A., i, 472.

α-methyl-Δβ-pentenoic acid, 1904, A., i, 473.

Fichter, Fritz, and Naima Sahlbom, capillary analysis of colloidal solutions, 1911, A., ii, 259.

Fichter, Fritz, and Carl Schlaepfer, aydimethyl- and a-ethylitaconic acids,

1906, A., i, 399.

Fichter, Fritz, and Julius Schwab, β-methylglutaconic acids, 1906, A., i, 625.

3:4-diaminoguaiacol, 1906, A., i, 842.

Fichter, Fritz, and Ph. Sjöstedt, electrolytic oxidation of aromatic sulphides, 1911, A., i, 41.

Fichter, Fritz, and August Sulzberger, phenylbenzoquinone [diphenylquinone] and derivatives of diphenyl, 1904, A., i, 325.

Fichter, Fritz, and Walter Tamm, electrolytic reduction of aromatic sulphonyl chlorides, 1910, A., i, 835.

Fichter, Fritz, and Otto Walter, 2:5-diphenylphenol, 1910, A., i, 29.

Fichter, Fritz, and Walter Wenk, electrolytic oxidation of organic sulphur compounds, 1912, A., i, 423.

Fichter, Fritz, and Adolf Willmann, synthesis of dialkylated dihydroxy-

quinones, 1904, A., i, 678.

Fichter, Fritz, and Chaskel Wortsmann, nitrobenzylated ethyl acetonedicarbozylates, 1904, A., i, 591.

Fici, Saverio, action of succinic acid on p-anisidine, 1903, A., i, 162.

Ficken, K. See Heinrich Ley.

Fickendey, Ernst. See Hans Buhlert.
Fickewirth, Georg. See Karl Fries and
Arthur Heffter.

Fidlar, E. See G. G. Nasmith.

Fieber, Rudolf, apparatus for testing gases, 1905, A., ii, 278. rapid and correct estimation of tung-

rapid and correct estimation of tungsten in ferrotungsten, 1912, A., ii, 495.

Fiebeg, Paul, the long-waved portion of the spectrum of titanium, 1910, A., ii, 170.

Fiechter, A., method for the reduction of potassium platinichloride in the estimation of potassium by the platinum process, 1911, A., ii, 933. Fiederer, Max. See Rudolf Friedrich Weinland.

Fiedler, Albert. See Emil Fischer.

Fiedler, Anna. See Walther Borsche. Fiedler, F. See Hans Rupe.

Fiedler, Karl. See Alfred Einhorn.

Field, Cyrus W., and Oscar Teague, electrical charge of native proteins and agglutinins, 1908, A., ii, 118.

Field. (Miss) Ellen. See George Barger. Field, Samuel, conditions which determine the composition of electrodeposited alloys. Part I. Copperzinc alloys, 1910, A., ii, 38.

conditions which determine the composition of electro-deposited alloys. II. Silver-copper, 1910, A., ii,

851.

Fielding, William, formation of silicon sulphide in the desulphurisation of iron, 1910, A., ii, 32.

Fielding, William. See also John Nor-

man Pring. Fienga, G., investigations on smooth muscle (dog's oesophagus). II. Action of cations, 1910, A., ii, 630.

Fierz, Hans Eduard. See Martin Onslow Forster.

Figee, Th. See Frans Antoon Hubert Schreinemakers.

Figueras, J. See Paul Lebeau. Filchner, Hans. See Carl Bülow.

Filehne, Wilhelm, diuresis. I. Introduction, 1903, A., ii, 33. the solubility of castor oil in lipoids,

1907, A., i, 1035.

Filehne, Wilhelm, and H. Biberfeld, diuresis, 1903, A., ii, 33, 501. uptake of water and salt by the

epidermis and the hygroscopic characters of certain horny structures, 1904, A., ii, 575.

Filehne, Wilhelm, and Walter Ruschhaupt, diuresis, 1903, A., ii, 501.

Filippi, Eduardo, action of barium chloride on the heart, 1906, A., ii,

decomposition of hydrogen peroxide in the presence of various substances, 1908, A., ii, 271.

conjugation of sulphonyl derivatives, 1910, A., ii, 786.

pharmacological behaviour of certain insoluble preparations of mercury. I., 1911, A., ii, 1014.

pharmacological properties of adaline (a-bromo-a-ethylbutyrylcarbamide),

1911, A., ii, 1120.

some iodine compounds and preparations in common therapeutic use, 1912, A., ii, 74.

Filippi, Eduardo, and Leonardo Rodolico, changes in the circulation of nitrogen produced by colloidal silver prepared by the electrical method, 1909, A., ii, 80.

Filippi, Filippo de, trimethylamine as a normal product of metabolism and its estimation in urine and fæces, 1907, A., ii, 109.

carbohydrate metabolism in a dog with an Eck's fistula, 1907, A., ii, 707, 794.

Filippo, Hendrik, rapid electro-analysis, 1909, A., ii, 440.

some derivatives of mesoxalic acid, 1910, A., i, 298.

Filippo, Hendrik. See also Willem Paulinus Jorissen, Pieter Adriaan Meerburg, and Frans Antoon Hubert Schreinemakers.

Fillinger, Franz von, detection of formaldehyde, 1908, A., ii, 902.

new method for the estimation of sugar, 1912, A., ii, 209.

Finch, F. F. See John Smyth Macdonald.

Finch, George, a new apparatus for the quantitative estimation of sulphur trioxide in sulphuric acid, 1911, A., ii, 150.

volumetric estimation of combined sulphuric acid, 1912, A., ii, 806.

estimation of sulphuric, nitric, and nitrous acids in mixed and waste acids, 1912, A., ii, 991. Finck, Albert. See Erwin Rupp.

Finck, Georg. See Karl Fries.

Fincke, Heinrich, the quantity of cellulose, lignin, and cutin in pepper and cocoa, 1907, A., ii, 416. estimation of formic acid in foods,

1911, A., ii, 232.

the quantity of formic acid in honey,

1912, A., ii, 608. Fincke, Heinrich. See also Richard Stoermer.

Finckh, Karl, determination of chemical equilibrium from explosion processes. I., 1905, A., ii, 444.

Finckh, Karl. See also Friedrich Dolezalek and Oscar Piloty.

Finckh, L. See Otto Hauser.

Findeklee, Waldemar, nitro-m-toluic acids, 1906, A., i, 21.

isoquinoline derivatives from methylphthalic acid, 1906, A., i, 42.

Findlay, Alexander, method for the calculation of solubilities, 1903, A., ii,

freezing point curves of dynamic isomerides; ammonium thiocyanate and thiocarbamide, 1904, T., 403; P., 49.

Findlay, Alexander, viscosity of liquid mixtures at their boiling points, 1905, A., ii, 803.

formation of hydrogen peroxide and other compounds by means of the Tesla discharge, 1906, A., ii, 261.

apparatus for the determination of transport numbers, 1909, A., ii, 858.

viscosity of binary mixtures at their boiling points, 1909, A., ii, 975.

Findlay, Alexander, and Henry Jermain Maude Creighton, the influence of colloids and fine suspensions on the solubility of gases in water. Part I. Solubility of carbon dioxide and nitrous oxide, 1910, T., 536; P.,

solubility of gases in ox-blood and oxserum, 1911, A., ii, 211.

Findlay, Alexander, and Wilfred Harry Harby, influence of colloids on the absorption of gases, especially of carbon dioxide in water, 1908, A., ii, 1024.

Findlay, Alexander, and (Miss) Evelyn Marion Hickmans, freezing point curves of the menthyl mandelates, 1907, T., 905; P., 132; discussion, P., 133.

the influence of hydroxy- and alkyloxygroups on the velocity of saponification. Part II., 1909, T., 1004; P., 152.

the partial racemisation of menthyl r-mandelate, 1909, T., 1386; P., 196.

Findlay, Alexander, and Buechok Shen, the solubility of carbon dioxide in beer, 1911, T., 1313; P., 189. the influence of colloids and fine sus-

the influence of colloids and fine suspensions on the solubility of gases in water. Part II. Solubility of carbon dioxide and of hydrogen, 1912, T., 1459; P., 195.

Findlay, Alexander, and Frederick Charles Short, behaviour of solutions of propyl alcohol towards semipermeable membranes, 1905, T., 819; P., 170; discussion, P., 171.

Findlay, Alexander, and William Ernest Stephen Turner, the influence of the hydroxyl and alkoxyl groups on the velocity of saponification. Part I., 1905, T., 747; P., 127.

Findlay, Alexander, William Ernest Stephen Turner, and (Miss) Gertrude Emily Owen, affinity constants of hydroxy- and alkyloxy-acids, 1909, T., 938; P., 146.

Findlay, Leonard, hæmolysis in the liver, 1910, A., ii, 788.

Fine, Morris Scide. See Lafayette Benedict Mendel and Frank Poll Underhill.

Finger, C. P. See Carl L. A. Schmidt. Finger, Hermann, chloro-derivatives of diacetamide, 1906, A., i, 811.

cyanuric derivatives, 1907, A., i, 298. preparation of quinazoline derivatives, 1907, A., i, 876.

oxidation of ethyl glycollate by mercuric oxide, 1909, A., i, 359.

nucleus-substituted triphenylmethane dyes, 1909, A., i, 518.

of spark spectra 1909 A ii 774

of spark spectra, 1909, A., ii, 774, 843.

alkylation of ethyl cyanoanilide-o-

carboxylate, 1910, A., i, 383.

Finger, Hermann, and Morand Leo Baumann, hydrazine derivatives of the diaminodiphenylmethane series, 1906, A., i, 892.

Finger, Hermann, and Wilhelm Breitwieser, perhydrogenated quinolines, 1909, A., i, 512.

Finger, Hermann, E. Bretsch, and Wilhelm Zeh, naphthol yellow-S, 1909, A., i, 470.

Finger, Hermann, and Heinrich Günzler, [benzoylenecarbamide], 1911, A., i, 237.

Finger, Hermann, and O. Hemmeter, action of aromatic mercaptides on ethyl a-chloroacetoacetate, 1909, A., i, 470.

Finger, Hermann, and L. Schupp, action of imino-ethers on amino-esters, 1906, A., i, 901.

Finger, Hermann, L. Schupp, and Wilhelm Zeh, action of imino-ethers on amino-esters, 1907, A., i, 876.

Finger, Hermann, and Carl Spitz, quinoline derivatives of 1:5-naphthylenediamine; a case of hydrolysis in glacial acetic acid, 1909, A., i, 523. Finger, Hermann, and E. Wilner,

Finger, Hermann, and E. Wilner, benzeneazosalicylic acid with the carboxyl group in the para-position, 1909, A., i, 536.

Finger, Hermann, and Wilhelm Zeh, new synthesis of benzoylenecarbamide, 1910, A., i, 382.

two isomeric benzylglyoxalidones, 1910, A., i, 591.

Finger, Hermann. See also Heinrich Konen.

Fingerling, Gustav, influence of irritants on milk secretion, 1904, A., ii, 61.

influence of food on milk secretion and on the composition of milk, 1904, A., ii, 424. Fingerling, Gustav, influence of stimulants on the consumption of food: digestibility and secretion of milk with non-stimulating and normal food, 1905, A., ii, 476.

effect of foods, both rich and poor in fat, in conjunction with various foods on milk secretion, 1906, A., ii,

622.

effect of food deficient in calcium and phosphoric acid on the secretion of

milk, 1911, A., ii, 510.

the physiological utilisation of the phosphorus compounds in fodders by ruminants, 1912, A., ii, 63.

the formation of organic phosphorus compounds from inorganic phosphates in the animal body, 1912, A., ii, 272.

the influence of organic and inorganic compounds on the secretion of milk,

1912, A., ii, 464.

Fingerling, Gustar, and Adolf Grombach, a new modification of Petermann's method for estimating citrate-soluble phosphoric acid in precipitated calcium phosphate (futterkalk), 1908, A., ii,

Fingerling, Gustav, and Arnulf Hecking, the quantitative separation of organic phosphorus and phosphates in folders, 1912, A., ii, 91. ingerling, Gustav. See also Carl

Fingerling, Beger and August Morgen.

Fink, Colin Garfield. See Max Bodenstein. Fink, Gail J. See James Bert Garner.

Fink, Hermann. See Oscar Piloty. Finke, Wilhelm, magnetic measurements of platinum metals and of monoclinic crystals, in particular of iron, cobalt, and nickel salts, 1910, A., ii, 179.

Finkelstein. Alexis. dissociation barium carbonate, 1906, ii,

354.

Finkelstein, preparation Hans, organic iodides from the corresponding bromides and chlorides, 1910, A., i, 453.

s-dichlorotetraphenylethane, 1910, A., i. 469.

Finkelstein, (Mlle.) Marie. See Eugen Bamberger and Amé Pictet.

Finkenbeiner, Hermann Adr. See Oskar Blank.

Finlayson, Alexander Moncrieff, the scheelite of Otago, 1909, A., ii,

nephrite and magnesium rocks from South Island, New Zealand, 1909, A., ii, 901.

Finlayson, Alexander Moncrieff, [wolframite and apatite from Carrock Fell, Cumberland], 1910, A., ii, 308.

Finn, A. N., estimation of uranium and vanadium, 1906, A., ii, 903.

Finn, Bertha, action of nutritive fluids

on the heart, 1906, A., ii, 40. Finn, Cornelius Philip. See Julius

Berend Cohen.

Finnemore, Horace, the constituents of Canadian hemp. Part I. Apocynin, 1908, T., 1513; P., 171.

a new synthesis of apocynin, 1908,

T., 1520; P., 171.

the constituents of Canadian hemp. Part II. Cynotoxin; preliminary note, 1909, P., 76.

chemical examination of the rhizome of Cimicifuga racemosa, 1910, A., ii,

801.

chemical examination of the bark of a species of prunus, 1910, A., ii, 1102.

Horace. See also John Finnemore. Wade.

Finoguéeff. See Michael I. Konowaloff.

Finzi, Bice, solubility of silver chloride in presence of mercuric salts, 1903, A., ii, 210.

formation of complex compounds of salts of silver and mercury, 1912, A., ii, 158.

some new basic silver-mercury compounds, 1912, A., ii, 158.

Finzi, Cesare, some derivatives of acetophenoneacetone, 1912, A., i, 995.

δ-phenyl-a-methyltetramethylenediamine : [ao-diamino-a-phenylpent-

ane], 1912, A., i, 1022. Finzi, Cesare, and Martin Freund, the electrolytic reduction of narcotine, 1912, A., i, 897.

Finzi, F. See Giuseppe Bruni.

Finzi, Friedrich, dihydroxydeoxybenz-

oins, 1905, A., i, 906.

Fiora, Paolo, rapid valuation of pastilles of mercuric chloride and cubes of sodium and potassium iodides, 1908, A., ii, 735.

Fiore, André. See Ernest Fourneau. Fiorentino, G. See Luigi Marino.

Fiori, Quinto, characteristic reactions of

atoxyl, 1910, A., ii, 1012.

Firbas, Richard, identity test for condurang extract, 1903, A., ii, 459. action of gum arabic on morphine, 1906, A., i, 529.

Fireman, Ernestine, and Peter Fireman, action of phosphonium iodide on polychlorides, 1903, A., ii, 644.

Fireman, Peter, deduction of the magnitude of the osmotic pressures in dilute solutions according to the kinetic theory, 1903, A., ii, 133.

action of ammonium chloride on certain chlorides. I. Action on metallic chlorides, 1904, A., ii, 656.

Fireman, Peter, and Edward 4. Portner, dissociation points of chlorides, 1904, A., ii, 723. Fireman, Peter. See also

See also Ernestine Fireman.

Firket, Pierre, tonometry of the gases of the blood, 1910, A., ii, 622.

Firma Emanuel Merck. See Merck. Firma Rud. Rütgers, separation of p-

and m-cresols, 1903, A., i, 479, 555.

Firth, James Brierley, note on the dehydration of crystals, 1911, P., 237.

Firth, James Brierley, and James Eckersley Myers, the action of sodium hypophosphite on copper sulphate in aqueous solution, 1911, T., 1329; P., 139; 1912, P., 101.

an apparatus for precipitating, filtering and drying in an inert gas,

1911, P., 96.

Firth, Robert Hammill, epidemic or bacillary dysentery, 1905, A., ii, 50.

Fischel, Alfred, the influence of chemical agents on the affinity of nerve for dyes, 1909, A., ii, 330.

Fischel, Richard, histochemical detection of peroxydases, 1911, A., ii,

Fischer, Arthur, quantitative analysis by electrolysis. XIII. Electrolytic estimation of antimony and its separation from tin, 1903, A., ii,

electrolytic separation of silver from antimony, 1904, A., ii, 87.

electrolytic estimation and separation of antimony and tin; the trisulphide method for estimating antimony, 1905, A., ii, 120.

electrolytic deposition of nickel from ammonium oxalate solution, 1907,

A., ii, 654.

electrolytic analysis, 1908, A., ii,

rapid electrolytic separation of nickel from zinc, 1908, A., ii, 324.

compensation apparatus for rapid methods of electrolytic analysis, 1909, A., ii, 521.

Fischer, Arthur, and R. J. Boddaert, electrolytic deposition of the more important metals from moving solutions, 1905, A., ii, 206.

Fischer, Arthur, and G. Delmarcel, electrolytic oxidation of sulphurous acid in aqueous solution, 1910, A., ii, 603.

Fischer, Arthur, and Remigius Fresenius, simple stand for electrolysis with gauze electrodes without disturbance of the liquid, 1912, A., ii, 484.

Fischer, Arthur, and J. Weise, the electrolytic estimation of molybdenum,

1912, A., ii, 869.

Fischer, August, detection of phosphorus, 1903, A., ii, 692. decomposition of hydrogen peroxide

solutions, 1907, A., ii, 161.

Fischer, Carl, and Richard Wolffenstein, the condensing influence of potassium persulphate on the toluic acids, 1904, A., i, 896.

Fischer, Emil, synthesis of polypeptides, 1903, A., i, 465, 799; 1904, A., i, 652; 1905, A., i, 688; 1906, A., i, 145, 808; 1907, P., 82; discussion, P., 82; A., i, 485; 1908, A., i, 324, 544.

hydrolysis of casein and silk-fibroin

by acids, 1903, A., i, 779.

synthesis of polypeptides. rivatives of phenylalanine, 1904, A., i, 890.

5-methylbarbituric acid, 1905, A., i, 122.

synthesis of polypeptides. XIII. Chlorides of amino-acids and polypeptides, and their use as synthetical agents, 1905, A., i, 863.

action of hippuryl chloride on polyhydric phenols, 1905, A., i, 892.

use of quartz vessels for lecture experiments, 1905, A., ii, 20.

amino-acids, polypeptides, and proteins, 1906, A., i, 324.

the Faraday lecture on synthetical chemistry in its relation to biology,

1907, T., 1749; P., 220. solubility of sodium naphthalene-\$sulphonate in water and in hydro-

chloric acid, 1907, A., i, 25. Walden's inversion, 1907, A., i, 192. B-mercuridipropionic acid, 1907, A.,

i. 200. occurrence of l-serine in silk, 1907,

A., i, 485. polypeptides. XXI. Derivatives of tyrosine and of glutamic acid, 1907, A., i, 901.

designation of optical antipodes as dand l- compounds, 1907, A., ii, 148.

spiders' silk, 1907, A., ii, 566.

optically active trimethyl-a-propiobetaine (a-homobetaine), 1908, A., i, 80.

Fischer, Emil, the melting point of phenylhydrazine and of certain osazones, 1908, A., i, 105.

reduction of glycine ethyl ester, 1908,

A., i, 323.

the synthesis of polypeptides. XXV. Derivatives of tyrosine and of amino-

acetal, 1908, A., i, 887.

methylcarbonato-derivatives of phenolcarboxylic acids and their use for synthetical operations, 1908, A., i, 892; 1909, A., i, 161, 309.

acetalyl sulphide, 1909, A., i. 363, history of guanino-acids, 1909, A., i,

some derivatives of phloroglucinol and a new synthesis of benzoresorcinol [2:4-dihydroxybenzophenone], 1910, A., i, 248.

conversion of guanine into xanthine by means of hydrochloric acid, 1910,

A., i. 336.

history of diazohydrazides, 1911, A.,

i, 90.

the Walden inversion and substitution processes, 1911, A., i, 418; 1912, A., i, 187.

acetohalogen-glucoses and p-bromophenylosazones of maltose and meli-

biose, 1911, A., i, 605.

micro-polarisation, 1911, A., ii, 85. Fischer, Emil, and Emil Abderhalden, hydrolysis of oxyhæmoglobin by the aid of hydrochloric acid, 1903,

A., i, 136. digestion of proteins by the pancreas

ferments, 1903, A., ii, 666.

synthesis of polypeptides. V. Derivatives of proline (pyrrolidine-2-carboxylic acid), 1904, A., i, 917.

hydrolysis of proteins, 1904, A., i,

1066.

digestion of casein by pepsin hydrochloric acid and by pancreas-ferment, 1904, A., i, 210.

behaviour of various polypeptides towards the pancreas ferment, 1905,

A., ii, 333.

formation of a dipeptide by hydrolysis of silk fibroin, 1906, A., i, 326.

formation of dipeptides by the hydrolysis of proteins, 1906, A., i,

behaviour of different polypeptides towards pancreas and stomachic

juices, 1906, A., ii, 99.

formation of polypeptides by the hydrolysis of proteins, 1907, A., i, 737, 990.

behaviour of certain polypeptides to pancreatic juice, 1907, A., ii, 487.

Fischer, Emil, and Friedrich Ach. conversion of caffeine into paraxanthine. theophylline, and xanthine, 1906, A.,

Fischer, Emil, and Edward Andreae. chitonic and chitaric acids, 1903, A.,

i, 678.

Fischer, Emil, and Walter Axhausen, synthesis of polypeptides. Alanylglycine and leucylalanylglycine, 1905, A., i, 688.

Fischer, Emil, and Peter Bergell, 8naphthalenesulphonic derivatives of

amino-acids, 1903, A., i, 24.

derivatives of dipeptides and their behaviour towards pancreas ferments, 1903, A., i, 694.

hydrolysis of dipeptides with pancreas

ferment, 1904, A., i, 867.

Fischer, Emil, Paul Blank, Julius Schenkel, Walther Schrauth, and Arthur Heinrich Koelker, synthesis of polypeptides. XIX., 1907, A.,i,684.

Fischer, Emil, and Herbert Blumenthal, synthesis of a-amino-y-hydroxybutyric

acid, 1907, A., i, 191.

Fischer, Emil, and Reginald Boehner, formation of proline by the hydrolysis of gelatin with barium hydroxide, 1910, A., i, 345.

conversion of glutamic acid and of pyrrolidonecarboxylic acid into pro-

line, 1911, A., i, 484.

Fischer, Emil, and Arnold Brunner, of polypeptides. synthesis Leucylglycine and alanyl-leucylglycine, 1905, A., i, 690.

Fischer, Emil, and Hans Carl, resolution of a-bromoisohexoic and of a-bromohydrocinnamic acids, 1907, A., i, 9.

Fischer, Emil, and Lee Holt Cone, synthesis of polypeptides. XXVII. I. Derivatives of histidine, 1908, A., i, 1004.

Fischer, Emil, and Konrad Delbrück, phenylthiolglucosides, 1909, A., i, 365. synthesis of new disaccharides of the type of trehalose, 1909, A., i, 633.

Fischer, Emil, and Alfred Dilthey, 5:5dialkylbarbituric acids and the ureides of the dialkylacetic acids, 1905, A., i, 35.

Fischer, Emil, and Theodor Dörpinghaus. hydrolysis of horn, 1903, A., i, 216.

Fischer, Emil, and Albert Fiedler, synthesis of polypeptides. XXXII. (I,) Derivatives of aspartic acid, 1910, A., i, 656.

Fischer, Emil, Hans Fischer, and Burckhardt Helferich, derivatives of lactose and of maltose and two new glucosides, 1910, A., i, 716,

Fischer, Emil, and Otto Fischer, derivatives of triphenylmethane, 1904, A., i. 863.

Fischer, Emil, and Erich Flatau, conversion of active a-bromopropionic acid into active methylsuccinic acid, 1909, A., i, 205.

optically active cyanopropylisopropylacetic acid, 1909, A., i, 628.

Fischer, Emil, and Karl Freudenberg, methylcarbonato-derivatives phenolearboxylic acids and their use for synthesis operations. IV., 1910, A., i, 265.

tannin, and the synthesis of similar substances, 1912, A., i, 471, 887.

Fischer, Emil, Karl Freudenberg, Kurt Hoesch, and Richard Lepsius, methylcarbonato-derivatives of phenolcarboxylic acids and their use for synthetic operations. V., 1911, A., i, 874.

Fischer, Emil, and Ferdinand Gerlach, pyrroline-2-carboxylic acid, 1912, A.,

i, 899.

Fischer, Emil, and Otto Gerngross, synthesis of polypeptides. XXX. Derivatives of l-cystine, 1909, A., i, 367.

Fischer, Emil, and Wilhelm Gluud, synthesis of polypeptides. XXXI. Derivatives of leucine, alanine, and N-phenylglycine, 1909, A., i, 887.

Fischer, Emil, and Albert Göddertz, synthesis of γ-amino-a-hydroxybutyric acid and its trimethyl derivative,

1911, A., i, 19.

Fischer, Emil, and Reinhart Groh, production of some amino-acids from phenylhydrazones of ketonic acids by aluminium amalgam, and preparation of the optically active \gamma-aminovaleric acids, 1911, A., i, 773.

Fischer, Emil, and Burckhardt Helferich, new synthetic glucosides, 1911,

A., i, 802.

Fischer, Emil, and Kurt Hess, compounds of carbohydrate derivatives with magnesium methyl iodide, 1912, A., i, 415.

Fischer, Emil, Kurt Hess, and Alex. Stahlschmidt, conversion of dihydrofurandicarboxylic acid into hydroxypyridinecarboxylic acid, 1912, A., i, 901.

Fischer, Emil, and Kurt Hoesch, methylcarbonato-derivatives of phenolearboxylic acids and their use for synthetic operations. VII. Didepsides of hydroxynaphthoic, ferulic, and o-coumaric acids; methyl derivatives of orsellic acid, 1912, A., i, 859.

Fischer, Emil, Julius Holzapfel, and Hans von Gwinner, optically active dialkylacetic acids, 1912, A., i, 157.

Fischer, Emil, and Walter Abraham Jacobs, resolution of racemic serine into the optically active components, 1906, A., i, 807.

optically active modifications of serine. isoserine, and diaminopropionic acid,

1907, A., i, 393.

Fischer, Emil, and Carl Kaas, action of hippuryl chloride on 2-methylindole,

1906, A., i, 455. Fischer, Emil, and Tokuhei Kametaka. reduction of the esters of d-alanine

and of dl-phenylalanine, 1909, A., i,

Fisher, Emil, and Karl Kautzsch. synthesis of polypeptides. XII. Alanylalanine and its derivatives, 1905, A.,

Fischer, Emil, and William F. Koelker, synthesis of polypeptides. Leucylisoserine, 1905, A., i, 692.

Fischer, Emil, and Ernst Koenigs, synthesis of polypeptides. VIII. Chlorides and amides of aspartic acid, 1905, A., i, 31.

synthesis of polypeptides. XVIII. Derivatives of aspartic acid, 1907,

A., i, 486.

Fischer, Emil, and Adolf Krämer, preparation of a-amino-yo-dihydroxy-nvaleric acid, 1908, A., i, 858.

Fischer, Emil, and Walter Kropp, synthesis of polypeptides. XXVI. I. Derivatives of a-aminostearic acid, 1908, A., i, 773.

Fischer, Emil, Walter Kropp, and Alex Stahlschmidt, derivatives of glutamic

acid, 1909, A., i, 368.

Fischer, Emil, and Hermann Leuchs, synthesis of serine, l-glucosaminic acid, and other hydroxyamino-acids, 1903, A., i, 12.

synthesis of d-glucosamine, 1903, A.,

i, 233.

Fischer, Emil, and Efim Semen London, formation of proline in the digestion of gliadin, 1911, A., ii, 905.

Fischer, Emil, and Andreas Luniak, synthesis of polypeptides. XXXII. Derivatives of l-proline and of phenylalanine, 1910, A., i, 136.

Fischer, Emil, Koichi Matsubara, and Siegfried Hilpert, resolution of aminoisovaleric acid into its optically active components, 1906, A., i, 561.

Fischer, Emil, and Josef von Mering, new class of narcotics, 1903, A., i, 552.

Fischer, Emil, and Joseph von Mering,

veronal, 1905, A., ii, 776.

Fischer, Emil, and Annibale Moreschi, Walden rearrangement. Conversions of d-glutamic acid, 1912, A., i. 836.

Fischer, Emil, and Erich Otto, synthesis of some dipeptide derivatives, 1903,

A., i, 607.

synthesis of polypeptides, 1903, A., i, 800.

Fischer, Emil, and Otto Pfeffer, methylcarbonato-derivatives of phenolcarboxylic acids and their use for synthetic VI. Partial methylation operations. of phenolcarboxylic acids, 1912, A., i,

Fischer, Emil, and Karl Raske, synthesis of polypeptides. XI. Derivatives of a-aminobutyric acid, 1905,

A., i, 693.

transformation of \$\beta\-vinylacrylic acid into diaminovaleric acid, 1905, A., i, 863.

stereochemistry of the 2:5-diketopiperazines, 1906, A., i, 457; 1907, A., i, 18.

mutual interconversion of optically active bromosuccinic and aspartic acids, 1907, A., i, 381.

conversion of l-serine into d-alanine,

1907, A., i, 900.

conversion of l-serine into the natural optically active cystine, 1908, A.,

syntheses of glucosides, 1909, A.,i, 365. compound of acetylbromoglucose and

pyridine, 1910, A., i, 503.

Fischer, Emil, and Georg Reif, synthesis of polypeptides. XXVII. (II.) Derivatives of proline [pyrrolidine-2-carboxylic acid], 1908, A., i, 1007.

Fischer, Emil, and Ferd. Reuter, synthesis of polypeptides. IX. Chlorides

of the amino-acids and their acyl de-

rivatives, 1905, A., i, 263.

Fischer, Emil, and Hans Roesner, synthesis of polypeptides. XXXII. (II.) Dipeptides of serine, 1910, A., i, 657.

Fischer, Emil, and Helmuth Scheibler, Walden's inversion, 1908, A., i, 324, 857; 1909, A., i, 359.

synthesis of polypeptides. (III.) Derivatives of active valine, 1908, A., i, 957.

the Walden inversion. VI. 8-Aminobutyric acid, 1911, A., i, 527.

Fischer, Emil, Helmuth Scheibler, and Reinhart Groh, the Walden inversion. V. Optically active β-amino-β-phenylpropionic acid, 1910, A., i, 622.

Fischer, Emil, and Fritz Schlotterbeck. transformation of sorbic acid into amino-acids, 1904, A., i, 549.

Fischer, Emil, and Julius Schmidlin, synthesis of polypeptides. XI. Dipeptides of phenylglycine with glycine, alanine, asparagine, and aspartic acid, 1905, A., i, 694.

Fischer, Emil, and Wilhelm Schmitz, synthesis of a-amino-acids by means of bromo-fatty acids, 1906, A., i,

phenylbutyric acids and their a-amino-

derivatives, 1906, A., i, 584.

Fischer, Emil, and Walter Schoeller, synthesis of polypeptides. XXII. Derivatives of l-phenylalanine, 1907, A., i, 1037.

Fischer, Emil, and Hans Schrader, compounds of quinones with esters of amino-acids, 1910, A., i, 270.

Fischer, Emil, and Arnold Schulze, synthesis of polypeptides. XVI. Derivatives of d-alanine, 1907, A., i, 295.

Fischer, Emil, and Max Darwin Slimmer, attempts at an asymmetric synthesis, 1903, A., i, 696.

Fischer, Emil, and Donald D. ran Slyke, products from pyrrole-2-carboxylic acid, 1911, A., i, 1020.

Fischer, Emil, and Joseph Steingroever, synthesis of polypeptides. XXIX. Derivatives of l-leucine, d-alanine, and glycine, 1909, A., i, 366.

Fischer, Emil, Hermann Strauss, and Josef Severin, synthesis of phenolic glucosides, 1912, A., i, 884.

Fischer, Emil, and Umetaro Suzuki, synthesis of polypeptides. III. Derivatives of pyrrolidine-2-carboxylic acids, 1904, A., i, 771.

synthesis of polypeptides. VII. Derivatives of cystine, 1905, A., i, 30. polypeptides of the diamino-acids, 1905, A., i, 121.

cystine, 1905, A., ii, 736.

synthesis of polypeptides. X. Polypeptides of the diamino- and hydroxyamino-acids, 1906, A., i, 73.

Fischer, Emil, and Otto Warburg, synthesis of polypeptides. XI. Glycylleucine, alanyl-leucine, leucylalanine, glycylalanyl-leucine, and active alanylglycine, 1905, A., i, 690. synthesis of polypeptides. XI. Opti-

cally active a-bromopropionic acid,

1905, A., i, 692.

resolution of leucine into its optically active components by means of its formyl derivative, 1906, A., i, 72.

Fischer, Emil, and Oskar Weichhold, resolution of aminophenylacetic acid into optically active constituents. 1908, A., i, 419.

Fischer, Emil. and Franz Wrede, heats of combustion of some organic com-

pounds, 1904, A., ii, 468.

determination of the heat of combustion of organic compounds by use of the platinum resistance thermometer, 1908, A., ii, 155.

Fischer, Emil, and Karl Zach, syntheses of bases of the sugar group,

1911, A., i, 117.

new anhydrides of dextrose and glucosides, 1912, A., i, 239.

new transformations of anhydrodextrose, 1912, A., i, 678. Fischer, Emil, and Géza Zemplén, be-

haviour of cellobiose and its ozone towards certain enzymes, 1909, A., i, 209.

new synthesis of inactive ad-diaminovaleric acid and of proline, 1909,

A., i, 303.

synthesis of the two optically active

prolines, 1909, A., i, 793.

new synthesis of aminohydroxy-acids and of piperidone derivatives, 1910, A., i, 100.

behaviour of cellose towards certain

enzymes, 1910, A., i, 302. e-amino-a-guanidinohexoic acid, 1910,

A., i, 305.

additions to the papers on e-aminoa-guanidinohexoic acid and new synthesis of aminohydroxy-acids and of piperidone derivatives, 1910, A., i, 612.

derivatives of cellobiose, 1910, A., i,

Fischer, Ernst, a new pyknometer pipette, 1904, A., ii, 384.

Fischer, Ernst. also Julius See Schmidt.

Fischer, Franz, valvular action and pulverisation of copper anodes, 1903, A., ii, 587.

anodic behaviour of copper and aluminium, 1904, A., ii, 534.

transition resistance and polarisation at the aluminium anode, 1905, A., ii, 6.

blue aluminium compounds deposited on the aluminium anode, 1905, A., ii, 252.

action of ultra-violet light on glass,

1905, A., ii, 320.

chemical transfer of metallic potentials and the chemical solution pressure of metals, 1905, A., ii, 501.

Fischer, Franz, mercury are lamp with quartz jacket suitable for chemical purposes, 1905, A., ii, 568.

course of chemical reactions at high temperatures, 1907, A., ii, 72,

preparation of argon from air by means of calcium carbide, 1907, A., ii, 344. formation of ozone by means of ultraviolet light, 1909, A., ii, 657.

theory of volatilisation by atomic rays.

1909, A., ii, 718.

process of rapidly forming lead-accumulator plates by means of phosphoric acid and phosphates, 1910, A., ii, 576.

Fischer, Franz, and Kurd Bendixsohn, production of ozone with rotating

anodes, 1909, A., ii, 136. formation of ozone at stationary

linear electrodes, 1909, A., ii, 227. Fischer, Franz, and Fritz Brachmer. formation of ozone by ultra-violet

light, 1905, A., ii, 580.

conversion of oxygen into ozone at high temperatures and the oxidation of nitrogen, 1906, A., ii, 224.

Fischer, Franz, and Victor Froboese, fractional crystallisation and atomic weight of argon, 1911, A., ii, 202.

Fischer, Franz, and Otto Hähnel, volatilisation of cathodes in attenuated gases, 1908, A., ii, 653, 800.

chemical or physical theory of volatisation (of cathodes), 1908, A., ii, 925.

preparation of pure argon and nitrogen,

1910, A., ii, 608.

Fischer, Franz, and George Iliovici, products of the arc and spark electric discharge in liquid argon, 1908, A., ii. 1034.

products of the arc and spark electric discharge in liquid argon. II. Experiments with hydrogen, titanium, tin, lead, antimony, and bismuth, 1909, A., ii, 139.

products of the arc and spark electric discharge in liquid argon or nitrogen. III. Tin nitride and pyrophoric tin,

1909, A., ii, 232.

Fischer, Franz, and Richard Lepsius, a constant form of a galvanic element with carbon anode (brennstoff element), 1912, A., ii, 1036.

Fischer, Franz, and Hans Marx, thermal production of ozone and of nitrie oxide in moving gases, 1906, A., ii,

behaviour of ozone with tetramethyldi-p-diaminodiphenylmethane, 1906, A., ii, 627.

Fischer, Franz, and Hans Marx, thermal relationships between ozone, nitric oxide, and hydrogen peroxide, 1906, A., ii, 845; 1907, A., ii, 163, 340.

Fischer, Franz, and Karl Massenez, preparation of ozone by electrolysis,

1907, A., ii, 162, 254.

Fischer, Franz, and Hans Ploetze, the electric pressure furnace. I. Construction of the furnace and its temperature-gradient under pressure, 1912, A., ii, 530.

the electric pressure furnace. Alkali peroxides from alkali hydroxides and oxygen, 1912, A., ii,

553.

the electric pressure furnace. Strontium peroxide from strontium oxide and oxygen, 1912, A., ii, 554.

the electric pressure furnace. III. Preparation of lead peroxide from lead oxide, and the dark brown compound, Pb₅O₈, 1912, A., ii, 555.

Fischer, Franz, and Oskar Ringe, formation of hydrogen peroxide, 1908, A.,

ii, 371.

preparation of argon from air by means of calcium carbide, 1908, A., ii, 688.

Fischer, Franz, and Fritz Schröter, new compounds of nitrogen with metals and their stability in the light of the periodic system, 1910, A., ii,

new experiments on the combining capacity of argon, 1910, A., ii, 608.

modifications of metals resulting from electrical disintegration in liquid argon, 1910, A., ii, 609.

Fischer, Franz, and Emil Stecher, rapid

electro-analysis under diminished

pressure, 1912, A., ii, 1096.

Fischer, Franz, and Karl Thiele, the lead coulombmeter, 1910, A., ii, 681. Fischer, Franz, Karl Thiele, and Edward

B. Maxted, the lead coulombmeter.

II., 1910, A., ii, 682.

Fischer, Franz, Karl Thiele, and Emil Stecher, rapid electro-analysis with stirring by bubbling a gas through the solution, 1911, A., ii, 1129. rapid electro-analysis under reduced

pressure, 1911, A., ii, 1129.

Fischer, Franz, and Erich Tiede, an electrical tungsten-resistance oven for chemical purposes, 1911, A., ii, 694.

Fischer, Franz, and Max Wolf, synthesis of concentrated hydrogen peroxide by means of the silent electrical discharge, 1911, A., ii, 1082.

Fischer, Franz, and Max Wolf, synthesis of hydrogen peroxide, 1912, A., ii, 447.

Fischer, Franz. See also Erich Tiede. Fischer, Fritz, change of resistance of palladium wires caused by occlusion of hydrogen, 1906, A., ii, 516.

Fischer, Georg (Berlin). See Otto Ruff. Fischer, Georg (Giessen), hæmolysis; is there a cocaine hæmolysis? 1910, A., ii. 970.

Fischer, Hans (Marburg). See Theodor

Zincke.

Fischer, Hans (München), optical behaviour of tryptophan, 1908, A., i,

question of the attachment of the purine bases in the nucleic acid

molecule, 1909, A., i, 434.

d-leucyl-l-tryptophan, 1910, A., i, 22. behaviour of d-leucyl-l-tryptophan towards autolytic ferments, 1910, A., i, 599.

synthesis of \(\beta\)-menthol-lactoside and its behaviour in the organism, 1911,

A., i, 217.

bile pigments. I., 1911, A., i, 803. Fischer, Hans, and Erich Bartholomaus

hamopyrrole, 1912, A., i, 50, 580. syntheses of phyllopyrrole; chemistry of hæmopyrrole, 1912, A., i, 297.

azo-dyes from substituted pyrroles,

1912, A., i, 323.

action of sodium ethoxide on pyrrole derivatives. I. and II., 1912, A., i, 384, 901.

preparation of phonopyrrolecarboxylic acid from hæmin, 1912, A., i,

the solution of the hæmopyrrole question, 1912, A., i, 646.

synthesis of 2:4-dimethylpyrrole-5acetic acid and 2:4-dimethylpyrrole-5-propionic acid, 1912, A., i, 647.

Fischer, Hans, and Paul Meyer, bile pigments. III. Hemibilirubin and its oxidation products, 1911, A., i,

isolation of choleic acid, stearic acid, and cholesterol from ox gall-stones,

1912, A., ii, 71.

Fischer, Hans, and Friedrich Meyer-Betz, bile pigments. II. Urobilinogen of urine and the nature of Ehrlich's aldehyde reaction, 1911, A., i, 1004.

Fischer, Hans, and Heinrich Rose, bilirubic acid, a new degradation product of bilirubin, 1912, A., i, 575.

Fischer, Hans. See also Emil Fischer and Otto Neubauer.

Fischer, Herbert. See Walter Herz.

Fischer, Hermann (Jena). See Ludwig Knorr.

Fischer, Hermann (München). See Eilhard Alfred Mitscherlich.

Fischer, Hermann (Wurzburg). See Wilhelm Manchot.

Fischer, Hugo, nitrogen-fixing bacteria, 1905, A., ii, 189.

life conditions of nitrogen-fixing bacteria, 1905, A., ii, 602.

the condition of living substance, 1905, A., ii, 841.

theory of dyeing, 1908, A., ii, 759. effect of lime on soil bacteria, 1909, A., ii, 602.

the transformations of nitrogen in different soils, 1912, A., ii, 594.

Fischer, Hugo. See also Otto Lemmermann and Ferdinanal Wohltmann.

Fischer, H. F. See Max Cloetta.
Fischer, Hermann Waldemar, metallic hydroxides, 1904, A., ii, 563; 1909, A., ii, 241.

freezing mixtures of isomeric xylenes, nitrotoluenes, and toluidines, 1910, A., i, 309.

positive ferric hydroxide, 1910, A., ii,

negative ferric hydroxide. I. The preparation and properties of negative ferric hydroxide, 1910, A., ii, 856.

negative ferric hydroxide. II. Ferric hydroxide and serum, 1910, A., ii, 856.

Fischer, Hermann Waldemar, and Otto Bobertag, glass thermostats for higher temperatures, 1908, A., ii, 757.

theory of reversible sols, 1909, A., ii, 303.

freezing of hydrogels, 1909, A., ii, 545.
Fischer, Hermann Waldemar, and E.
Brieger, ultra-microscopic observations of the hydrolysis of mercuric
chloride, 1910, A., ii, 957.

iron in blood, 1912, A., ii, 269.

iron in blood. II. Iron poisons, 1912, A., ii, 924.

Fischer, Hermann Waldemar, and Eric Kuznitzsky, negative ferric hydroxide. III. Arsenic and iron, 1910, A., ii, 882.

Fischer, Hermann Waldemar. See also Otto Bobertag.

Fischer, J. See Herbert Freundlich. Fischer, Julius, thermochemical theory of assimilation, 1906, A., ii, 792.

Fischer, Karl, and O. Gruenert, detection of benzoic acid in meats and fats, 1909, A., ii, 708; 1910, A., ii, 1121.

Fischer, Karl, and H. Peyau, Halphen's reaction, 1905, A., ii, 213.

Fischer, Karl von. See Walter Dieckmann.

Fischer, Karl T., and Heinrich Alt, boiling point, freezing point, and vapour tension of pure nitrogen at low pressures, 1903, A., i, 72.

freezing and melting pressure of nitrogen, 1903, A., i, 72.

Fischer, Max. See Wilhelm Wislicenus.

Fischer, Martin Henry, antagonism between alkaloids and salts, 1904, A., ii, 198.

production and inhibition of glycosuria in rabbits by salts, 1905, A., ii, 103, 741.

the swelling of fibrin, 1908, A., i, 929. cedema as a colloido-chemical problem, and observations on the nature of water-fixation in the organism, 1910, A., ii, 329.

the nature of turbid swelling; (parenchymatous, albuminous, or granular degeneration), 1911, A., ii, 309.

the colloido-chemical analysis of neph-

ritis, 1911, A., ii, 417. colloido-chemical analysis of absorption and secretion processes; absorption from the peritoneal cavity, 1911, A., ii, 510.

the colloid-chemical theory of water absorption by protoplasm, 1912,

A., ii, 856.

Fischer, Martin Henry, and Gertrude

Moore, the swelling of fibrin, 1907,
A., i, 1095.

alimentary excretion of carbohydrates, 1907, A., ii, 798.

inhibiting action of neutral salts on the swelling of fibrin through acids and alkalis, 1909, A., i, 856.

Fischer, Martin Henry, and Wolfgang Ostwald, physico-chemical theory of fertilisation, 1905, A., ii, 329.

Fischer, Martin Henry. See also James J. Hogan and Marion O. Hooker.

Fischer, [Philipp] Otto, oxidation of rosindone and naphthaphenazine by chromic acid, 1904, A., i, 111

benziminazoles and oxidation products of ortho-diamines, 1904, A., i, 349. tautomerism of benziminoazoles, 1907, A., i, 352.

discontinuous cathode luminescence spectra of some aromatic compounds, 1903, A., ii, 909.

2-methylanthracene from ditolylmethane or ditolylethane, 1909, A., i, 563 Fischer, Otto, and Karl Arntz, action of hydroxylamine on isorosindone and thiorosindone, and the formation of naphthasafranol from isorosindone, 1907, A., i, 94.

Fischer, Otto, R. Berckhemer, J. Ulbricht, Paul Dreverhoff, and Theodor Merl, action of phosphorus pentachloride on 1-alkylpyridones and 1-alkylquinolones. IV., 1903, A., i, 52.

Fischer, Otto, and Walter Boesler. harmaline derivatives, 1912, A., i,

645

Fischer, Otto, and Christian Buck, harmine and harmaline, 1905, A., i,

Fischer, Otto, and Lothar Castner, ditolvlethane and ditolvlethylene from paraldehyde and toluene, 1910, A., i,

Fischer, Otto, Ferdinand Falco, and Hans Gross, chrysophanic acid, 1911,

A., i, 309.

Fischer, Otto, Adolf Fritzen, and S. Eilles, reduction of triphenylmethane dyes and of azo-compounds by sodium hyposulphite, 1909, A., i, 616.

Fischer, Otto, and Hans Gross, the ditolylmethane from formaldehyde and toluene, 1910, A., i, 661.

the nitrosoamine rearrangement with hydrobromic acid, 1912, A., i, 439.

Fischer, Otto, Hans Gross, and Peter Neber, chrysophanie acid, frangulaemodin, and some oxonium compounds of anthracene derivatives, 1911, A., i,

Fischer, Otto, Hans Gross, and Hugo Ziegler, oxonium salts of some hydroxyanthraquinone ethers, 1912, A., i, 765.

Fischer, Otto, and Eduard Hepp, action of hydroxylamine on aposafranones, 1905, A., i, 948.

B-dimethylnaphthasafranine, 1903, A., i, 59.

indulines of the aminoazobenzene fusion, 1903, A., i, 134.

naphthaphenoxazine derivatives, 1903, A., i, 654.

action of methyl iodide and alkali on p-nitrosodimethylaniline, 1912, A., i. 439.

Fischer, Otto, and Walter Hess, benziminazoles, 1904, A., i, 195.

ketonic decomposition of the triphenylcarbinols, 1905, A., i, 205.

Fischer, Otto, and Fritz Limmer, benziminazoles and their resolution, 1906, A., i, 895.

Fischer, Otto, Johann George Mouson. and Otto Veiel, benziminazoles and their decomposition, 1905, A., i, 245.

Fischer, Otto, and Peter Neber, the behaviour of monohalogen-anilines,

1912, A., i, 438.

Fischer, Otto, and Georg Prause, resolution of the iminazole ring in the case of amarine and anisine, 1908, A., i,

Fischer, Otto, and Fritz Römer, resolution of the iminazole and oxazole rings, 1906. A., i. 539.

action of hydroxylamine on safranones, 1907, A., i, 981.

synthesis of phenylquinoxalines, 1908, A., i, 694.

dimethylanilinephthalein and similar basic phthaleins, 1909, A., i, 799.

Fischer, Otto, and August Sapper, amethylanthracene, 1911, A., i, 279.

Fischer, Otto, and Erich Schindler, oxidation of naphthaphenazine by chromic acid. II., 1906, A., i,

oxidation of naphthazines by chromic acid. III. Relation of the azines to the quinoxalines, 1908, A., i, 221.

Fischer, Otto, and Edgar Schmidt, tetramethylchrysaniline, 1910, A., i, 702.

Fischer, Otto, and Heinrich Straus, aßnaphthazines, 1908, A., i, 222.

Fischer, Otto, and H. Wolter, cyanobenzylamines, 1909, A., i, 638.

Fischer, Otto, and Hugo Ziegler, 1methylanthracene and some anthracene derivatives, 1912, A., i, 754.

Fischer, Otto. See also Emil Fischer and Richard Meyer.

Fischer, P. See Ernst von Meyer.

Fischer, Paul, deformation in mimetic crystals, 1911, A., ii, 882.

Fischer, Richard, and O. A. Soell. alkaloids of Dicentra cucullaria, 1903, A., i, 193.

Fischer, Richard, and M. E. Tweeden, alkaloids of Eschscholtzia californica, 1903, A., i, 193.

Fischer, Robert. See Josef Herzig.

Fischer, Theophile, estimation of the halogens in mercury compounds, 1905, A., ii, 350.

Fischer, Theophile, and Adolf Cuntze, cadmium, zinc, and bismuth cobalticyanides, 1903, A., i, 76.

Fischer, Theophile, and Joseph Hoppe, the behaviour of organic arsenic preparations in the human body, 1910, A., ii, 432,

Fischer, Theophile, and H. von Wartenberg, mercury oxybromide, 1903, A., ii, 79.

new oxyhaloids of mercury, 1905,

A., ii, 456.

Fischer, Ulrich, affinity between iodine and silver, 1912, A., ii, 536, 1054.

Fischer, Waldemar. See Arthur

Hantzsch.

Fischer, Waldemar M., kinetics of the formation and saponification of the esters of nitrous acid, 1909, A., ii,

estimation of manganese by Volhard and Wolff's method, 1910, A., ii, 76.

Fischer, Waldemar M., and P. Miloszewski, the solubility of sodium picrate in solutions of sodium salts, 1911, A., i, 193.

Fischer, Waldemar M., and N. Steinbach, a new volumetric estimation of nitrites and separation of nitrous and nitric acids, 1912, A., ii, 1093.

Fischl, Leo. See Albert Ladenburg. Fischler, Franz, urobilin, 1906, A., ii,

470, 780.

Franz, and K. Bardach, Fischler, phosphorus poisoning in a dog with partial exclusion of the liver (Eck's fistula), 1912, A., ii, 668.

Fischler, Max. See Wilhelm Franz

Loebisch.

Volkmar Fischmann. Emilie. See Kohlschütter.

Fiser, J. See František Slavik

Fisher, Cassius A. See Erwin Hinckley Barbour.

Fisher, Gertrude, and Mary B. Wishart, animal calorimetry. IV. The absorption of dextrose and the effect it has on the composition of the blood, 1912,

A., ii, 1185.

Fisher, Henry L. See Nellis B. Foster. Fisher, Irving, a new method of indicating food-values, 1906, A., ii, 374.

Fisher, Kenneth, and William Henry Perkin, jun., experiments on the synthesis of the terpenes. Part I (continued). Resolution of dl-1methyl-\Delta^1-cyclohexene-4-carboxylic acid and synthesis of the optically active modifications of terpineol, 1908, T., 1871; P., 228.

experiments on the synthesis of the terpenes. Part XIII. Synthesis of isocarvestrene (\Delta^{6:8(9)}-m-menthadiene) and its derivatives, 1908, T.,

1876; P., 228.

Fisher, Walter William, salinity of waters from the oolites, 1904, A., ii, 269.

Fishman, Casriel. See Worth Hale.

Fiske, Augustus Henry, an apparatus for the extraction of liquids with ether, 1909, A., ii, 656.

analysis of aboriginal copper objects from Mexico and Yucatan, 1911, A., ii, 726.

a new silver spiral for use in organic elementary analysis, 1912, A., ii. 603.

Fiske, Augustus Henry. See also Charles Loring Jackson.

Fiske, P. S. See Georg Bredig.

Fitchett, Frank, and John Malcolm, physiological action of tutin, 1909, A., ii, 919.

Fitschy, P., [cyanogenesis] in plants growing in Belgium, 1907, A., ii, 45.

Fittig, Rudolph, obituary notice of, 1911, T., 1651.

Fittig, Rudolph, Ludwig Batt, Karl Bock, Harry Salomon, and Georg Wernher, condensation of aldehydes and lactones with dibasic acids, 1904, A., i, 744.

Fittig, Rudolph, Percy Borstelmann, Karl Hadorff, Erich Lepère, Mark Lurie, and Franz Stadlmayr, lactonic acids, lactones, and unsaturated acids,

1904, A., i, 966.

Fittig, Adolf Breslauer, Rudolph, Walther Friedmann, Paul Jehl. Alfred Rieche, and Oscar Scheen, transformation of unsaturated acids, 1904, A., i. 418.

Fittig, Rudolph, Wilhelm Dannenberg, Jacob Kraencker, August Schwärtzlin, Oscar Scheen, and Johann' Simon, transformation of unsaturated acids,

1904, A., i, 553.

Fittig, Rudolph, Paul Krans, Fritz Lentz, Joseph von Panayeff, and Walter Peters, dilactones. II., 1907, A., i, 471.

Fittipaldi, Emil Hugo, detection of albumoses in urine, 1912, A., ii,

107.

Fitz, Reginald, Carl Lucas Alsberg, and Lawrence Joseph Henderson, excretion of phosphoric acid during experimental acidosis in rabbits, 1907, A., ii, 284.

Fitzenkam, Robert. See Fritz Ullmann. Fitzgerald, Edward, and Arthur Lapworth, ester catalysis and a modification of the theory of acids, 1908, T., 2163; P., 274.

experiments on the formation and hydrolysis of esters, acetals, and allied compounds; preliminary

note, 1908, P., 153,

Fitzgerald, Fred F., reactions in liquid ammonioammonia; potassium zincate, cuprous nitride, and an ammonio-basic mercuric bromide, 1907, A., ii, 545.

potassium ammoniostannate, 1908,

A., ii, 114.

Fitzgerald, Mabel Purefoy, the alveolar carbon dioxide pressure in disease, 1910, A., ii, 316.

the origin of the hydrochloric acid in the gastric tubules, 1911, A., ii,

Fitzgerald, Mabel Purefoy, and John Scott Haldane, normal alveolar carbon dioxide pressure in man, 1905, A., ii,

Fitzgerald, W. P., constant level reser-

voir, 1909, A., ii, 655.

Fitzpatrick, J. J., pebbles of argentiferous copper from Mexico, 1903, A., ii, 300.

Fjeldstad, C. A., the effect of thyroidectomy on the development of active immunity in rabbits, 1910, A., ii,

Flack, Martin. See Leon Asher and Leonard Erskine Hill.

Flade, Friedrich, passivity, 1911, A., ii,

Flade, Friedrich, and Hans Koch, pas-

sivity of iron, 1912, A., ii, 558. Flade, Rudolf. See Arthur Hantzsch.

Flächer, Franz, conversion of ephedrine into \(\psi - \text{ephedrine}, 1904, A., i, 769. the resolution of dl-suprarenine into its components, 1909, A., ii, 159.

Flächer, Franz. See also Ernst Schmidt. Flamand, Claude, and Bernhardt Prager, analysis of compounds containing nitrogen in union with nitrogen by means of Kjeldahl's method, 1905, A., ii, 201.

Flamand, Claude. See also Alexander

Ellinger.

Flamand, Henri, influence of nutrients on the development of leguminous nodules, 1906, A., ii, 44.

Flamand, Jules, detection of fluorine in

beer, 1909, A., ii, 180.

detection of small quantities of sodium carbonate in waters, 1909, A., ii, 762.

Flament. See Maurice Daufresne.

Flamini, Mario, action of phosphorus on the circulation of calcium in normal and rachitic children, 1908, A., ii, 406.

Flanders, Fred F., new qualitative test for calcium, 1906, A., ii, 901.

Flanders, Fred F. See also Otto Folin.

Flanigen, Anna Lockhart, electrolytic precipitation of copper from alkaline cvanide electrolyte, 1907, A., ii, 580.

Flaschner, Otto, action of benzyl chloride and o- and p-nitrobenzyl chlorides on phenylhydrazine and p-bromophenylhydrazine, 1905, A., i, 936.

electrolytic reduction of hydroxylamine and of nitrous acid, 1907,

A., ii, 454.

mutual solubility of piperidines and

water, 1908, A., ii, 364.

the action of B-rays on photosensitive solutions, 1909, T., 327: P., 34.

the miscibility of the pyridine bases with water and the influence of a critical-solution point on the shape of the melting-point curve, 1909, T., 668; P., 71.

Flaschner, Otto, and Basil Charles Mac-Ewen, the mutual solubility of 2methylpiperidine and water, 1908, T,

1000; P., 119.

Flaschner, Otto, and Irvine Giles Rankin, melting point and saturation curves of binary systems; substituted benzoic acids and water, 1910, A., i,

Flaschner, Otto. See also Victor Rothmund.

Flatau, Erich. See Emil Fischer.

Flatow, Leopold, desmotropism of halogen-substituted acid methylene groups in the diketohydrindene series, 1904, A., i, 511.

the katabolism of amino-acids in the

organism, 1910, A., ii, 321.

Flatow, Leopold. See also Otto Neubauer.

Flawitzky, Flavian M., laws of the reciprocal action of solid substances in cryohydrate mixtures and in eutectic alloys, 1906, A., ii, 152.

investigation of the eutectic mixture of silver and ammonium nitrates by the method of melting, 1909, A., ii,

application of the laws of eutectics to fused silicates, 1910, A., ii, 510.

See Oskar Kellner Flebbe, Rudolf. and Johannes Scheiber.

Fleck, Alexander. See Thomas Stewart Patterson.

Fleckenstein, Alfred, salt solutions in mixtures of alcohol and water, 1905, A., ii, 688.

Flecker, Leo. See Wolfgang Pauli.

Fleckseder, Rudolf, dropsy and glycosuria in uranuim poisoning, 1907, A., ii, 379.

Fleckseder, Rudolf, calomel diuresis, 1912, A., ii, 582

Fleig, Charles, action of secretin, 1903. A., ii, 385.

action of alkaline soaps on the pancreatic secretion, 1904, A., ii, 57.

transformation of formic acid and formates in the organism, 1907, A., ii, 372.

purgative action of phenolphthalein and of its disodium derivative, 1908, A., ii, 313.

colour reactions of sesame oil with (a) aromatic aldehydes and (b) various

sugars, 1908, A., ii, 994.

colour reactions of the carbohydrates based on the formation of furfuraldehyde from them; reactions with indole and carbazole, 1908, A., ii, 1077.

colour reactions of aromatic aldehydes with phenols and various cyclic. heterocyclic, and open-chain compounds, 1908, A., ii, 1078.

colour reactions of proteins, 1908, A.,

ii, 1080.

is phenolphthalein split in the body?

1909, A., ii, 169.

the passage of phenolphthalein and of its disodium derivative through the organism, 1909, A., ii, 255.

disodiophenolphthaloquinone or disodioaciphenolphthalein, 1909, A., i,

495.

detection in urine of chromogens of methylene-blue, thionin, and Lauth's violet by oxidising agents in acid media, 1909, A., ii, 527.

the comparative toxicity of concentrated and diluted arsenobenzene solutions in intravenous injections,

1912, A., ii, 469.

Fleischer, Julius, a filter funnel for the estimation of paraffin in mineral oil distillates, 1905, A., ii, 486.

Fleischer, Julius, and Heinrich Frank, rapid estimation of alcohol and ethyl ether in their mixtures, 1907, A., ii, 655.

Fleischer, Karl. See Martin Freund and Otto Wallach.

Fleischmann, Fritz. See Fritz Haber. Fleischmann, Friedrich Noël Ashcroft, the condensation products of triacetic lactone with acetoacetic ester and \$\beta\-aminocrotonic ester, 1907, T., 250; P., 16.

gyrolite from Co. Antrim, 1910, A.,

ii, 310.

Fleischmann, Hanns. See Johannes Scheiber.

Fleischmann, Martin. See Max Busch. Fleishmann, Paul, and Leonor Michaelis, the formula for the precipitin reaction according to Hamburger and Arrhenius, 1907, A., ii, 367.

Fleischmann, Wilhelm, and Georg Wiegner, lactose and its behaviour in aqueous solutions, 1910, A., i, 362. Fleisher, Moyer S. See Leo Loeb.

Fleissner, Hans, compound gas-pipette, 1908, A., ii, 891.

Fleissner, Hans. See also August Harpf.

Fleming, John Arnold, and Robert Abbott Hadfield, magnetic qualities of some alloys not containing iron, 1905, A., ii. 799.

Fleming, Robert. See Frank George

Pope.

Paul. See Flemming. Schülke Mayr.

Flemming, S., balloon observations of atmospheric radioactivity, 1909, A.,

Fletcher, Arnold L., the radioactivity of the rocks of the Transandine tunnel, 1910, A., ii, 677.

the radioactivity of the Leinster

granite, 1911, A., ii, 89.

the radioactivity of some igneous rocks from antarctic regions, 1911, A., ii,

radium content of secondary rocks,

1912, A., ii, 224.

Fletcher, F., toxic substances excreted by the roots of plants, 1908, A., ii,

effect of previous heating of soil on the growth of plants and the germination of seeds, 1911, A., ii, 530.

Fletcher, Harvey. See Robert A. Milli-

Fletcher, Herbert Morley, cholesteatoma of the brain, 1904, A., ii, 64.

Fletcher, James, and Daniel Tyrer, an easily adjustable vapour thermostat, 1912, P., 189.

the latent heats of chloroform and benzene and of their mixtures between 0° and 80°, 1912, P., 319.

Fletcher, Lazarus, possible existence of a nickel-iron (Fe, Ni3) in meteorites, 1909, A., ii, 65.

Fletcher, Mark, cobaltiferous mispickel from Norway, 1904, A., ii, 743.

Fletcher, Walter Morley, oxygen and the "survival metabolism" of muscle, 1903, A., ii, 89.

osmotic properties of muscle due to

fatigue, 1903, A., ii, 90.

Fletcher, Walter Morley, osmotic properties of muscle, 1904, A., ii, 189.

the alleged formation of lactic acid in muscle during autolysis and in post-survival periods, 1912, A., ii, 67.

Fletcher, Walter Morley, and Frederick Gowland Hopkins, lactic acid in amphibian muscle, 1907, A., ii, 373.

Fletcher, Walter Morley. See also Otto Loewi.

Flett, John Smith, and William Pollard. pseudo-gaylussite from the Clyde, 1903, A., ii, 379.

Fleurent, Emile [Charles Albert], relation between the amounts of gluten and total nitrogen in different wheats, 1904, A., ii, 200.

estimation of phosphoric acid in food-

stuffs, 1905, A., ii, 116.

action of various physical and chemical agents on the gluten of wheat flour; estimation of gluten, 1905, A., ii, 215.

bleaching of flour, 1906, A., ii, 587.

Emile, and Lucien method for the accurate determination of ash in the analysis of vegetable and animal materials, 1911, A., ii, 445.

estimation of phosphorus in milk,

1911, A., ii, 535.

the mechanism of the partial disappearance of phosphorus in the calcination of organic matters, and a method for estimating the ash in those substances, 1911, A., ii, 656.

Fleury, P., detection of inositol as a means of identifying wine vinegar,

1910, A., ii, 1006.

Fleury, P. See also G. Meillère.

Flexner, Simon, and Hideyo Noguchi, constitution of snake venom and snake sera, 1903, A., ii, 500.

plurality of cytolysius in snake venom,

1905, A., ii, 107.

Flieringa, J., saponin from Trevesia sundaica leaves, 1911, A., i, 480.

Flimm, Wilhelm. See Emanuel Merck. Flint, Harley A. See Charles Loring

Flint, William Ruthven, complexity of tellurium, 1910, A., ii, 845; 1912, A., ii, 1051. Flint, William Ruthven. See also Philip

Embury Browning.

Flohil, J. Th., a new mode of estimating pentosans by the copper reduction method, 1911, A., ii, 160.

Flood, F. G. See Roemer Rex Renshaw.

Flooh, Adolf. See Robert Kremann. Flooh, Josef. See Hugo Schrötter.

Flora, Charles Paxson, use of the rotating cathode for the estimation of cadmium taken as the sulphate, 1905, A., ii, 859.

the use of the rotating anode for the estimation of cadmium taken as the

chloride, 1906, A., ii, 52.

estimation of cadmium by means of the rotating cathode, 1906, A., ii,

estimation of cadmium as oxide, 1906,

A., ii, 127.

Flora, Charles Paxson. See also Philip Embury Browning.

Florance, D. C. H. See C. Coleridge Farr.

Florence, Albert, assay of cinchona barks, 1907, A., ii, 317.

detection of blood in urine; red urines, 1907, A., ii, 827.

blood and red pigmented urines, 1908, A., ii, 442.

exact gasometric estimation of urea and urinary ammonia, 1909, A., ii, 449.

clinical reagent for urobilin, urobilinogen, and blood, 1910, A., ii, 911.

estimation of hæmapheic pigments, 1910, A., ii, 911.

Florence, Wilhelm, stolzite and scheelite from Brazil, 1904, A., ii, 418.

Florentin, Daniel. See André Kling and M. Marqueyrol.

Florin, Jean, the spectroscopic recognition of traces of mercury in nitrocellulose; stability in explosives, 1911,

A., ii, 1033. Florió, Fortunato, apparatus for the rapid distillation of mercury, 1908, A., ii, 829.

Robert Brooke, See George Floris. McGowan.

Flory, Edgar L. See William Albert Noyes.

Flos, Friedrich. See Franz Kunckell. Flourens, P. See C. Gerber.

Flügel, Fritz, freezing-point determinations with very dilute aqueous solutions, 1912, A., ii, 533.

Flügel, Max. See Karl Löffler and

Theodor Pfeiffer.

Flürscheim, Bernhard, laws of substitution in aromatic compounds, 1903, A., i, 79; 1905, A., i, 614; 1907, A., i, 834, 835.

ethyl B-diethylaminopropionate, 1904, A., i, 19.

variations in the affinity value of single bonds, 1906, A., ii, 529.

Flürscheim, Bernhard, the chlorination of para-nitroaniline, 1908, T., 1772; P., 211.

[coloured and colourless triphenyl-methyl], 1908, A., i, 871.

the mechanism of the reduction of nitroanilines and nitrophenols, 1909, P., 21.

the relation between the strengths of acids and bases, and the quantitative distribution of affinity in the molecule, 1909, T., 718; P., 22, 193; 1910, T., 84.

chemical affinity and electrons; preliminary note, 1909, P., 261.

Flürscheim, Bernhard, and Theodor Simon, the reduction of aromatic nitro-compounds to azoxy-derivatives in acid solution, 1907, P., 163; 1908, T., 1463.

tetranitroaniline, 1910, P., 81; dis-

cussion, P., 81.

Flürscheim, Bernhard. See also Friedrich Kehrmann.

Fluri, M., the influence of aluminium salts on protoplasm, 1909, A., ii, 338, 1046.

Flury, Ferdinand, pharmacology of the rue (Peganum harmala), 1911, A., ii, 138.

pharmacological properties of certain acid oxidation products of cholesterol, 1911, A., ii, 1119.

chemistry and toxicology of the ascarides, 1912, A., ii, 464.

Flury, Ferdinand. See also Alexander Gutbier and Alexander Schmincke.

Flusin, G., rôle of imbibition in the osmosis of liquids, 1908, A., ii, 359.

Fluss, G. See Philippe Auguste Guye.

Fluteaux, G. See A. Goris.

Foà, Carlo, nucleo-proteins and their decomposition products, 1904, A., i, 538.

chemical nature of histon and the proteins from which it is extracted, 1904, A., i, 701.

action of compressed gases on the life of micro-organisms and on enzymes, 1906, A., ii, 696.

a graphic method for registering certain fermentation processes, 1908, A., i, 746.

Foà, Carlo, and Alberto Aggazzotti, the physiological action of colloidal metals, 1909, A., ii, 688.

Foà, Ida, new selenium compound, 1910, A., i, 187.

Foà, Ida. See also Francesco Marino-Zuco and Arnaldo Piutti. Foà, Jone, action of ammonia on itaconic anhydride, 1904, A., i, 230.

Foà, Virgilio. See Mario Betti.

Foch, A., measurement of the range of the α-particles of uranium by the scintillation method, 1911, A., ii, 354.

Fock, Andreas [Ludwig], isomerism and polymorphism, 1910, A., ii, 23.

distinction between and knowledge of the different kinds of isomerism, 1910, A., ii, 493.

Focke, C., physiological assay of digitalis leaves, 1908, A., ii, 332.

Focke, Friedrich, regular intergrowth of nemaphyllite and dolomite from the Tyrol, 1904, A., ii, 419.

Fodor, Andor. See Emil Abderhalden, Eugen Bamberger, Ernst Berl, and Hans von Euler.

Fodor, Otto. See Fritz Ullmann.

Foelsing, A., preparation of zinc hydrogen borodisalicylate, 1911, A., i, 449.

Foerg, Richard, glucoside formation from bioses, 1903, A., i, 713.

Foerster, Fritz, the electrolytic estimation of copper, 1906, A., ii, 805. quantitative estimations of metals by

electrolysis, 1907, A., ii, 54. nickel oxide electrodes, 1908, A., ii,

146, 147. electrolytic analysis, 1908, A., ii, 322,

reactions in the iron-nickel peroxide accumulator. II. Behaviour of the electrolyte, 1908, A., ii, 558.

electrolysis of copper sulphate, 1909,

A., ii, 314. electromotive behaviour of oxygen,

1909, A., ii, 962. Foerster, Fritz, and F. Blankenberg,

cuprous sulphate, 1907, A., ii, 89.

Foerster, Fritz, and Albert Blich, the behaviour of nitrous gases towards water and aqueous alkalis, 1910, A., ii, 1059.

Foerster, Fritz, and Giulio Coffetti, electrolysis of solutions of copper sulphate, 1904, A., ii, 818.

Foerster, Fritz, and Karl Gyr, action of iodine on alkalis, 1903, A., ii, 209. electrolysis of solutions of potassium iodide, 1903, A., ii, 352.

Foerster, Fritz, and Viktor Herold, reactions in the iron-nickel peroxide accumulator. III. Behaviour of the iron electrode, 1910, A., ii, 770.

Foerster, Fritz, and Hans Jacoby, formation of calcium cyanamide, 1907, A., i, 397; 1909, A., i, 893.

Foerster, Fritz, and Max Koch, the interaction of nitrous gases and oxygen with water, 1908, A., ii, 941, 1031.

Foerster, Fritz, and Erich Müller, theory of the action of halogens on alkalis, 1903, A., ii, 142.

theory of the electrolysis of solutions of alkali chlorides, 1903, A., ii,

electrolysis of alkali chlorides in presence of fluorine compounds, 1904, A., ii, 815.

electrolytic formation of chlorates.

1905, A., ii, 697.

Foerster, Fritz, and Alfred Piguet, electrolysis of potassium acetate, 1904, A., i, 965; 1905, A., i, 111. anodic evolution of oxygen, 1904,

A., ii, 697.

Foerster, Fritz, and W. Treadwell, jun., electrolytic separation of nickel and zinc, 1908, A., ii, 324.

Foerster, Fritz, and Erwin Schwabe, electrolytic refining of bismuth, 1910,

A., ii, 619.

Foerster, Fritz, and Johannes Wolf, quantitative estimation of antimony by electrolysis of solutions of its sulpho-salts, 1907, A., ii, 508.

Foerster, Fritz, and J. Yamasaki, electrolysis of alkali bromides and retardation of the anodic separation of the halogens, 1910, A., ii, 576.

electrochemical behaviour of tin, 1911,

A., ii, 576.

Foerster, Fritz. See also Giulio Coffetti. Bernardo Diethelm. and Kurt Eisenreich.

Foerster, Hans. See Robert Stollé. Förster, Ludwig. See Rudolf Fabinvi.

Foerster, Otto, separation of manganese, 1904, A., ii, 517.

volumetric alkalimetric method for determining alkaline earths in manures and soils, 1908, A., ii, 1072.

Foerster, Otto. See also Otto Lemmermann.

Förster, Paul. See Richard Anschütz and Georg Frerichs.

Förster, Rudolf. See Wilhelm Völtz. Foex, E., Zopf's "fibrinkörper" and their relation to the metachromatic corpuscles, 1912, A., ii, 1082.

Foex, G. See Pierre Weiss.

Foglesong, John E. See James Bert Garner.

Foizik, Artur. See Willy Marchwald. Fokin, Sergius, estimation of carbon dioxide in the carbonates of the alkali and alkaline earth metals by means of the alkalimeter, 1903, A., ii, 391.

decomposition of fats by enzymes,

1904, A., i, 1071.

Fokin, Sergius, plants containing, in their seeds, an enzyme which decomposes fats into glycerol and fatty acids, 1904, A., ii, 199, 280.

fermentative decomposition of fats [by

enzymes], 1906, A., ii, 793.

the rôle of metallic hydrides in reduction, and data as to the composition of some fats and oils, 1907, A., i, 10,

process of oxidation of drying vegetable

oils, 1907, A., i. 820.

catalytic reactions of oxidation and reduction of unsaturated organic compounds, 1908, A., i, 311.

the "hydrogen number" as a means for determining unsaturated organic compounds in a manner similar to the iodine numbers of Hiibl and Wys, 1908, A., ii, 637.

catalytic reduction of unsaturated organic compounds, 1911, A., i, 1.

the elaidin reaction, 1911, A., i, 5. reactions of certain unsaturated fatty acids with formaldehyde, 1911, A., i. 765.

reduction of higher unsaturated aliphatic acids to saturated acids by the action of zinc and water on their halogen derivatives; Grignard reaction applied to the latter, 1912, A., i, 234.

new isomerides of oleic acid:

 $\begin{array}{c} \mathrm{CH_3 \cdot [GH_2]_4 \cdot CH \cdot CH \cdot [CH_2]_{10} \cdot CO_2H} \\ \mathrm{and} \qquad \mathrm{CH_3 \cdot [CH_2]_5 \cdot CH \cdot CH \cdot [CH_2]_9}. \end{array}$ 'CO2H; influence of displacement of the double linking in the molecule, 1912, A., i, 534.

Folin, Otto, estimation of urea in urine, 1903, A., ii, 116, 518; 1912, A., ii,

estimation of ammonia in urine and liquids of animal origin, 1903, A., ii. 239.

acidity of urine, 1903, A., ii, 562. rigor mortis, 1903, A., ii, 674.

estimation of ammonia in urine, 1904, A., ii, 83; 1911, A., ii, 331.

creatinine and creatine in urine, 1904,

A., ii, 375. alkalinity of blood, 1904, A., ii, 826.

normal urine, 1905, A., ii, 183. a theory of protein-metabolism, 1905,

A., ii, 268. estimations of sulphate and sulphur,

1906, A., ii, 123.

alkylureas [alkylcarbamides] and alkylamines, 1907, A., ii, 494.

reduction of barium sulphate in ordinary gravimetric estimations, 1907 A., ii, 503.

Folin, Otto, separate estimation of acetone and acetoacetic acid in diabetic urines, 1907, A., ii, 588.

estimation of total sulphur in urine,

1909, A., ii, 263.

preparation of cystine, 1910, A., i, 606.

Folin, Otto, and Frederick Conrad Blanck, preparation of creatinine from urine, 1911, A., i, 20.

Folin, Otto, and Willey Denis, preparation of creatinine from creatine, 1911,

A., i, 20.

protein metabolism from the standpoint of blood and tissue analysis,

1912, A., ii, 271.

protein metabolism from the standpoint of blood and tissue analyses. II. The origin and significance of the ammonia in the portal blood, 1912, A., ii, 364.

creatine in the urine of children, 1912,

A., ii, 465.

an apparatus for the absorption of

fumes, 1912, A., ii, 635.

new methods for the estimation of total non-protein nitrogen, urea, and ammonia in blood, 1912, A., ii, 703.

protein metabolism from the standpoint of blood and tissue analysis. III. Further absorption experiments with especial reference to the behaviour of creatine and creatinine and to the formation of urea, 1912, A., ii, 780.

protein metabolism from the standpoint of blood and tissue analysis. IV. Absorption from the large intestine, 1912, A., ii, 853.

phosphotungstic-phosphomolybdic compounds as colour-reagents, 1912,

A., ii, 1011.

tyrosine in proteins estimated by a new colorimetric method, 1912, A., ii, 1012.

Folin, Otto, and Chester J. Farmer, a new method for the estimation of total nitrogen in urine, 1912, A., ii, 702.

Folin, Otto, and Fred F. Flanders, estimation of benzoic acid, 1911, A., ii, 1039.

new method for the estimation of hippuric acid in urine, 1912, A., ii, 396, 501.

ionisation, as indicated conductivity, a necessary prerequisite for the combination of acids with bases? 1912, A., ii, 634.

Folin, Otto, and Henry Lyman, protein metabolism from the standpoint of blood and tissue analysis. V. Absorption from the stomach, 1912, A., ii, 853.

Folin. Otto, and Archibald Bruce Macallum, a blue colour-reaction of phosphotungstic acid (?) with uric acid and other substances. 1912, A., ii, 495.

estimation of ammonia in urine, 1912,

A., ii, 683.

Folin, Otto, and Arthur Howard Wentworth, a new method for estimating fat and fatty acids in fæces, 1910, A., ii, 757.

Folin, Otto. See also Carl Lucas Als-

berg.

Folli. See Paul Pellaccani.

Fomin, W. See Leo A. Tschugaeff. Fontaine, E., modification of the Reichert thermoregulator, 1911, A., ii, 252.

Fontana, Alberto, and Frederick Mollwo Perkin, electrolytic oxidation of

anthracene, 1904, A., i, 863.

Fontein, F., equilibria in ternary and quaternary systems in which two liquid layers occur, 1910, A, ii, 596.

Fonzes-Diacon, Henri, preparation of hydrogen sulphide, 1907, A., ii, 164. use of urotropin for "desulphurising wines and musts, 1910, A., ii, 662.

Fonzes-Diacon, Henri, and Carquet, toxicity of sodium nitroprusside, 1903, A., ii, 605.

volumetric estimation of alkali nitroprussides and of soluble cadmium

salts, 1903, A., ii, 617.

Foote, Harry Ward, thiocyanates of silver and potassium and their solubility, 1903, A., i, 797.

iodides of casium, 1903, A., ii, 367. double cæsium and mercuric chlorides and their solubility, 1903, A., ii,

solubility of potassium and barium nitrates and chlorides, 1904, A., ii,

double cæsium lead bromides, 1907, A., ii, 173.

nature of precipitated colloids, 1908, A., ii, 821.

formation of double salts, 1910, A., ii,

formation of double salts. III. Ques-

tion of double salt formation between the alkali sulphates, 1911, A., ii, 393.

mixed crystals of ammonium chloride with nickel, cobalt, and copper chlorides, 1912, A., ii, 847.

Foote, Harry Ward, and Irving Atwater Andrew, acid oxalates of lithium, sodium, potassium, and cæsium and their solubility, 1905, A., i, 679.

certain alleged double oxalates, 1905,

A., i, 679.

Foote, Harry Ward, and Walter Minor Bradley, solid solution in minerals. with special reference to nephelite, 1911, A., ii, 122.

solid solution in minerals; composition of analcite, 1912, A., ii,

composition of nephelite, 1912, A., ii,

Foote, Harry Ward, and Howard Stanley Bristol, solubility of barium and mercuric chlorides, 1904, A., ii, 658.

Foote, Harry Ward, and Walter Chapin Chalker, polyiodides of potassium. rubidium, and cæsium, 1908, A., ii, 586.

Foote, Harry Ward, and Frank Loyal Haigh, formation of double salts. II. Double cæsium mercuric chlorides forming from acetone, 1911, A., ii, 397.

Foote, Harry Ward, and Ralph Walker Langley, an indirect method for estimating columbium and tantalum, 1911, A., ii, 71.

a recent method for separating tantalum and columbium, 1911, A., ii, 72.

Foote, Harry Ward, and Louis Henry Levy, double salts of mercuric chloride with the alkali chlorides and their solubility, 1906, A., ii, 231.

double ammonium 1907, A., ii, 173. lead chlorides,

molecular condition of salts dissolved in a fused salt, 1907, A., ii, 440.

Foote, Harry Ward, and Norman Andrews Martin, molecular condition of salts dissolved in a fused salt. II. The electrical conductivity of salts in fused mercuric chloride, 1909, A., ii,

Foote, Harry Ward, and George Albert Menge, relative solubility of certain sparingly soluble calcium and barium

salts, 1906, A., ii, 353.

Foote, Harry Ward, and Samuel Ray Scholes, the vapour pressure of hydrates, determined from their equilibria with aqueous alcohol, 1911, A., ii, 859.

Harry Ward, Samuel Ray Foote. Scholes, and Ralph Walker Langley, nature of precipitated colloids. II., 1909, .A., ii, 871.

Foote, Harry Ward, and Edwin Kinmouth Smith, dissociation pressures of certain oxides of copper, cobalt, nickel, and antimony, 1908, A., ii, 847.

Foote, Harry Ward, and Percy Talbot Walden, formation of double salts.

1911, A., ii, 726.

Foote, Warren M., shower of meteoric stones near Holbrook, Arizona, 1912, A., ii, 1183.

Forbes, Alexander, See Lawrence Joseph

Henderson.

Forbes, Frederic B., portable outfit for the estimation of carbon dioxide, dissolved oxygen, and alkalinity in

drinking water, 1904, A., ii, 517.

Forbes, Frederic B., and Gilbert H.

Pratt, estimation of carbonic acid drinking water, 1903, A., ii,

Forbes, George Shannon, lecture experiment on nascent hydrogen, 1912, A., ii, 38.

solubility of silver chloride in chloride solutions and the existence of complex argentichloride ions, 1912, A.,

Forbes, George Shannon. See also Robert Luther and Theodore William

Richards.

Forbes, W. R., a hygrometric method of vapour-pressure determination, 1912, A., ii, 897.

purification of mercury, 1912, A., ii, 942.

[lecture experiment]; apparatus to study the diffusion of chlorine gas, 1912, A., ii, 1162.

a simple potash bulb, 1912, A., ii, 1210.

Carl [Friedrich Otto Hugo], Forch, specific heat of solutions of naphthalene in various organic solvents; heat change arising from the dissolution of naphthalene in various solvents, 1903, A., ii, 632.

certain regularities in the molecular volumes of inorganic salts in aqueous

solution, 1903, A., ii, 714.

specific gravity and thermal expansion of solutions of naphthalene in various organic solvents, 1904, A., i. 489.

surface tension of inorganic salt solutions, 1905, A., ii, 681.

Forch, Carl, and Paul Nordmeyer, specific heat of chromium, sulphur, silicon, and some salts between -188° and the ordinary temperature, 1906, A., ii, 521.

Forcrand [de Coiselet], [Hippolyte]
Robert de, zinc oxide, 1903, A., ii,
20.

composition and constitution of hydrates of hydrogen sulphide, 1903, A., i, 221.

physical properties of trimethylcarbinol, 1903, A., i, 455.

composition of the hydrates of gases, 1903, A., ii, 134.

simple relation between the molecular heat of solidification and the boiling point, 1903, A., ii, 267, 353, 466.

specific heats and heats of vaporisation or fusion of aniline and other organic compounds, 1903, A., ii, 409.

peroxides of zinc, 1904, A., ii, 172. possibility of chemical reaction, 1905,

A., ii, 15.

prediction of chemical reactions, 1905, A., ii, 15.

valency of hydrogen, 1905, A., ii,

heat of formation of sodium hydride; acidity of the hydrogen molecule, 1905, A., ii, 372.

some properties of the hydrides of the metalloids of the first three families, 1905, A., ii, 696.

rubidium, cæsium, and lithium, 1906, A., ii, 445.

chlorides and sulphates of rubidium and cæsium, 1906, A., ii, 654.

comparisons between the alkali and alkaline earth oxides, 1906, A., ii, 727.

action of the alkali and alkali-earth metals on a molecule of water, 1906, A., ii, 831.

plaster of Paris, 1906, A., ii, 852. preparation of lithia, 1907, A., ii,

preparation of lithia, 1907, A., ii 615.

a new method of preparation of anhydrous lithium oxide; its heat of solution, 1907, A., ii, 683.

heat of formation of lithium oxides, 1907, A., ii, 928.

heat of formation of anhydrous barium and strontium oxides, 1908, A., ii, 155.

the neutral alkali and alkaline-earth carbonates, 1908, A., ii, 256.

action of heat on the lithium hydroxides, 1908, A., ii, 493.

hydrates of baryta and strontia, 1908, A., ii, 764.

lithium, strontium, and barium oxides, 1909, A., ii, 120.

hydrates of potassium carbonate, 1909, A., ii, 664.

Forcrand, [de Coiselet], [Hippolyte]

Robert de, normal carbonates of rubidium and cæsium, 1909, A., ii, 730.

rubidium and cæsium hydrogen carb-

onates, 1909, A., ii, 1002.

alkali hydrogen carbonates, 1910, A., ii, 124.

hydrates of rubidium and cæsium hydroxides, 1910, A., ii, 124.

heat of formation of casium peroxide, 1910, A., ii, 584.

thermochemical studies of some binary compounds of the alkali and alkaliearth metals, 1911, A., ii, 96.

some probable chemical properties of radium and its compounds, 1911, A., ii, 172.

hydrates of potassium fluoride, 1911, A., ii, 488.

hydrofluorides of alkali fluorides, 1911, A., ii, 583.

hydrates of rubidium and cæsium fluorides, 1911, A., ii, 603.

calcium ethoxides, 1912, A., i, 67. some physical constants of cyclo-

hexanol, 1912, A., i, 548. the system: water-cyclohexanol, 1912, A., i, 694.

ethoxides of calcium and barium, 1912, A., i, 742.

cryoscopy and heats of solution, fusion, and vaporisation of cyclohexanol, 1912, A., ii, 735.

Ford, Allen P., gas generator for hydrogen sulphide, hydrogen, and other gases, 1906, A., ii, 531.

Ford, Allen P., and Ogden G. Willey, estimation of sulphur in iron, 1904, A., ii, 773.

Ford, John Simpson, note on the hydrolysis of starch by diastase, 1904, T., 980; P., 112.

Lintner's soluble starch and the estimation of "diastatic power," 1904, A., ii, 452.

continuous-observation polarimeter tube, 1904, A., ii, 770.

Ford, John Simpson, and John Monteath Guthrie, the influence of certain amphotericelectrolyteson amylolytic action, 1905, P., 296; 1906, T., 76.

action, 1905, P., 296; 1906, T., 76. malt analysis. II. Estimation of moisture and extract, 1905, A., ii,

biochemistry of barley. I. Amylase of resting barley, 1908, A., ii, 218.

Ford, Thomas B., improved extraction appearatus, 1912, A., ii, 445.

Ford, William Ebenezer, composition of dumortierite, 1903, A., ii, 158. Ford, William Ebenezer, rickardite, a new mineral, 1903, A., ii, 302.

composition of axinite, 1903, A., ii,

some interesting beryl crystals and their associations, 1906, A., ii,

chalcopyrite crystals from Japan, 1907, A., ii, 100.

stephanite crystals from Arizpe, Sonora, Mexico, 1908, A., ii, 505.

effect of the presence of alkalis in beryl on its optical characters, 1910, A., ii. 873.

herderite crystals from Auburn, Maine,

1911, A., ii, 1102. analyses of stibiotantalite, 1911, A.,

ii, 1104.

Ford, William Ebenezer, and Walter Minor Bradley, chemical and optical study of a labradorite, 1910, A., ii,

pseudomorphs after stibnite from Mexico, 1912, A., ii, 948.

William Ebenezer, See also Samuel Lewis Penfield.

Ford, W. Hutson, alcohol in normal blood and tissues, 1906, A., ii, 867.

Ford, William Webber. See John Jacob Abel and Hermann Schlesinger.

Forder, S. W. See Edward Harrison Keiser.

Foregger, Richard von, and Herbert Philipp, earth alkali and allied peroxides: properties and applications, 1906, A., ii, 352.

Foreman, Frederick W., hydrolysis of the protein of linseed, 1911, A., i,

fungicidal properties of liver of sulphur, 1911, A., ii, 222.

Foresti, G. See Mario Raffo.

Forfang, Einar, composition of potatoes, 1904, A., ii, 510.

Forghieri, Luigi. See Giuseppe Plancher. Forli, V., the action of strychnine on the nerve fibres of the vagus to the heart, 1908, A., ii, 721.

Forli-Forti, Gino. See Guido Bargellini and Emanuele Paternò.

Formanek, Emanuel, action of formaldehyde on pyridine, 1905, A., i,

Formánek, Jaroslav, and Franz Peč, aluminium dishes and other appliances in quantitative analysis, 1910, A., ii,

Formanek, Julius, relation between the constitution and absorption spectra of rosaniline dyes, 1904, A., ii, 106,

Formánek, Julius, relations existing between constitution and absorption spectra of the thiazines and thiazones, 1905, A., ii, 217.

fluorescence of dyes, 1906, A., ii,

oxazine dyes, 1907, A., i, 88.

Formenti, Carlo, detection of saccharin in milk, 1903, A., ii, 48.

analysis of aluminium and its chief alloys, 1906, A., ii, 127.

Formhals, R. See Adalbert Kolb.

Fornaini, Mario. See Nicola Parrayano. Fornara, Cesare. See Giuseppe Bruni.

Fornet, A. See Paul Pfeiffer.

Forrest, Laurence R. See Augustus Herman Gill.

Forschbach, J., ethyl glucosaminecarboxylate and its behaviour in the system of a dog suffering from pancreasdiabetes, 1906, A., ii, 788.

Forschbach, J., and Severin, colorimetric estimation of dextrose in blood, 1912,

A., ii, 697.

Forschbach, J., and Siegfried Weber. the diuretic action of dimethylaminoparaxanthine and its decomposition in the body, 1907, A., ii, 378.

Forsling, Sven, holmium, 1904, A., ii, 176.

Forssell, Jacob. See Karl Elbs and James Locke.

Forssman, John, are the antigen and the amboceptor-fixing substance of the blood corpuscles identical? 1908, A., ii, 510.

Forssman, John. See also Ivar Bang. Forssner, Gunnar, free amino-acids in urine, 1906, A., ii, 243.

the influence of the fat of the food ingested on the excretion of acetone substances, 1910, A., ii, 1092; 1911, A., ii, 135.

the influence of muscular work on the excretion of acetone substances, with diets poor in carbohydrates, 1910, A., ii, 1092.

the action of alanine on the excretion of acetone, 1912, A., ii, 72.

Forst, Peter von der. See Hermann Grossmann.

Forster, Adolf, action of methyl alcohol in the organism, 1911, A., ii, 753.

Forster, Aquila. See John Armstrong Smythe.

Forster, E. L. C., rate of formation of ipdates, 1904, A., ii, 163.

Forster, Martin Onslow, studies in the camphane series. Part X. The constitution of enolic benzoylcamphor, 1903, T., 98.

Forster, Martin Onslow, studies in the camphane series. Part XI. The dioximes of camphorquinone and other derivatives of isonitrosocamphor, 1903, T., 514; P., 97; discussion, P., 98.

studies in the camphane series. Part XIV. isoNitrosocamphor, 1904, T.,

892; P., 138.

action of magnesium alkyl haloids on derivatives of camphor, 1904, P., 207.

studies in the camphane series. Part XVII. Configuration of isonitrosocamphor and its unstable modification, 1905, T., 232; P., 22.

studies in the camphane series. Part XXI. Benzenediazo-ψ-semicarbazinocamphor and its derivatives, 1906, T., 222; P., 31; discussion,

P., 31.

the triazo-group. Part VII. Interaction of benzhydroximic chloride and sodium azide, 1909, T., 184; P., 25.

the triazo-group. Part IX. Transformation of cinnamoylazoimide into cinnamenylcarbimide (cinnamenyl isocyanate), 1909, T., 433; P., 69.

Forster, Martin Onslow, and Herbert Moore Attwell, studies in the camphane series. Part XV. Bornylcarbimide, 1904, T., 1188; P., 91.

Forster, Martin Onslow, and Biman Bihari Dey, hydrazoximes of benzil and diacetyl, 1912, T., 2234; P., 275.

Forster, Martin Onslow, and Frederick Percy Dunn, an interpretation of the Hantzsch-Werner hypothesis, 1909,

T., 425; P., 68.

Forster, Martin Onslow, and Hans Eduard Fierz, studies in the camphane series. Part XVI. Camphorylcarbimide and isomeric camphorylcarbamides, 1905, T., 110; P., 21.

studies in the camphane series. Part XIX. Camphoryl-ψ-semicarbazide, 1905, T., 722; P., 151; discussion,

P., 151.

studies in the camphane series. Part XX. Camphorylazoimide, 1905, T.,

826; P., 178.

aromatic azoimides. Part I. Parahydroxyphenylazoimide, 1907, T., 855; P., 112; discussion, P., 113.

studies in the camphane series. Part XXIII. Oximes of camphorylsemicarbazide and camphorylazoimide, 1907, T., 867; P., 114.

aromatic azoimides. Part II. Orthoand meta-hydroxyphenylazoimides,

1907, T., 1350; P., 205.

Forster, Martin Onslow, and Hans Eduard Fiers, aromatic azoimides. Part III. The naphthylazoimides and their nitro-derivatives, 1907, T., 1942; P., 258.

the triazo-group. Part I. Triazoacetic acid and triazoacetone (acetonylazoimide), 1907, P., 258; discussion,

P., 259; 1908, T., 72.

the triazo-group. Part II. Azoimides of propionic ester and of methyl ethyl ketone, 1908, T., 669; P., 54.

the triazo-group. Part IV. Allylazoimide, 1908, T., 1174; P.,

143.

the triazo-group. Part V. Resolution of a-triazopropionic acid, 1908, T., 1859; P., 226.

 the triazo-group. Part VI. Triazoethyl alcohol and triazoacetaldehyde,

1908, T., 1865; P., 227.

Forster, Martin Onslow, Hans Eduard Fierz, and Walter Philip Joshua, the triazo-group. Part III. Bistriazo-derivatives of ethane and of acetic ester, 1908, T., 1070; P., 102.

Forster, Martin Onslow, and Charles Samuel Garland, studies in the camphane series. Part XXVII. Camphorylphenyltriazen (camphordiazoaminobenzene) and its bearing on the constitution of diazoamino-compounds, 1909, T., 2051; P., 244; discussion, P., 244.

Forster, Martin Onslow, and Frederik Marinus van Gelderen, the triazogroup. Part XVI. Interaction of nitrosates and sodium azide, 1911,

T., 239; P., 19.

the triazo-group. Part XIX. Nitrosoazides of dipentene, d-limonene, and l-limonene, 1911, T., 2059; P., 195.

Forster, Martin Onslow, and Hans Grossmann, studies in the camphane series. Part XXII. Nitrogen haloids from camphoryl-ψ-carbamide, 1906,

T., 402; P., 74.

Forster, Martin Onslow, and Henry Holmes, studies in the camphane series. Part XXV. Action of diazomethane on the two modifications of isonitrosocamphor, 1908, T., 242; P., 8; discussion, P., 9.

Forster, Martin Onslow, and Hubert Arthur Harry Howard, studies in the camphane series. Part XXXII. Orientation of Tiemann's isoamino-

camphor, 1912, P., 313.

Forster, Martin Onslow, and Thomas Jackson, studies in the camphane series. Part XXIV. Camphoryldithiocarbamic acid and camphorylthiocarbimide, 1907, T., 1877; P., 242; discussion, P., 243.

Forster, Martin Onslow, and Ernest Arthur Jenkinson, studies in the camphane series. Part XII. aa-Benzoylnitrocamphors and aa-benzoyliodo-

camphor, 1903, T., 537.

Forster, Martin Onslow, and (Miss) Hilda Mary Judd, studies in the camphane series. Part XVIII. A new formation of acetylcamphor. 1905, T., 368; P., 116.

the triazo-group. Part XII. Derivatives of p-triazobenzaldehyde, 1910,

T., 254; P., 28.

- Forster, Martin Onslow, and (Miss) Frances Mary Gore Micklethwait, studies in the camphane series. Part XIII. Action of nitrogen peroxide on 1-nitrocamphene, 1904, T., 325; P.,
- Forster, Martin Onslow, and Robert Müller, the triazo-group. Part VIII. Azoimides of the monobasic aliphatic acids, 1909, T., 191; P., 26.

the triazo-group. Part X. Triazoantipyrine, 1909, T., 2072; P.,

the triazo-group. Part XI. Substituted triazomalonic and phenyltriazoacetic acids, 1910, T., 126; P., 4.

the triazo-group. Part XIII. Triazomethylcarbimide (triazomethyl isocyanate), 1910, T., 1056; P., 112.

Forster, Martin Onslow, and Sidney Herbert Newman, the triazo-group. Part XVI. Azoimides of the acetoacetic series, 1910, T., 1360; P., 197.

the triazo-group. Part XV. Triazoethylene (vinylazoimide) and the triazoethyl haloids, 1910, T., 2570; P., 322; discussion, P., 323.

t'ie triazo-group. Part XVII. Nitrosoazides of pinene and terpineol, 1911,

T., 244; P., 19.

the triazo-group. Part XVIII. 8-Triazoethylamine, 1911, T., 1277; P.,

Forster, Martin Onslow, and Johannes Heinrich Schaeppi, perhaloids of diphenyliodinium iodide, 1912, T., 382: P., 37; discussion, P., 37.

Forster. Martin Onslow, and Johannes Heinrich Schaeppi, the triazo-group. Part XXI. Benzenoid azoimides containing multivalent iodine, 1912, T., 1359; P., 219.

Forster, Martin Onslow, and Hans Spinner, studies in the camphane series. Part XXXII. Stereoisomeric modifications of isonitrosoepicamphor, the third and fourth monoximes of camphorquinone, 1912, T., 1340; P., 46.

Forster, Martin Onslow, and Hermann Stötter, dihydrocinnamenylcarbimide (B-phenylethyl isocyanate), 1911, T.,

1337; P., 206.

Forster, Martin Onslow, and Tom Thornley, studies in the camphane series. Part XXVI. Aryl derivatives of iminocamphor, 1909, T., 942; P., 145; discussion, P., 145.

Forster, Martin Onslow, John Robert Trotter, and Jacob Weintroube, studies in the camphane series. Part XXX. Constitution of pernitrosocamphor (camphenylnitroamine), 1911, T., 1982; P., 259.

Forster, Martin Onslow, and John Charles Withers, studies in the camphane series. Part XXXI. Condensation of camphorquinone with nitromethane, ethyl cyanoacetate and phenylacetonitrile, 1911, P., 327; 1912, T., 1327.

the triazo-group. Part XX. imides of the propane series, 1912,

T., 489; P., 50.

Forster, Martin Onslow, and Adolf Zimmerli, studies in the camphane Part XXVIII. Stereoisoseries. meric hydrazones and semicarbazones of camphorquinone, 1910, T., 2156, P., 245; discussion, P., 246.

studies in the camphane series. Part XXIX. A new phenylhydrazone of camphorquinone, 1911, T., 478; P.,

Forster, Robert Benjamin. See Franz Sachs. Forsyth, David, the structure and secre-

tion of the parathyroids in man, 1907, A., ii, 491.

prolonged protein feeding, 1907, A., ii, 635.

Forsyth, R. W., effect of temperature on the rate of production of uranium-X, 1909, A., ii, 637.

Forsyth, William Collins. See Thomas

Stewart Patterson.

Fort, M., new neutral salt reaction, 1912, A., ii, 1047.

Fortey, (Miss) Emily C. See Sydney

Fortini, Valentino, new thallic potassium

selenate, 1904, A., ii, 36. new analogies between thallium and

aluminium, 1906, A., ii, 87. saponification of triglycerides, 1912,

A., i, 826.

estimation of [calcined] magnesia in magnesium carbonate and in mixtures of asbestos, 1912, A., ii, 388.

Fortini, Valentino. See also Massimo

Tortelli.

Fortinsky, B. F., derivatives of diphenyl,

1912, A., i, 770.

Fortner, Max, condensation of fluorene with benzoyl chloride, 1903, A., i,

2-benzovlfluorene and retene, 1904,

A., i, 729.

Fortner, Max. See also Georg Bredig. Fortrat, R., structure of solar bands due to oxygen, 1912, A., ii, 402.

structure of some special bands, 1912,

A., ii, 505.

Fortunatoff, K. See Nikolaus J. Demianoff.

Foss, A. See Lothar Wöhler.

Fosse, Robert, a derivative of hydrogen peroxide [dinaphthapyranol], 1903, A., i, 49.

polymerisation and fission of the molecule in the pyranol series, 1903, A.,

i, 357.

transformations of phenyl carbonate and phenyl salicylate, 1903, A., i, 485.

a reaction in which symmetrical diarylpyrones [xanthones] are produced,

1903, A., i, 510. the union of dinaphthaxanthonium salts with phenols, 1904, A., i, 83, 336.

union of dinaphthaxanthonium salts with tertiary aromatic amines, 1904, A., i, 337.

the dinaphthaxanthene series, 1904,

A., i, 519, 816.

action of a trace of certain salts or of alkali hydroxides on phenol carbonate, 1904, A., i, 734.

a reaction of some acid anhydrides; new series of acids containing the pyran ring, 1906, A., i, 691.

replacement of the hydroxyl of some carbinols by the group 'CH2'CO2H,

1907, A., i, 136.

action of pp-tetramethyldiaminobenzhydrol on certain methylenic compounds, 1907, A., i, 414.

triphenylearbinol: action of malonic and cyanoacetic acids, 1907, A., i, 764.

Fosse, Robert, action of carbamide, thiocarbamide, urethane, and some amides on xanthhydrol, 1908, A., i, 41.

aromatic alcohols: new reactions.

1908, A., i, 85.

constitution of the compounds of tetramethyldiaminobenzhydrol with some methylenic derivatives, 1908, A., i, 567.

constitution of the methylene derivatives of tetramethyldiaminodiphenylmethane; replacement hydroxyl in Michler's carbinol by the alkylmethylene radicle, 1908, A., i, 568.

oxonium compounds and pyryl salts,

1909, A., i, 599.

metallic character of an organic radicle,

1909, A., i, 599.

metallic character of the dinaphthapyryl salts. III. Displacement of hydrogen chloride from the pyryl chloride by hydrogen bromide, and conversely, of hydrogen bromide from the pyryl bromide by hydrogen chloride. IV. Displacement of the acids from pyryl salts by picric acid. V. Precipitation of the dinaphthapyryl salts as sulphide by hydrogen sulphide, 1909, A., i, 666.

the basic power of dinaphthapyranol is only manifested in acid solution.

IX., 1909, A., i, 734. transformation of aromatic alcohols into phosphinous acids by hypophosphorous acid, 1910, A., i, 292.

action of hypophosphorous acid on triphenylcarbinol and on Michler's

hydrol. II., 1910, A., i, 451. action of hypophosphorous acid on dinaphthapyranol; dinaphthapyrylphosphinous acid, 1910, A., i,

direct production of carbamide from proteins during oxidation or hydro-

lysis, 1912, A., i, 519.

synthesis of carbamide by the oxidation of ammonia and carbohydrates, glycerol, or formaldehyde, 1912, A., i, 541.

the production of carbamide by hydrolysis of protein, 1912, A., i, 668.

carbamide [in plants], 1912, A., ii,

Fosse, Robert, M. Baillon, and A. Robyn, new reactions of some hydrols, 1906, A., i, 975.

Fosse, Robert, and P. Bertrand, an organic persulphate, 1904, A., i, 1042.

Fosse, Robert, and P. Bertrand, pyryl salts formed with oxygen acids. II.,

1909, A., i, 666.

Fosse, Robert, and L. Lesage, basicity of pyranic oxygen; double salts of halogen derivatives of dinaphthapyryl and of the metals, 1905, A., i, 541, 917.

valency of the oxygen atom in xanthyl compounds; double salts of xanthyl and metallic haloids, 1906, A., i,

electropositive character of the dinaphthapyryl radicle. VI. Extremely pronounced aptitude of forming insoluble or sparingly soluble compounds. VII. Displacement of potassium, ammonium, and alkylammonium chlorides from their platinichlorides by the pyryl chloride. VIII. Displacement of potassium from potassium picrate by the oxygenated base dinaphthapyranol, 1909, A., i, 667.

Fosse, Robert, and A. Robyn, some new compounds of the pyranol series,

1903, A., i, 646.

o-phenoxybenzoic acids, 1904, A., i,

pyranic [xanthyl] phenols, 1905, A., i,

introduction of dinaphthapyryl and xanthyl radicles into electronegative molecules, 1906, A., i,

Fossler, (Miss) Mary Louise, a safety

siphon, 1912, A., ii, 1161.

Foster, Bernard, and Henry Allen Dugdale Neville, solubility of calcium phosphate in saturated solutions of carbon dioxide conta ning ammonia, 1910, P, 236.

Foster, Glyn William Arnold, action of the silent discharge on chlorine,

1905, A., ii, 449.

the action of light on potassium ferrocyanide, 1906, T., 912; P.,

Foster, Glyn William Arnold. See also Fritz Haber.

Foster, M. Louise. See Christian Archibald Herter.

Foster, Nellis B., treatment of diabetes by socretin, 1907, A., ii, 189.

influence of dietary conditions on physiological resistance, 1910, A., ii, 640.

Foster, Nellis B., and Henry L. Fisher, creatine and creatinine metabolism in dogs with Eck fistula, 1911, A., ii, 744.

Foster, William, jun., action of magnesium oxide on a mixture of arsenic trisulphide and sulphur, 1904, A., ii, 118.

slow oxidation of as-dichlorovinyl ethyl ether, 1909, A., i, 356.

composition of some Greek vases, 1910, A., ii, 1069.

Foster, William, jun. See also Le Roy Wiley McCay and Fred Neher.

Foster, William Henry, estimation of copper, 1907, A., ii, 303.

Foster, William Henry, See also John

Edward Purvis.

Fouard, Eugène, catalytic action of the alkali and alkaline-earth salts in the fixation of atmospheric oxygen by solutions of the polyphenols, 1906, A., i, 421.

reaction of an oxydase type exhibited by halogen derivatives of the rare

earths, 1906, A., i, 578.

colloidal properties of starch, 1907,

A., i, 391, 677.

colloidal properties of starch and the existence of a perfect solution of this substance, 1908, A., i, 138, 953.

the properties of starch in relation to its colloidal condition, 1908, A., i,

colloidal properties and spontaneous gelatination of starch, 1909, A., i,

colloidal properties of starch in relation to its chemical constitution,

1909, A., i, 209.

"solubilisation" of colloidal, starch by the action of alkalis, 1909, A., i, 699.

fixation of bases by soluble starch,

1910, A., i, 225.

practical method for preparing semipermeable membranes, applicable to the determination of molecular weights, 1911, A., ii, 267.

osmotic measurements of salt solutions and Arrhenius' theory of ions, 1911,

A., ii, 1071.

mechanism of osmosis, 1912, A., ii, 141. osmotic measurements of salt solutions and Arrhenius' theory, 1912, A., ii,

Fouassin, A. See Edouard Bourgeois.

Foucar, J. Louis. See C. Davis.

Fouchet, A., estimation of formic acid, alone or mixed with its homologues, by means of alkaline permanganate, 1912, A., ii, 499.

oil from the seeds of the hybrid Juglans nigra × Juglans cincrea, 1912,

A., ii, 675,

Fouchet, A. See also Gustave Perrier. Fouilland. See Regaud.

Fouquet, Gaston, density of sucrose, 1908, A., i, 855.

aqueous solutions and their densities; sucrose solutions, 1908, A., i, 855.

the contraction occurring when sucrose is dissolved in water, 1910, A., i, 96. spontaneous crystallisation of sugar, 1910, A., ii, 193.

control of the quantity of sulphurous acid utilised in sulphitation pro-

cesses, 1910, A., ii, 344.

simple relationships between the density and the index of refraction of a solution and its volume concentration, 1910, A., ii, 393.

Fourneau, Ernest, amino-alcohols of the type OH CMeR CH₂ NMe₂, 1904,

A., i, 377.

amino-alcohols; synthetic ephedrines,

1905, A., i, 57.

hydroxyamino-acids, 1907, A., i, 622. atoxyl, 1907, A., i, 740.

synthetical ephedrines, 1907, A., i, 762.

morpholones, 1909, A., i, 50.

aminohydroxy-acids. II. Aminoderivatives of a-hydroxyisobutyric acid, 1909, A., i, 210.

a new alkaloid from the bark of Pseudocinchona africana (Rubiaceae), 1909,

A., i, 600.

amino-alcohols; derivatives of glycerol and phenyl ethers, 1910, A., i, 246. the alkaloid of Pseudocinchona africana; hydrolysis by alkalis, 1910,

A., i, 501. derivatives of amino-alcohols, 1910,

A., i, 822. salts and esters of alkylaminodithio-

carbamic acids, 1911, A., i, 528.

Fourneau, Ernest, and André Fiore, iso-

merism of corynanthine with yohimb-

ine, 1912, A., i, 49.

Fourneau, Ernest, and Karl Ochslin, 1:4-dichloroarsinobenzoyl chloride; esters of benzarsinious and benzarsinic acids, 1912, A., i, 928.

Fourneau, Ernest, and Maurice Piettre, proximate analysis of lipoids by alco-

holysis, 1912, A., ii, 1109.

Fourneau, Ernest, and Marc Tiffeneau, aromatic mono-substituted ethylene oxides, 1905, A., i, 591.

some aromatic ethylene oxides, 1906,

A., i, 20.

preparation of the asymmetrical halohydrins and properties of the corresponding ethylene oxides, 1907, A., i, 817.

Fourneau, Ernest, and Marc Tiffeneau, action of organo-magnesium derivatives on ethylene oxides, 1908, A., i, 163.

Fourneau, Ernest, and Augustè Vila, salts and esters of alkylaminodithio-carbamic acids, 1912, A., i, 26.

Fourneau, Ernest. See also Les Établissements Poulenc Frères and Marc Tiffeneau.

Fournel, P., determination of the transition points of steels by the electrical resistance method, 1906, A., ii, 546.

variation of the electrical resistance of steels near the transition points,

1906, A., ii, 646.

Fournier, Albert, estimation of gold in auriferous sand by the wet way, 1907, A., ii, 305.

Fournier, H., p-ethylbenzaldehydes, 1903, A., i, 347.

o-tolualdehyde, 1904, A., i, 63. action of hydrogen bromide on primary and secondary saturated alcohols,

1906, A., i, 787.

transformation of the primary saturated alcohols into the corresponding monobasic acids, 1907, A., i, 271.

oxidation of acetone by potassium permanganate, 1908, A., i, 247.

preparation of fatty acids and their anhydrides, 1909, A., i, 759.

catalytic hydrogenation of unsaturated organic compounds, 1910, A., i, 92.

action of acetic anhydride and its homologues on organo-magnesium compounds, 1910, A., i, 652.

Fournier, L. See Adolphe Besson.

Fowler, Alfred, new series of lines in the spectrum of magnesium, 1903, A., ii, 461.

fluted spectrum of titanium oxide, 1907, A., ii, 726.

spectrum of scandium, and its relation to solar spectra, 1909, A., ii, 5.

spectrum of magnesium hydride, 1909, A., ii, 949.

Fowler, Alfred, and Herbert Shaw, the less refrangible spectrum of cyanogen and its occurrence in the carbon arc, 1912, A., ii, 215.

Fowler, Alfred, and (Hon.) Robert John Strutt, spectroscopic investigations in connexion with the active modification of nitrogen. I. Spectrum of the after-glow, 1911, A., ii, 678.

Fowler, Alfred. See also (Hon.) Robert

John Strutt.

Fowler, C. C., and Philip Bouvier Hawk, the metabolic influence of copious water drinking with meals, 1910, A., ii, 625.

Fowler, Gilbert John, chemical action of tropical sunlight, 1908, A., ii, 914.

Fowler, Gilbert John, Edward Ardern, and William Thomas Lockett, the oxidation of phenol by certain bacteria in pure cultures, 1911, A., ii, 139.

Fowler, Gilbert John, and Percy Gaunt, interaction of dilute solutions of ammonium salts and various filtering

media, 1907, A., ii, 683.

Fowler, Roy Edward. See Hector

Russell Carveth.

Fox, Charles James John, coefficients of absorption of nitrogen and oxygen in distilled water and sea-water, and of atmospheric carbon dioxide in seawater, 1910, A., ii, 29.

Fox, Charles James John. See also Richard Abegg and Morris William

Travers.

Fox, John Jacob, separation of cadmium from zinc as sulphide in the presence of trichloroacetic acid, 1907, T., 964; P., 147.

solubility of lead sulphate in concentrated solutions of ammonium acetate; preliminary note, 1907, P.,

199.

action of dilute nitric acid on helian-

thin, 1908, A., i, 581. solubility of lead sulphate in concentrated solutions of sodium and potassium acetates, 1909, T., 878; P., 128.

the salts of 8-hydroxyquinoline, 1910,

T., 1119; P., 134.

p-hydroxyazo-derivatives of quinoline. Part I., 1910, T., 1337; P., 177.

Fox, John Jacob, and Arthur Josiah Hoffmeister Gauge, the solubility of potassium sulphate in concentrated aqueous solutions of non-electrolytes, 1910, T., 377; P., 27.

mannitoboric acid, 1911, T., 1075;

P., 136.

Fox, John Jacob, and John Theodore Hewitt, studies in the acridine series. Part I., 1904, T., 529;

constitution and colour of azo-compounds. Part II. The salts of parahydroxyazo-compounds with acids, 1908, T., 333; P., 6; discussion, P., 7.

Fox, John Jacob, and Frank George Pope, substituted thiolazo-derivatives benzene, 1912, T., 1498; P., 200.

Fox. John Jacob. See also James John-Dobbie and John Hewitt.

Fox. M. G. See Richard Lorenz.

Fraatz. See Werner.

Frabot, C., action of molybdates on polyphenols and their derivatives, 1904, A., ii, 451.

colour reaction for tungsten, 1904, A.,

ii. 844.

estimation of nitric nitrogen ammonia, 1910, A., ii, 652.

Frabot, C. See also Ferdinand Jean. Fraenckel, Adolf, estimation of phos-

phorus, sulphur, and silicon in acetylene, 1908, A., ii, 983.

Fraenckel, Felix, limits of existence of the hydrates of ferrous sulphate, 1907.

A., ii, 778.

Fraenckel, Paul, concentration hydrogen ions in pure gastric juice, and its relation to electrical conductivity and acidity; the influence of the alkaline earths on the reaction of animal fluids, 1905, A., ii, 403.

Fraenkel, Albert, action of ricin on fishes' blood, 1903, A., ii, 663. breathing and metabolism, 1907, A.,

ii, 973.

Fraenkel, (Mlle.) D. See Leo A. Tschugaeff.

Frankel, Leiba. See Carl Adam Bis-

Fränkel, Sigmund, preparation and constitution of histidine, 1903, A., i,

decomposition of histidine, 1906, A., i, 547.

chondroitin-sulphuric acid, 1907, A., i, 369.

lipoids, 1908, A., i, 377; 1909, A., ii,

pharmacological significance of twin ethvl groups, 1908, 1060.

the milk of a woman sixty-two years

old, 1909, A., ii, 597.

Fränkel, Sigmund, and Rudolf Allers, a new reaction characteristic of adrenaline, 1909, A., ii, 628.

Fränkel, Sigmund, and Ludwig Dimitz, lipoids. VII. The scission products of kephalin, 1909, A., i, 870.

lipoids. XIII. Composition of the spinal cord, 1910, A., ii, 1086.

Fränkel, Sigmund, and Aladar Elfer, a method for drying serum, 1910, A., ii, 1081.

lipoids. XV. The drying of tissues and blood for the preparation of lipoids, 1912, A., i, 521.

Frankel, Sigmund, and Herbert Elias. XIV. Leucopoliin, 1910, A., lipoids. i, 906.

Fränkel, Sigmund, and Max Hamburg. diastase. I. Preparation and properties, 1906, A., i, 917.

Frankel, Sigmund, and Kurt Linnert, lipoids. IX. Sahidin from human brain, 1910, A., i, 295.

lipoids. X. The detection of galactose in lipoids, 1910, A., i, 600.

lipoids. XI. Comparative chemistry of the brain, 1910, A., ii, 729.

Fränkel, Sigmund, Kurt Linnert, and Giulio Andrea Pari, lipoids. V. Phosphatide of the ox pancreas, 1909, A., i, 621.

Fränkel, Sigmund, and Ernst Neubauer. VII. Kephalin, 1909, A., i,

870.

Fränkel, Sigmund, and Alexander Nogueira, lipoids. II. Unsaturated phosphatides of the kidney, 1909, A., i, 276.

lipoids. III. Interaction between the unsaturated phosphatides of the kidney and dyes, 1909, A., i, 276. Fränkel, Sigmund. and Theodor R.

Offer, lipoids. XII. The phosphatides of horse pancreas, 1910, A., i, 600.

Fränkel, Sigmund, and Giulio Andrea Pari, lipoids. IV. Phosphatides of the ox pancreas, 1909, A., i, 620.

Fraenkel, Walter, chemical kinetics of ethyl diazoacetate, 1907, A., ii,

silicon-aluminium alloys, 1908, A., ii,

action of carbon and silicon on zinc sulphide at high temperatures, 1909, A., ii, 1007.

Fraenkel, Walter, and Gustav Tammann, meteoric iron, 1909, A., ii, 157.

Fraenkel, Walter. See also Georg Bredig.

automatic filling Frailong, Robert, burette, 1910, A., ii, 66.

colorimetric method of estimating small quantities of sugar by means of the a-naphthol test, 1910, A., ii, 757.

Francesconi, Luigi, constitution of derivatives of santonin, 1903, A., i,

parasantonide and parasantonic acid. I., II., and III., 1904, A., i, 169.

Francesconi, Luigi, and Guido Bargellini, haloid and nitro-derivatives of naphthalic anhydride; influence of the substituents on fluorescence, 1903, A., i, 34.

Francesconi, Luigi, and Guido Bargellini, fluorescence of naphthalic anhydride and some of its derivatives. 1904, A., i, 168.

relation between fluorescence and the chemical constitution of organic sub-

stances, 1906, A., ii, 714.

Francesconi, Luigi, and Aurelio Bastianini, hydroxamic acids, 1904, A., i, 721.

Francesconi. Luigi, and Giuseppe Bresciani, preparation of nitrosyl chloride, 1903, A., ii, 724.

Francesconi, Luigi. and Umberto Cialdea, nitroso-organic anhydrides, 1903, A., i, 788.

mixed organo-inorganic anhydrides,

1904, A., i, 707.

Francesconi, Luigi, and Guido Cusmano. action of free hydroxylamine on santonin, 1908, A., i, 272.

coloured hydro-haloids of unsaturated aromatic ketones, 1908, A. i, 801.

hydrochloric acid action of santonin and its derivatives ; mechanism of the formation of desmotroposantonin, 1908, A., i, 817.

action of free hydroxylamine on lactones, 1909, A., i, 233.

hydroxylamineoximes of santonin. III., 1909, A., i, 723.

nitrosohydroxylaminosantoninoximes and their derivatives. IV., 1909, A., i, 724.

action of free hydroxylamine on

coumarin, 1910, A., i, 38.
Francesconi, Luigi, and Felice Ferrulli, action of nitrous acid on the oximes of the santonin series; santolic acid, 1903, A., i, 829.

Luigi, and Giovanni Francesconi, Maggi, action of light and of alkalis on santonin and its derivatives; photosantoninic acid, 1904, A., i, 60.

Francesconi, Luigi, and Curio Manio Mundici, intermolecular transpositions in the synthesis of aromatic aldehydes by Gattermann's method; derivatives of p-dimethylbenzaldehyde, 1903, A., i, 426.

Francesconi, Luigi, and Evaristo Piazza, silver and mercury compounds of certain oximes; transformation of stereoisomeric oximes, 1903, A., i,

Francesconi, Luigi, and (Mlle.) Francesca Pirazzoli, derivatives of acenaphthen equinone and their relations to the o-diketones, 1903, A., i, 500.

Francesconi, Luigi, and Giovanni de Plato, substituted halogenated amides, 1903, A., i, 798.

Francesconi, Luigi, and Ernesto Puxeddu, polymerisation of aromatic ethylenic compounds, 1909, A., i, 226.

Francesconi, Luigi, and G. Sanna, essential oil of Bupleurum fructicosum,

1911, A., i, 658, 896.

Francesconi, Luigi, and Pietro Scarafia, essential oil of Santolina chamaecyparissus, 1911, A., i, 1001; 1912, A., i, 38.

essential oil of Santolina chamaecyparissus. II. Action of hydroxyl-

amine, 1911, A., i, 1001.

Francesconi, Luigi, and Nunzio Sciacca, reaction between nitric oxide and oxygen at low temperatures, 1904, A., ii, 613.

Francesconi, Lwigi, and E. Sernagiotto, action of nitrosyl chloride on the essential oil of Bupleurum fructicosum; nitrosochlorides, 1911, A., i, 1000.

essential oil of Bupleurum fructicosum, Linn., 1911, A., i, 1000.

Δ^{1:5}-dihydrocuminaldehyde [and] β-phellandrene in the essential oil of Bupleurum fructicosum, 1911, A., i, 1000.

apparatus for continuous working in fractional distillations in a vacuum,

1911, A., ii, 966.

localisation and distribution of the essential oil in "Bupleurum fruticosum" (Linn.), 1911, A., ii, 1025.

cosum" (Linn.), 1911, A., ii, 1025. action of nitrosyl chloride on the essential oil of Bupleurum fructicosum; nitroso-chlorides; derivatives and decomposition products; dihydrocuminaldehyde. III., 1912, A., i, 37.

the essential oil of Seseli bocconi, 1912,

A., i, 123.

localisation and distribution of the essential oil in Seseli bocconi and Crithmum maritimum. I., 1912, A., ii, 381.

Franchimont, Antoine Paul Nicolas, action of absolute nitric acid on heterocyclic compounds, 1907, A., i, 395.

sodium alkyl carbonates, 1910, A., i. 4.

monoalkylnitroamines, 1910, A., i, 616.

trinitrophenylalkylnitroamines, 1910, A., i, 617.

nitrilotrimethylnitroaminomethylene, 1911, A., i, 19.

Franchimont, Antoine Paul Nicolas, and J. J. Attema, so-called compounds of salts of sulphocarboxylic acids with sulphuric esters, 1903, A., i, 484.

Franchimont, Antoine Paul Nicolas, and Hilmar Johannes Backer, absorption spectra of the cobalto-derivatives of aliphatic nitroamines, 1912, T., 2256; P., 264.

Franchimont, Antoine Paul Nicolas, and J. V. Dubsky, reaction products of potassium isocyanate and diaminoacetone hydrochloride; amino- and carbamido-propyleneureine [carbamidomethylglyoxalone], 1911, A., i, 238.

derivatives of s-diaminoacetone, 1911, A., i, 528.

acetylation of substituted acetamides, 1911, A., i, 529.

the direct nitration of aliphatic iminocompounds, 1912, A., i. 752.

Franchimont, Antoine Paul Nicolas, and Hermann Friedmann, 2:6-tetramethylpiperidine, 1905, A., i, 80.

amides of a- and \(\beta\)-aminopropionic

acids, 1906, A., i, 71.

certain derivatives of s-diaminoacetone (1:3-diaminopropanone), 1907, A., i, 832.

action of concentrated nitric acid on trimethyleneureine and on hydro-

uracil, 1907, A., i, 877.

nitration and acetylation of glycine anhydride and its methyl homologues: alanine anhydride and α-aminoisobutyric anhydride, 1908, A., i, 509.

Franchimont, Antoine Paul Nicolas, and Erwin Kramer, derivatives of piperazine, 1910, A., i, 139; 1912, A., i, 391.

Franchimont, Antoine Paul Nicolas, Willem van Ryn, and Hermann Friedmann, piperidides, 1907, A., i, 842.

Franchini, Giuseppe, increased assimilation of lecithin and its behaviour in the organism, 1907, A., ii, 895.

lecithin, choline, and formic acid, 1909, A., ii, 165.

Franchini, Giuseppe, and Luigi Preti, cutaneous respiration, 1908, A., ii, 509.

Franchis, M. de. See Giovanni Leonardi. Francis, Arthur Gordon, and Charles Alexander Keane, the nitration of acetylbenzoin and of stilbenediol diacetates, 1911, T., 344; P., 44.

Francis, Arthur Gordon. See also (Sir)

Edward Thorpe.

Francis, C. K., and Perry Fox Trowbridge, phosphorus in beef, 1910, A., ii. 731, 792.

Francis, Francis Ernest, Schiff's additive products from ethyl acetoacetate and benzylideneaniline, 1903, A., i, 411.

the action of nitrogen sulphide on organic substances. Part IV., 1905,

T., 1836; P., 258.

the preparation and reactions of benzovl nitrate, 1905, P., 302; 1906, T., 1.

benzovl nitrate, 1907, A., i, 53.

action of ammonia on benzaldehyde and the preparation of benzaldehydeammonia, 1909, A., i, 588.

Francis, Francis Ernest, and Oliver Charles Minty Davis, the action of nitrogen sulphide on organic substances. I. and II., 1904, T., 259, 1535; P., 21, 204.

preparation of the acyl derivatives of the aldehyde-cyanohydrins. I., 1909, T., 1403; P., 210.

Francis, Francis Ernest, and Maximilian Nierenstein, action of benzoyl chloride and potassium cyanide on benzoyloxybenzoic acids and on acylated hydroxybenzoyloxybenzoic acids, 1911, A., i, 642

Francis, Francis Ernest, and (Miss) Clara Millicent Taylor, the additive products of benzylideneaniline with ethyl acetoacetate and ethyl methylacetoacetate, T., 998; P., 113.

Francis, Francis Ernest. See also Charles Hugh Clarke and Douglas Arthur

Clibbens.

Franck, H. H. See Aladar Skita.

Franck, J., mobility of the radioactive ions and the mass of gaseous ions, 1909, A., ii. 953.

the ionic mobility in argon and the influence of small quantities of oxygen on this magnitude, 1910, A., ii, 479.

occurrence of free electrons in chemically inert gases at atmospheric pres-

sure, 1910, A., ii, 817.

transformation of the resonance spectrum of fluorescent iodine into a banded spectrum by admixed gases, 1912, A., ii, 509.

Franck, J., and Gustav Hertz, the fluorescence of iodine vapour excited by polarised light, 1912, A., ii, 509.

Franck, J., and Lise Meitner, radioactive ions, 1911, A., ii, 958.
Franck, J., and Robert Pohl, mobility

of ions in helium, 1907, A., ii, 523.

Franck, J., and P. Pringsheim, the electrical and optical behaviour of the chlorine flame, 1911, A., ii, 574.

Franck, J., and W. Westphal, charge of gaseous ions, 1909, A., ii, 781. valency in gaseous ionisation, 1911, A., ii, 957.

influence of fluorescence on ionisation by collision, 1912, A., ii, 314.

Franck, J., and Robert Williams Wood, the influence on the fluorescence of iodine and mercury vapour of gases with different affinities for electrons, 1911, A., ii, 169.

Franck, J. See also Robert Williams

Wood.

Franck, Willy. See Hugo Kauffmann. Franck, Walther August. See Dietrich Harries.

Francke, Erich, action of nitrous acid on hydrazine, 1906, A., ii, 82.

Francke, Georg. See Bernhard Schöndorff.

Franco, S. di, measurement of crystals of hexamethylenetetramine, A., i, 114.

François, Maurice, compounds of gold chloride and pyridine, 1903, A., i, 652. estimation of pyridine in aqueous solution, 1903, A., ii, 704.

substituted mercurammonium iodides from primary and secondary amines,

1904, A., i, 151. pyridine mercuri-iodides, 1905, A., i,

iodomercurates and chloroiodomercurate of monomethylamine, 1905,

A., i, 574. preparation of acetamide, 1906, A., i,

340. combinations of mercuric iodide and

methylamine, 1906, A., i, 484. combination of mercuric iodide with free amines, 1906, A., i, 644.

separation of ammonia and methyl-

amine, 1907, A., i, 391.

detection and estimation of ammonia in methylamine and volatile fatty amines, 1907, A., ii, 503.

double phosphate of magnesium and methylamine, 1908, A., i, 505.

two methods of preparing methylamine, 1908, A., i, 768.

modification of the preparation of methylamine from bromoacetamide, 1908, A., i, 956.

theory of the preparation of methylamine from solutions of acetylbromoamide, 1909, A., i, 13. the nature of Hofmann's bromo-

acetamide, 1909, A., i, 140.

Frank, Adolph, rendering atmospheric nitrogen available for agriculture and industry, 1903, A., ii, 570.

production of carbon (lampblack and graphite) from acetylene and metallic carbides, 1906, A., ii, 21. indirect estimation of alcohol

refraction, 1908, A., ii, 637.
Frank, Albert R., preparation of sodium

and calcium hyposulphites by electrolysis, 1904, A., ii, 615.

Frank, Erich, physiology of blood-sugar,

1911, A., ii, 301.

[a simple method for the estimation of sugar in blood], 1911, A., ii, 340. estimation of dextrose in urine and

blood, 1912, A., ii, 608.

Frank, Erich, and A. Bretschneider, physiology of blood-sugar. III. The residual reduction in the blood after fermentation, 1911, A., ii, 409.

physiology of blood-sugar. IV. The carbohydrates of red corpuscles,

1912, A., ii, 180.

Frank, Erich, and Salo Isaac, the theories of experimental diabetes, 1911, A., ii, 310.

the disordered metabolism in phos-

phorus poisoning, 1911, A., ii, 315. Frank, Erich, and Przedborski, uric acid formation from nucleic acid and hypoxanthine under the influence of atophan, 1912, A., ii, 659.

Frank, Erich. See also Kurt Moeckel. Frank, Franz, and Alfred Schittenhelm, the fate of nucleic acid contained in the food of normal men, 1910,

A., ii, 52. protein metabolism, 1911, A., ii, 127,

Frank, Franz. See also Emil Abderhalden

Frank, Fritz, estimation of antimony in red caoutchouc ware, 1912, A., ii, 497. Frank, Fritz, and Karl Birkner, estimation of cinnabar and sulphur auratum

in rubber wares, 1910, A., ii, 244. Frank, Fritz, and Gnädinger, investigation of the "urucuri" fruit. I., 1911,

A., ii, 647.

Frank, Fritz, and Felix Jacobsohn, estimation of mercury and antimony sulphides in vulcanised caoutchouc, 1909, A., ii, 833.

Frank, Fritz, and Eduard Marchwald, guttapercha-like substance from the resin of the karite tree, 1905, A., i, 293.

direct estimation of nitrogenous byproducts and impurities in raw caoutchouc, 1912, A., ii, 1002.

Frank, Fritz. See also Eduard Marck-

Frank, George Herbert, the sulphide dyestuffs. Part I., 1910, T., 2044; P., 218.

Frank, George Herbert, and Arthur George Perkin, analysis of indigos containing starch, 1912, A., ii, 706.

Frank, Heinrich. See Julius Fleischer. Frank, Henry. See Edmund Howd Miller.

Frank, Josef, heat of liquefaction of colloids, 1912, A., ii, 20...

Frank, Leonhard. See Theodor Pfeiffer. Frank, Louis. See Otto Kühling.

Frank, Max, crystallographic properties of some compounds of ethylenedi-

amine, 1910, A., i, 302.

Frank, Oskar. See Emil Abderhalden. Frank, Otto, and Adolf Ritter, action of the mucous membrane of the surviving intestine on soaps, fats, and fatty acids, 1905, A., ii, 733.

Frank, Otto, and Fritz Voit, physiological action of pilocarpine, 1903,

A., ii, 167.

Frank, Otto. See also Alfred Argyris. Frank, Paul. See Arthur Rosenheim.

Frank, Philip, the digestibility of white of egg as influenced by the temperature at which it is coagulated, 1911, A., i, 698.

Frank, Philipp, the relative principle and the representation of physical phenomena in space of four dimensions, 1910, A., ii, 840.

Frank, Rudolf, preparation of sulphur

trioxide, 1908, A., ii, 684.

Frank, Robert T., electric conductivity of blood during coagulation, 1905, A., ii, 835.

Franke, Adolf [Emil], action of bromine on polymeric aldehydes, 1907, A., i, 286.

Franke, Adolf, and Oswald Hankam, action of ethyl sodiomalonate ак-dibromodecane, 1910, A., i, 460.

Franke, Adolf, and Moritz Kohn, synthesis of alkylated glutaric acids from \(\beta\)-glycols. I. Synthesis of a-methylglutaric acid, 1903, A., i,

synthesis of alkylated pentamethylenediamine [ay-diaminopentane] and alkylated piperidines from β-glycols. I., 1903, A., i, 153.

condensations by means of magnesium ethyl iodide, 1904, A., i, 845.

action of organo-magnesium compounds on \(\beta\)-hydroxy-aldehydes and on keto-alcohols, 1905, A., i, 111.

Franke, Adolf, Moritz Kohn, J. Kovačević, and J. Nemlich, preparation of glycols from keto-alcohols by the organo-magnesium comaction of pounds, 1907, A., i, 816.

Franke, Adolf, Moritz Kohn, Eugen Thiel, and Karl Zwiauer, preparation of B-glycols from aldols by the action of organo-magnesium compounds, 1907,

A., i, 171.

Franke, Adolf, and Hermann Wozelka. the polymerisation of certain aldehydes of the series C, Ho, O, 1912, A., i, 413.

Franke, Adolf. See also Richard Prib-

ram.

Franke, Emil. See Chemische Fabrik Grünau Landshoff & Mayer and Friedrich Wilhelm Küster.

Franke, Ewald. See Paul Ehrlich.

Franke, H., direct estimation of [quebracho] tannin, 1907, A., ii, 60.

Franke, Max. See Hermann Emde and

Julius Tröger.

Franke, Richard, action of 2:5-dimethylpyrazine on aldehydes, 1906, A., i, 47. Franke, Ulrich. See Otto Wallach.

Frankel, Edward M. See Louis J. Curt-

Frankforter, George Bell, alkaloids of isopyrum and isopyroine, 1903, A.,

pitch [oleo-resin] and terpenes of the Norway pine and the Douglas fir, 1906, A., i, 971.

analysis of the water of Death Gulch,

1906, A., ii, 557.

American colophony. I. Resin of the Norway pine, 1909, A., i, 401.

Frankforter, George Bell, and Lillian Cohen, volumetric estimation of magnesium in water, 1907, A., ii, 988.

Frankforter, George Bell, and Francis C. Frary, new forms of lecture and laboratory apparatus, 1905, A., ii, 514. chlorohydrochlorides of pinene and firpene, 1906, A., i, 970.

Frankforter, George Bell, and Max Lando, eugenol and certain of its derivatives, 1905, A., i, 592.

Frankforter, George Bell, and A. W. Martin, seeds of Rhus glabra, 1904, A., ii, 436.

Frankforter, George Bell, and Andrew P. Petersen, lignite. II. Volatile constituents, 1912, A., ii, 55.

Frankforter, George Bell, V. H. Roehrich, and E. V. Manuel, reaction between ammonium chloride and potassium dichromate when heated, 1910, A., ii, 292.

Frankforter, George Bell, G. W. Walker, and A. D. Wilhoit, colorimetric estimation of dissolved oxygen in water, 1909, A., ii, 263.

Frankforter, George Bell, and Rodney West, gasometric estimation formaldehyde, 1905, A., ii, 619.

action of formaldehyde solution on potassium permanganate, 1906, A., . 929.

Frankl, Erich. See Rudolf Wegscheider. Frankl, Theodor, the antagonism between adrenaline and the chlorides of the alkaline earths and of potassium, 1910, A., ii, 59.

the action of sulphur on the intestine,

1911, A., ii, 749. Frankl, Theodor. See also Bondi.

Frankland, (Sir) Edward, obituary notice

of, 1905, T., 574.

Frankland, Edward Percy, a synthesis of tetrahydrourie acid, 1910, 1316; P., 171.

aß-dibenzylaminopropionic acid and 1:7-dibenzyltetrahydrouric 1910, T., 1686; P., 202.

the action of benzylamine on s-dibromosuccinic acid, 1911, T., 1775; P.,

a method of determining carbon and nitrogen in organic compounds, 1911, T., 1783; P., 207, 309. Frankland, Edward Percy, and Henry

Edgar Smith, the action of aliphatic amines on s-dibromosuccinic acid. Part I., 1911, P., 320; 1912, T., 57.

the action of aliphatic amines on s-Part II. dibromosuccinic acid. Allylamine, 1912, T., 1724; P., 224.

Frankland, Edward Percy. See also Julius Tafel. Frankland, Percy Faraday, presidential

address, 1912, T., 654.

Frankland, Percy Faraday, and Fred Barrow, the acyl-bornylamines. Part I. Fatty bornylamides, 1:09, T., 2017; P., 263.

the acyl-bornylamines. Part II. Aromatic bornylamides, 1909, T., 2026;

P., 263.

Frankland, Percy Faraday, Sidney Raymond Carter, and Ernest Bryan Adams, position-isomerism and optical activity; halogen derivatives of methyl dibenzoyltartrate, 1912, T., 2470; P., 292.

Frankland, Percy Faraday, and Edward Done, the resolution of inactive glyceric acid by fermentation and by brucine,

1905, T., 618; P., 132.

Frankland, Percy Faraday, and Edward Done, the influence of various substituents on the optical activity of malamide, 1906, T., 1859; P., 286.

Frankland, Percy Faraday, and Norman Leslie Gebhard, the ethereal salts and amide of dimethoxypropionic acid derived from d-glyceric acid, 1905, T.,

864; P., 189.

Frankland, Percy Faraday, and John Harger, position-isomerism and optical activity; the methyl and ethyl esters

of di-o-, -m-, and -p-nitrobenzoyltar-taric acids, 1904, T., 1571; P., 203.

Frankland, Percy Faraday, Henry Leonard Heathcote, and Clarence James Green, the nitration of diethyl monobenzovland mono-p-toluyltartrates, 1903, T., 168.

Frankland, Percy Faraday, Henry Leonard Heathcote, and (Miss) Hilda Jane Hartle, nitrotartaric acid and some of its ethereal salts, 1903, T., 154.

Frankland, Percy Faraday, and Ernest Ormerod, the influence of evelie radicles on optical activity; tartaric and ac-tetrahydro-B-naphthylamides, furfurylamide, and piperidide,

1903, T., 1342; P., 230.

Frankland, Percy Faraday, and Hugh O'Sullivan, influence Henry double linking on optical activity; some n-propyl and allyl derivatives of menthol, 1911, T., 2325; P., 319. menthyl nitrilotriacetate, 1912, T.,

287; P., 19. Frankland Percy Faraday, and Arthur Slator, the influence of various substituents on the optical activity of

tartramide, 1903, T., 1349; P., 229. Frankland, Percy Faraday, and Douglas Frank Twiss, the Grignard reaction applied to the esters of hydroxyacids, 1904, T., 1666; P., 245.

the influence of various substituents on the optical activity of tartramide. Part II., 1906, T., 1852; P., 285. the influence of various substituents

on the optical activity of tartramide. Part III. Halogen-substituted anilides, 1910, T., 154; P., 5.

Franklin, D. R. See James Flack Norris. Franklin, Edward Curtis, reactions in

liquid ammonia, 1905, A., ii, 581. mercury nitrogen compounds (the mercuriammonium salts and bases), 1907, A., ii, 264.

potassium ammoniozincate, 1907, A.,

boiling point of liquid ammonia, 1908, A., ii, 34.

Franklin, Edward Curtis, electrical conductivity of liquid ammonia solutions. III., 1909, A., ii, 957.

potassium ammonoplumbite, 1911, A.,

ii, 983.

electrical conductivity of liquid sulphur dioxide solutions at - 33.5°, -20° , -10° , 0° , and $+10^{\circ}$, 1911, A., ii, 1052.

ammonia system of acids, bases, and salts, 1912, A., ii, 451.

theory of the mercury ammonia com-

pounds, 1912, A., ii, 557.

action of potassamide on cupric nitrate in liquid ammonia solution: cuprous imide, cuprous nitride, and potassium ammoniocuprite, 1912, A., ii, 1174.

Franklin, Edward Curtis, and Hamilton Perkins Cady, velocities of the ions in liquid ammonia solutions, 1904, A., ii,

466.

Franklin, Edward Curtis, and Harry Drake Gibbs, electrical conductivity of methylamine solutions, 1907, A., ii, 840.

Franklin, Edward Curtis, and Thomas B. Hine, potassium ammoniotitanate, N:Ti·NHK, 1912, A., ii, 1168.

Franklin, Edward Curtis, and Charles August Kraus, electrical conductivity of liquid ammonia solutions. II., 1905, A., ii, 298.

heat of volatilisation of liquid ammonia at its boiling point under atmospheric pressure, 1907, A., ii, 929.

Frankovic, Vladimir. See Robert Kre-

Frantz, Friedrich. See Gustav Heller. Franz, Arthur. See Adolf Pinner.

Franz, Friedrich, action of sodium sulphite, aldehyde sodium hydrogen sulphite, acetone sodium hydrogen sulphite, and other substances on toads, 1904, A., ii, 631.

the toxicity of alkali salts of thiocyanic

acid, 1912, A., ii, 668.

Franz, Friedrich, and G. Sonntag, the excretion of sulphurous acid in the human subject after administration of sodium sulphite and sulphurous acid in combination with sodium salt, 1908,

A., ii, 714. Franz, Friedrich. See also Eugen Rost. Franz, Georg. See Paul Jacobson.

Franz, Margarete. See Karl Bernhard

Lehmann.

Franz, Shepherd Ivory, and William Carl Ruediger, changes in the skin following the application of local anæsthetics. I. Ethyl chloride, 1910, A., ii, 1088.

Franzen. Hans. See Theodor Curtius. Franzen, Hartwig, replacement of the hydroxyl group by the hydrazine

group, 1905, A., i, 244.

reduction of oximes and hydrazones with zinc dust and glacial acetic acid, 1905, A., i, 427.

reduction of hydrazones in acid solu-

tion, 1905, A., i, 830.

N-aminoheterocyclic compounds. 1-Amino-2-phenyl-2:3-naphthaglyoxaline, 1906, A., i, 706.

application of sodium hyposulphite in gas analysis, 1906, A., ii, 577.

benzaldehyde-o-aminophenylhydrazone, 1907, A., i, 321.

2:3-naphthylenedihydrazine, 1907. A., i, 880.

double compounds of acetates with acetic anhydride, 1908, A., i, 937. analysis of high percentage gases, 1908, A., ii, 425.

acylation of amines, 1909, A., i, 575.

general reaction of aldehydes and ketones, 1909, A., i, 804.

production of amino-acids in plants, and the action of formaldehyde on potassium cyanide, 1911, A., ii, 323.

the aldehyde of leaves, 1911, A., ii,

524.

action of formaldehyde on potassium

cyanide, 1912, A., i, 677.

biochemistry of micro-organisms. The fermentation of formic acid by Bacillus prodigiosus in a medium of constant composition, 1912, A., ii, 669.

Franzen, Hartwig, and Georg Braun, fermentation of formic acid by Proteus

vulgaris, 1908, A., ii, 215.

Franzen, Hartwig, and Wilhelm Deibel, reducing action of organo-magnesium compounds, 1905, A., i, 843. 7-hydroxy-8-naphthylhydrazine, 1908, A., i, 832.

Franzen, Hartwig, and Fritz Egger, estimation of formic acid, 1911, A., ii,

443.

Franzen, Hort vis, and Theolor Eichler replacement of hy lroxyl groups by hydr zin -gr) ip; 1933, A, i, 831. benzylilenehy lruines, 1910, A., i, 700

Franzen, Hurwy, and G. Greve, estination of formic acil, 1909,

A., ii, 1057.

bio hemistry of micro-organisms. II. The fermenta tion of formic acid with Bacillus pr odigiosus, 1910, A., ii, 333.

Franzen, Hartwig, and G. Greve, biochemistry of micro-organisms. III. The fermentation of formic acid by Bacillus plymouthiensis, 1910, A., ii, 799.

biochemistry of micro-organisms. IV. The fermentation of formic acid by

Bacillus kiliense, 1911, A., ii, 60. Franzen, Hartwig, and Fritz Kraft, N-amino-heterocyclic compounds. III. Properties of a-acylhydrazines, 1-amino-2:5-diphenyl-1:3:4-triazole, and 1-amino-2:5-dibenzyl-1:3:4-triazole, 1911, A., i, 816.

Franzen, Hartwig, and E. Löhmann, estimation of nitric acid by nitron in liquids containing many organic substances, 1909, A., ii, 517.

biochemistry of micro-organisms. I. Quantitative estimation of nitrate fermentation, 1909, A., ii, 1044.

Franzen, Hartwig, and Hubert Leslie Lucking, the hydrazinates of some metallic salts. II., 1911, A., ii, 285.

Franzen, Hartwig, and Otto von Mayer, action of hydrazine hydrate on complex cobalt salts, 1906, A., ii, 859. the hydrazinates of some metallic

salts, 1909, A., ii, 40.

detection of carbon monoxide means of blood, 1911, A., ii, 1029.

Franzen, Hartwig, and Rudolf Scheuermann, N-aminoheterocyclic compounds. II. 1-Amino-2-p-isopropylphenyl-2:3-naphthaglyoxaline, 1908, A., i, 293.

Franzen, Hartwig, and O. Steppuhn, alcoholic fermentation, 1911, A., ii,

biochemistry of micro-organisms. Fermentation and production of formic acid by yeasts, 1912, A., ii, 475, 589.

Franzen, Hartwig, and Peter Stieldorf, reduction of azo-compounds by means of sodium hyposulphite, 1908, A., i, 113.

Hartwig, and Friedrich Franzen. Zimmermann, action of amyl nitrite on oximes, 1906, A., i, 388.

a new method of preparation and the properties of quaternary hydrazines, 1906, A., i, 702.

action of nitrites and nitrosyl chloride on aldazines, 1907, A., i, 661.

Franzen, Hartwig. See also Theodor Curtius. Fraprie, Frank Roy, cæsium chromates,

1906, A., ii, 539. Fraprie, Frank Roy. See also Charles Palache.

Fraps, George Stronach, nitrification, 1903, A., ii, 448.

factors of availability of plant food, 1904, A., ii, 677.

estimation of sulphates in vegetable products, 1905, A., ii, 59. assimilation of free nitrogen by

hacteria, 1905, A., ii, 110.

studies on nitrification, 1905, A., ii, 110. composition of rice refuse, 1905, A., ii, 114.

nitrification and ammonification of some fertilisers, 1906, A., ii, 382. availability of phosphoric acid of the

soil, 1906, A., ii, 702.

simple fat-extraction apparatus, 1907, A, ii, 314.

ammonia-soluble phosphoric acid of the soil, 1908, A., ii, 622.

effect of ignition on the solubility of soil phosphates, 1912, A., ii, 85.

George Stronach. Fraps, Sec William Alphonso Withers.

Frary, Francis C., a new apparatus for rapid electrolytic estimations, 1907, A., ii, 649.

rapid estimation of zinc by electrolysis. 1908, A., ii, 68.

Frary, Francis C. See also George Bell Frankforter.

Frary, Guy G. See Alfred Newton Cook.

Frasch, Hans Albert, preparation of ammonio-nickel chloride and separation of nickel from other metals, 1904, A., ii, 128.

separation of nickel and cobalt, 1904,

A., ii, 565.

preparation of a double salt ammonio-nickel chloride, 1906, A., ii, 91,

Fraschina, Carlo, new condenser for extraction apparatus, 1909, A., ii, 564.

Fraschina, Carlo. See also Isaak Ber-

Fraser, (Miss) Mary Taylor, and John Addyman Gardner, the origin and destiny of cholesterol in the animal Part V. On the inorganism. hibitory action of the sera of rabbits fed on diets containing varying amounts of cholesterol on the hæmolysis of blood by saponin, 1905, A., ii, 595.

origin and destiny of cholesterol in the animal organism. VII. The quantity of cholesterol and cholesterol esters in the blood of rabbits fed on diets containing varying amounts of cholesterol,

1910, A., ii, 970.

Fraser, (Sir) Thomas Richard, and Robert Henry Elliot, action of sea snake venoms. I., 1904, A., ii, 630.

Fraser, (Sir) Thomas Richard, and Alister Thomas Mackenzie, Strophanthus sarmentosus; its pharmacological action and its use as an arrow poison, 1910, A., ii, 639.

Frassetti, P., ethylene xanthate and ethylene thiocarbonate, 1905, A., i,

256.

Frauenberger, Franz, silicic acid in Whartonian jelly, 1908, A., ii, 969.

Joseph Christic Whitney, relations between the colour, composition, and constitution of the alkali derivatives of the nitrophenols, 1903, A., i, 816.

comparative study of m-sulphaminebenzoic acids made by different

methods, 1903, A., i, 825.

Frazer, Joseph Christie Whitney, and Harmon N. Holmes, electric osmosis, 1908, A., ii, 1019.

Frazer, Joseph Christie Whitney, also Harmon Northrop Morse.

Frear, William, and Charles P. Beistle, some Cuban soils of chemical interest, 1903, A., ii, 236.

Frear, William, and M. H. Pingree, creaming of milk during its sale, 1903, A., ii. 340.

Frébault, Aristide, reduction of benzonitrile and p-toluonitrile, 1905, A., i, 437.

Aristide, and Jules Aloy, Frébault. picramic acid [dinitroaminophenol], 1904, A., i, 870.

Frébault, Aristide. See also Jules Aloy.

Frébault, Paul. See Jules Alov.

Freckmann, W. See Conrad von Seel-

Fred, Edwin Brown, increasing the activity of higher and lower plants by small amounts of poisons, 1911, A., ii, 1123.

quantitative reduction of methyleneblue by bacteria found in milk, and the use of this stain in estimating the keeping quality of milk, 1912, A., ii, 1199.

Fredenhagen, Carl, passivity of iron and the periodic phenomena observed at iron electrodes, 1903, A., ii, 353.

foundations of a general theory of the electrolytic solution tensions of substances in any solvent, 1905, A., ii, 686.

passivity, 1906, A., ii, 76.

Fredenhagen, Carl, spectrum analysis, 1906, A., ii, 409.

temperature radiation of iodine vapour, 1907, A., ii, 146.

pure temperature radiation and the application of Kirchhoff's law, 1907, A., ii, 593.

cause of emission of bunsen flame spectra, 1907, A., ii, 594.

cause of the emission of the principal series lines of the alkali metals and the Doppler effect in canal- and anode-rays, 1908, A., ii, 79.

review of the various theories of passivity; fresh observations on the passivity of iron, nickel, and chromium, 1908, A., ii, 679.

the emission of negative electrons by heated potassium and sodium, and the conductivity of the vapours of these metals, 1911, A., ii, 571.

the influence of neutral gases on the absorption of sodium vapour, 1911, A., ii, 1043.

emission of negative electrons by heated metals, 1912, A., ii, 517.

Free, Edward E., electrolytic estimation of minute quantities of copper, 1908, A., ii, 227.

solubility of precipitated basic copper carbonate in solutions of carbon dioxide, 1908, A., ii, 848.

lead chromate, 1909, A., ii, 313.

Freeborn, Albert, experiments on a

yellow colouring matter from ergot, 1912, P., 71.

Fréedericksz, Vsévolod, dispersion and absorption of chromium and manganese in the visible and ultraviolet spectrum, 1911, A., ii, 349.

relation between the optical constants and the potential of metals, 1911, A., ii, 449.

Fréedericksz, Vsévolod. See also Charles Eugène Guye.

Freer, Paul Caspar. See Raymond Foss Bacon.

Frégonneau, Karl, the action of bacteria on azo-colouring matters, 1909, A., ii, 335.

Frehn, A., the partition of nitrogen in human milk, 1910, A., ii, 429.

Frei, H. See Richard Lorenz.

Frei, Johannes. See Eugen Bamberger. Frei, Walter, diminution of conductivity by colloids and observations relating to the conductivity of serum,

1910, A., ii, 177.
refractive index of colloids, 1910, A.,

ii, 365.

Freimann, Hans. See Eugène Grandmougin and Emilio Noelting.

Freis, Rudolf, order of separation in silicate fusions, 1907, A., ii, 183.

Frémont, Charles. See Floris Osmond. French, Andrew Gordon, a new element, probably of the platinum group, 1912, A., ii, 54.

French, H. E., the comparative toxicity of different animal tissues to animals susceptible to thyroid feeding, 1912,

A., ii, 468.

French, Herbert Stanley, Marcus Seymour Pembrey, and John Henry Ryffel, blood changes in cyanosis due to congenital heart disease, 1909, A., ii, 668.

French, Herbert Stanley. See also Richard William Allen and Marcus Sey-

mour Pembrey.

Frenkel, Bronislaw, the behaviour of morphine in the frog, 1910, A., ii, 1095.

Frenkel, L., estimation of small quantities of ammonia in presence of urea,

1906, A., ii, 391.

Frenkel-Heiden, cerebro-spinal fluid, 1907, A., ii, 110,

Frentzel, Johannes, and Max Schreuer, nutrition studies. IV. Composition and energy value of flesh feecs, 1904, A., ii, 275.

Frentzel, Ludwik. See Fritz Ullmann. Frenzel, Carl, aqueous ammonia solution, 1903, A., ii, 72.

electrolysis of aqueous solutions, 1903, A., ii, 528.

Frerichs, Georg, estimation of tellurium, 1903, A., ii, 41.

estimation of nitric acid in water, 1903, A., ii, 328.

testing sublimate-dressings, 1903, A., ii, 335.

volumetric estimation of free and combined sulphuric acid, 1903, A., ii, 389.

detection of nitric acid by the diphenylamine reaction, 1905, A., ii, 282.

estimation of iron in reduced iron, 1908, A., ii, 538.

berberine. I. Berberrubine, 1910, A., i, 500.

Frerichs, Georg, and Georg Breustedt, arylhydantoins, 1903, A., i, 16.

Frerichs, Georg, and Paul Förster, action of hydrazines on thiocyanoacetic acid and its ethyl ester, 1910, A., i, 190.

Frerichs, Georg, and Heinrich Frerichs, detection of poisoning by veronal, 1906, A., ii, 379. Frerichs, Georg, and Ludwig Hartwig. action of carbamide on compounds of cyanoacetic acid, 1906, A., i. 74, 163.

Frerichs, Georg, and Martin Hollmann, arylhydantoins, 1906, A., i, 207.

Frerichs, Georg, and Hans Hupka, thiocarbamides of the phenylenediamines, 1903, A., i, 654.

Frerichs, Georg, and Edwin Wildt, action of sodium hydroxide on derivatives of dithiodiglycollic acid and diselenodiglycollic acid, 1908, A., i, 413.

Frerichs, Georg. See also Heinrich Beckurts and Wilhelm Peters,

Frerichs, Heinrich, action of potassium selenocyanate on compounds chloroacetic acid, 1903, A., i, 609.

estimation of selenium in organic compounds, 1903, A., ii, 327.

volumetric estimation of iodine, 1905, A., ii, 281.

estimation of morphine in opium; extract of opium and tincture of opium, 1910, A., ii, 82.

Frerichs. Heinrich, and O. Rentschler, action of xanthates on derivatives of chloroacetic acid, 1906, A., i, 408.

Frerichs, Heinrich, and G. Rodenberg, electrolytic estimation of small quantities of arsenic, 1905, A., ii, 651. Frerichs, Heinrich. See also Georg

Frerichs.

Frese, Hans, occurrence of a-picoline in brown-coal-tar, 1903, A., i, 364.

Frese, Hans. See also Wilhelm Schneidewind.

Frese, Karl. See Hans Aron.

Fresenius, [Remigius] Heinrich, and Paul H. M. P. Brinton, estimation of potassium as potassium platinichloride, 1911, A., ii, 333.

Fresenius, Heinrich, and A. Czapski, a new radioactive mineral spring at Brambach i. V., 1911, A., ii, 686.

Fresenius, Ludwig. See Otto Lemmermann and Conrad von Seelhorst.

Fresenius, Ludwig R., determination of small hydrogen ion concentrations from the intensity of the residual current, 1912, A., ii, 894.

Fresenius, Remigius, application of "cupferron" in quantitative analysis,

1911, A., ii, 336.

Fresenius, Remigius. See also Richard Anschütz and Arthur Fischer.

Fresenius, [Theodor] Wilhelm, statement of analytical results, 1905, A., ii, 197.

Fresenius, Wilhelm, and Leo Grünhut, commercial analysis of formaldehyde, 1905, A., ii, 211.

Fresenius, Wilhelm, and Leo Grünhut. quantitative analysis of some new surgical dressings, 1905, A., ii, 211. estimation of lecithin in oil, 1911, A.,

ii, 343.

specific gravity table of alcohol-water mixtures at 17.5°, 1912, A., i, 154.

volume-condition of alcoholic sugar solutions and the indirect determinations of the extract. I. and II., 1912, A., ii, 303.

indirect estimation of alcohol in beer,

1912, A., ii, 870. estimation of extract in worts and

beers, 1912, A., ii, 1112. Fressel, Hans. See Heinrich Wieland. Freudenberg, Ernst, fat metabolism,

1912, A., ii, 1069.

Freudenberg, Karl. See Emil Fischer. Freudenberg, Wilhelm, anophorite, a new hornblende from the Katzenbuckel, 1910, A., ii, 721.

Freudenreich, Eduard von. nitrogenfixing bacteria, 1903, A., ii, 744.

Freudenreich, Eduard von, and Jensen, propionic acid fermentation in Emmenthaler cheese, 1907, A., ii, 120.

Freudenreich, Eduard von, and Johannes Thöni, action of different lactic ferments on cheese ripening, 1905, A., ii, 189.

Freund, Ernst, proteoses in blood, 1908, A., ii, 117.

the amount of albumose in blood, 1908, A., ii, 512.

Freund, Ernst, and Richard Fellner, estimation of the nitrogenous constituents of urine by means of mercuric chloride, 1903, A., ii, 191.

Freund, Ernst, and Julius Joachim. serum globulins, 1903, A., ii, 87.

Freund, Ernst, and Hugo Popper, glycogen formation in the liver after intravenous injection of sugar, 1912, A., ii, 661.

Freund, Hermann, isopropyl-4-stilbazole, m-methyl-4-stilbazole, and mmethyl-2-stilbazole, 1906, A., i, 883. the biological behaviour of iodoproteins, 1909, A., ii, 919.

Freund, Hermann, and E. Grafe, metabolism in experimental salt fever,

1912, A., ii, 186.

Freund, (Miss) Ida, influence of temperature on the change of volume on neutralisation for various salts at different concentrations, 1909, A., ii,

Freund, Martin, cotarnine, IV. Application of Grignard's reaction, 1904, A., i, 187.

385

Freund, Martin, cytisine, 1904, A., i, 263.

1:8-dimethyltetrahydroquinoline,

attempts to prepare alkaloids of the

isoquinoline series, 1904, A., i, 915. thebaine, 1905, A., i, 918; 1906, A., i, 303.

new method for the preparation of tetraphenylmethane, 1906, A., i, 574. formation of pyrene from thebaine,

1910, A., i, 631.
preparation of cotarnine salts of organic acids, 1911, A., i, 561.

preparation of hydrastinine and analogous bases from berberine, 1912, A., i, 383.

preparation of berberine derivatives,

1912, A., i, 487.

preparation of tetrahydroberberine derivatives, 1912, A., i, 487.

preparation of methylenedicotarnine,

1912, A., i, 579.

Freund, Martin, and Fritz Achenbach, action of hydroxylamine on some ortho-substituted derivatives of anthraquinone, 1911, A., i, 69.

Freund, Martin, and Heinrich Beck, behaviour of 2-methyltetrahydroisoquinoline towards chromic acid, 1904, A., i, 618.

papaverine, 1904, A., i, 917.

a new series of bases derived from dihydroberberine, 1905, A., i, 151. action of magnesium benzyl chloride on crystal-violet, 1905, A., i, 159.

Freund, Martin, and Franz Becker, anils of the methoxybenzaldehydes and their behaviour with methyl iodide, 1903, A., i, 563.

cotarnine, 1903, A., i, 572.

Freund, Martin, and Erich Beschke,

narceine, 1907, A., i, 235.

Freund, Martin, and Georg Bode, action of Grignard's solutions on halogen ammonium compounds, 1909, A., i, 514.

Freund, Martin, and Adolf Daube, methylenedihydrocotarnine, 1912, A.,

i, 491.

Freund, Martin, and Karl Fleischer, synthesis of the higher indandiones,

1910, A., i, 490.

constitution of isonarcotine and the synthesis of narcotine derivatives of high molecular weight, 1912, A., i, 490.

Freund, Martin, Karl Fleischer, and Max Rothschild, action of diethyl-malonyl chloride on some substances containing nitrogen, 1911, A., i, 236.

Freund, Martin, and Paul Horkheimer, cytisine, 1906, A., i, 302.

Freund, Martin, and Otto Kupfer, stereochemistry of nitrogen compounds; isomeric bishydrocotarnines, 1911, A., i. 911.

Freund, Martin, and Gustav Lebach, indole colouring matters, 1903, A., i, 278; 1904, A., i, 266; 1905, A., i, 663.

Freund, Martin, and Karl Lederer, action of organic magnesium compounds on hydrastinine, 1911, A., i, 906.

cotarnine. VI., 1911, A., i, 910.

Freund, Martin, and Fritz Mayer, a-methyltetrahydroberberine, 1905, A., i, 657.

action of Grignard's reagents on Michler's ketone, 1906, A., i, 384.

homologues of berberine and canadine, 1907, A., i, 632.

action of Grignard's solutions on β -cinchonine- and β -quinine-ethiodides, 1910, A., i, 132.

Freund, Martin, and Paul Oppenheim,

narceine, 1909, A., i, 410.

Freund, Martin, and Hans Hermann Reitz, behaviour of cotarnine towards Grignard's reagent, 1906, A., i, 600.

Freund, Martin, and Ludwig Richard, action of Grignard reagents on quaternary ammonium haloids, 1909, A., i, 417.

Freund, Martin, and Keita Shibata, dihydrohydrastinine: the stereochemistry of compounds containing nitrogen, 1912, A., i, 488.

Freund, Martin, and Edmund Speyer, cevadine [veratrine]. II., 1904, A.,

i, 613.

a method for the preparation of compounds derived from pseudo-bases by the replacement of the hydroxyl group by hydrocarbon residues, 1905, A., i, 156.

action of hydrogen peroxide on thebaine, morphine, and their ethers,

1911, A., i, 76.

codeine oxide, 1911, A., i, 909.

Freund, Martin, and Adolf Wirsing, di-p-dimethylaminoindigotin, 1907, A., i, 254.

Freund, Martin. See also Cesare Finzi. Freund, Michael, thermometer holder for distilling flasks, the entire scale being visible, 1912, A., ii, 932.

Freund, Robert. See Josef Houben. Freund, Saly. See Max Dittrich. Fround, Walther, physiology of muscle in warm-blooded animals, 1904, A.,

metabolism in the infant, 1909, A., ii,

Freund. Wilhelm. See Alfred Wohl. Freundler, Paul [Théodore], formation of

azo-compounds; reduction of o-nitrobenzyl alcohol, 1903, A., i, 371.

benzene-o-azobenzyl alcohol and its transformations into phenylindazole and azodiphenylmethane, 1903, A., i. 585.

benzovl derivatives of hydrazobenzene.

1903, A., i, 663.

application of pyridine in the preparation of some amide derivatives, 1904, A., i, 33.

researches on azo-compounds; new mode of formation of indazole deriv-

atives, 1904, A., i, 108.

formation of azo-compounds; reduction of o-nitrobenzyl methyl ether, 1904, A., i, 121.

azo-compounds; reduction of nitrobenzoic acids and acetals, 1904, A.,

reduction of o-nitrobenzyl alcohol; general remarks on the formation of indazyl derivatives, 1904, A., i, 667.

transformation of azo-compounds containing an ortho-substituted alcohol radicle into indazyl derivatives, 1904, A., i, 699.

methyl anthranilate and its detection,

1904, A., i, 830.

press for the preparation of pellets, 1904, A., ii, 652. correction,

azodiphenylmethane: a

1905, A., i, 162. bromination of paraldehyde, 1905, A., i, 569.

cyclohexylacetone, 1906, A., i, 283. azo-compounds; transformation of ocarboxylic azo-compounds into 3hydroxyindazyl derivatives, 1906, A., i, 544.

researches in the cyclohexane series,

1906, A., i, 733.

chlorination of paracetaldehyde: bu-

tylchloral, 1907, A., i, 13.

o-carboxylic azo-compounds and their transformation into 3-hydroxyindazyl derivatives, 1907, A., i, 158.

ethyl aa-dichloroisopropyl ether and dibromoacetaldehyde, 1907, A., i,

halogen derivatives of acetaldehyde, 1907, A., i, 285.

constitution of azo-compounds; reply to Tiffeneau, 1908, A., i, 228.

Freundler, Paul [Théodore], asymmetric synthesis, 1909, A., i, 164.

1-hydroxyindazyl derivatives, 1910,

A., i, 138.

chloroanthranilic esters and condensation with nitrosobenzene. 1910, A., i, 445.

hydroxyindazoles, 1911, A., i, 577.

alkyl chloro- and bromo-anthranilates. 1911, A., i, 637.

hydroxyindazoles. IV. Preparation of hydroxyindazoles from non-substituted benzene-azo- or -hydrazobenzoic acids, 1911, A., i, 753.

benzeneazoxy-o-benzoic acid, 1911, A.,

i. 757.

hydroxyindazoles. III. Preparation of ortho-substituted azo-acids, 1911, A., i. 757.

V. Constitution, hydroxyindazoles.

1911, A., i, 815.

Freundler, Paul, and Lucien Béranger, derivatives of azobenzene and hydrazobenzene, 1903, A., i, 202. Freundler, Paul, and Emile Damond,

some derivatives of cyclohexane,

1905, A., i, 890.

preparation of racemic amyl alcohol,

1906, A., i, 2.

Freundler, Paul, and Paul Juillard, action of nitrosobenzene on secondary amines, 1909, A., i, 145.

Freundler, Paul, and André de Laborderie, benzeneazo-p-benzaldehyde and its derivatives, 1903, A., i, 202.

Freundler, Paul, and Marcel Ledru, bromoacetal, 1905, A., i, 326.

Freundler, Paul, and Henri Sevestre, preparation of o-azocarboxylic acids. 1909, A., i, 69.

Freundlich, Herbert, precipitation of colloidal solutions by electrolytes, 1903, A., ii, 532.

adsorption in solutions, 1907, A., ii,

precipitation and adsorption of colloids. 1907, A., ii, 939.

adsorption and occlusion, 1908, A., ii,

nature of adsorption, 1909, A., ii,

importance of adsorption for the precipitation of suspension colloids, 1910, A., ii, 692.

diminution of velocity of crystallisation by addition of foreign substances, 1910, A., ii, 1045.

Freundlich, Herbert, and J. Fischer, influence of colloids on the electrolytic deposition of lead, 1912, A., ii, 1131.

Freundlich. Herbert, and Alexander Krestovnikoff, kinetics of the transformation of chloroalkylamines into heterocyclic compounds, 1911, A., ii,

Freundlich, Herbert, and Gregor Losev. adsorption of dyes by charcoal and textile fabrics, 1907, A., ii, 534.

Freundlich. Herbert, and Ehrhart Mäkelt, absolute zero of potential, 1909, A., ii, 368.

Freundlich, Herbert, and Morton Masius, adsorption in a solution of several substances, 1911, A., ii, 374.

Freundlich, Herbert, and Walter Neumann, classification of solutions of colouring matters, 1908, A., ii,

adsorption of colouring matters, 1909,

A., ii, 868.

Freundlich, Herbert, and W. Novikow, electrolytic formation of films of zinc on the surface of liquids, 1910, A., ii, 577.

Froundlich, Herbert, and E. Posnjak, diminution of crystallisation; velocity as adsorption phenomenon, 1912, A., ii, 438,

Freundlich, Herbert, and (Miss) Marion Brock Richards, kinetics of the transformation of chloralkylamines into heterocyclic compounds, 1912, A., ii, 633.

Froundlich, Herbert, and H. Schucht. precipitation of arsenious sulphide sol by salts of the rare earths, 1912, A., ii, 1044.

Freundlich, Herbert. See also Fritz Emslander.

Freundlich, J., receiver for vacuum fractional distillation, 1908, A., ii, 829.

Frevert, Harry Louis. See Gregory Paul Baxter and Theodore William Richards.

Frew, John. See Thomas Stewart Patterson.

Frew, Robert Skeoch, autolytic formation of lactic acid in muscles, 1909, A., ii,

Frey, Burkhard. See Fritz Ullmann. Frey, Ernst, gout, 1905, A., ii, 742.

osmotic work of the kidneys. Iodide, nitrate, sulphate, and phosphate are excreted in the urinary tubules, 1911, A., ii, 511.

the concentration of ethyl chloride in the blood of warm- and cold-blooded animals at the onset of narcosis,

1912, A., ii, 584.

Frey, Ernst. See also Heinrich Kionka.

Frey, Henry C. See Carl E. Smith. Frey, Max von, the alkaline odour,

1911, A., ii, 129.

dichloroquinizarins, 1912, A., i, 477. Frey, Otto, columbin. II., 1907, A., i,

simple method for the estimation of phosphorus in phosphorised oils, 1911, A., ii, 535.

Frey, Robert. See Max Busch.

Frey, Walther, and Alfred Gigon, the quantitative estimation of amino-acids in urine by means of formaldehyde titration, 1910, A., ii, 164.

Frey, Wilhelm. See Johannes D'Ans

and Lothar Wöhler.

Freydag, Rudolph. See Paul Duden. Freylon, (Mlle.) Germaine, resolution of

racemic amines by means of camphoramic acids, 1908, A., i, 827. a-camphoramic acids, 1908, A.,

compounds with a branched chain,

1910, A., i, 296, 358. Freyss, Georges, and Adolphe Paira,

5-nitro-8-methoxyquinoline and derivatives, 1903, A., i, 198.

See also Freyss. Georges. Emilio Noelting.

Freyssinge, L., and Raoul Roche, purification and sterilisation of drinking water by means of calcium peroxide, 1905, A., ii, 515.

Freytag, Curt. See Karl Löffler.

Frézouls, Jules, derivatives of hexahydrobenzaldehyde, 1912, A., i, 629.

catalytic hydrogenation of phenyl styryl ketone: diphenylpropane and s-dicyclohexylpropane, 1912, A., i, 629.

Jules. See also Marcel Frézouls. Godchot.

Fribourg, Ch. See Henri Pellet.

Fric, R., modifications undergone by nitrated celluloses and powders derived from them, under the influence of heat, 1912, A., i, 73.

Fricke, Ludwig, estimation of fluorine in Martin slag, 1904, A., ii, 772.

estimation of sulphur in pig-iron and steel by titration with iodine and thiosulphate solution, 1904, A., ii, 774.

See also Fricke. Ludwig. Behrend.

Fricker, Emil, excretion of iodine and

lithium by the bile, 1909, A., ii, 79. Friderich, Louis, numerical studies on the equation of fluids; determination of the constants a and b, 1906, A., ii, 427.

Friderich, Louis, Edouard Mallet, and Philippe Auguste Guye, new method of preparing lead peroxide, 1906, A., ii. 756

Friderici, Egon. See Richard Stoermer. Fridericia, L. S., the explanation of Chauveau's experimental results, from which the conclusion was drawn that fats have less value than carbohydrates as a source of energy for muscular work, 1912, A., ii, 853.

Fridrich, Walter. See Rudolf Friedrich

Weinland.

Frieboes, Walther, Moser's blood crystals,

1904, A., ii, 104.

Fried, Rudolf, application of hydrofluoric acid in iron works laboratories, 1903, A., ii, 391.

Fried, Walter, preparation of the corresponding aldol from ethoxyacetalde-

hyde, 1907, A., i, 184.

Friedberg, A. See Daniel Vorländer. Friedel, Friedrich. See Emil Abderhalden.

Friedel, Georges, anthophyllite from Saint-Germain-l'Herm, 1903, A., ii,

boleite and related minerals, 1906, A., ii, 455.

pilolite from the Pyrenees, 1908, A., ii, 400.

Friedel, Georges, and Francis Grandjean. stanniferous rutile from Vaux (Rhône), 1909, A., ii, 491.

synthesis of chlorite by the action of alkaline solutions on pyroxene, 1909,

A., ii, 813.

Lehmann's anisotropic liquids, 1910, A., ii, 809.

liquids with conical focal lines, 1910, A., ii, 1018.

anisotropic liquids, 1911, A., ii, 1. structure of liquids with conical focal

lines, 1911, A., ii, 165. Friedel, Jean, formation of chlorophyll [in seedlings] in rarefied air and rarefied oxygen, 1903, A., ii, 171.

chlorophyllic assimilation in absence of oxygen, 1905, A., ii, 191.

a green organ devoid of assimilatory power, 1906, A., ii, 481.

Friedemann, F. See Peter Klason.

Friedemann, Max, and Fritz Sachs, hæmolysis by soaps, and the relationship between soaps and the complex hæmolysins of the blood-serum, 1908, A., ii, 866.

Friedemann, Ulrich, precipitation of egg-albumin by other colloids and its relationship to the reactions of immune substances, 1906, A., i, 467.

Friedemann, Ulrich, and Salo Isaac, metabolism of injected proteins, immunity and hypersensitiveness, 1908, A., ii. 606.

Friedemann, Ulrich. See also Max Neisser.

Friedemann, W. H. See Harry Waldemar Bresler.

Friedenthal, Hans, determination of the reaction of a liquid by means of indicators, 1904, A., ii, 288.

acidimetry of animal liquids, 1905, A.,

ii, 213.

the quantitative chemical analysis of mixtures by utilising differences of specific gravity, 1911, A., ii,

Friedenthal, Hans. See also Hilary

Lachs and Eduard Salm.

Friederich, Walter. See Johannes D'Ans. Friederichs, Wilhelm, absorption spectra of vapours, 1905, A., ii, 782.

Friederici, Kurt. See Alfred Stock.

Friedheim, Carl, so-called solid solutions of indifferent gases in uranium oxides, 1905, A., ii, 530.

quantitative separation of glucinum and aluminium, 1907,

53.

Friedheim, Carl, Oskar Decker, and Ernst Diem, separation of arsenic from vanadium and molybdenum, 1905, A., ii, 764.

Friedheim, Carl, and Peter Hasenclever. use of hydroxylamine in quantitative analysis [separation of metals], 1905,

A., ii, 766.

Friedheim, Carl, William Hope Henderson, and Alfred Pinagel, separation of tungsten trioxide and silicon dioxide by means of hydrogen chloride and the analysis of silicotungstates, 1905, A., ii, 614.

Friedheim, Carl, and Ludwig Jacobius, separation of metals by volatilisation in a current of hydrogen chloride,

1905, A., ii, 652.

Friedheim, Carl, and Franz Keller, cobaltimolybdates, 1907, A., ii, 96.

Friedheim, Carl, and Otto Nydegger, estimation of sulphuric acid by benzidine, 1907, A., ii, 196.

Friedheim, Carl, and Alfred Pinagel, supposed volatility of silicon dioxide at the moment of its liberation by strong acids, 1905, A., ii, 584.

Friedheim, Willi, distribution of nitrogen in the precipitation by acids and by rennet of cow's, buffalo's, goat's, human, and ass's milk, 1909, A., ii, 687.

Friedl, Arthur, Charles Weizmann, and Max Wyler, the fluoresceins and eosins from 4-hydroxyphthalic, 4methoxyphthalic, and hemipinic acids, 1907, T., 1584; P., 214.

Friedl, Arthur. See also William

Henry Bentley.

Friedl, Franz, 2-naphthol-3-carboxylic acid and its condensation with benzaldehyde, 1910, A., i, 741.

the preparation of nitropyridine, 1912,

A., i, 299.

Friedländer, Konrad, 4-stilbazole, 1905, A., i, 232.

4-stilbazole and 3'-nitro-4-stilbazole,

1905, A., i, 818.

action of 5-methylacridine on benzaldehyde and m-nitrobenzaldehyde, 1905, A., i, 829.

substitution of protein by amides,

1907, A., ii, 895.

influence of amides on protein meta-

bolism, 1908, A., ii, 514. digestibility of hay from water meadows as compared with ordinary hay, 1908, A., ii, 1066.

Friedländer, Paul, sulphur analogues of the indigotin group, 1906, A., i,

the dye of antique purple from Murex brandaris, 1907, A., i, 867; 1909, A., i, 262.

indigoid dyes, 1908, A., i, 371, 673. behaviour of indigoid dyes and indigotin towards alkalis, 1908, A., i,

binuclear quinones, 1909, A., i, 417. dyes of the thionaphthen series, 1909, A., i, 503.

p-methoxysalicylaldehyde, 1910, A., i,

Friedländer, Paul, S. Bruckner, and G. Deutsch, bromo- and methoxy-derivatives of indigotin, 1912, A., i, 318.

Friedländer, Paul, Augusto Chwala, and Zoltan Slubek, arylthioglycollic [arylthiolacetic] acids, 1907, A., i, 525.

Friedländer, Paul, and Paul Cohn, opdinitrobenzaldehyde. II., 1903, A., i, 264.

Friedländer, Paul, E. Eckstein, and N. N. Voroschtsoff, "thioindigo" dyes of the naphthalene series, 1912, A., i, 293.

Friedländer, Paul, and Rodolfo Fritsch, derivatives of m-acetylaminobenzaldehyde, 1903, A., i, 346.

Friedlander, Paul, and Béla von Horváth, condensations with aminobenzyl alcohols, 1903, A., i, 252.

Friedländer, Paul, and St. Kielbasin ski, aldehydes of oxindole, indoxyl, and hydroxythionaphthen, 1911, A., i 1021.

Friedländer, Paul, and Victor Laske. constitution of Greiff's dibromoanthr-

anilic acid, 1907, A., i, 848.

Friedländer, Paul, Victor Laske, and Gustav Müller, derivatives of thionaphthen and thioindigotin, 1907, A., i. 334.

Friedländer, Paul, and Emil Lenk, oand p-mercaptobenzaldehyde, 1912,

A., i, 702.

Friedländer, Paul, and Ferdinand Mauthner, sulphur dyes, 1905, A., i,

Friedländer, Paul, and Georg Schick, new anthracene dyes, 1904, A., i, 69, 679.

Friedländer, Paul, and R. Schuloff, indigoid dyes. III., 1908, A., i, 674.

Friedlander, Paul, and . Erw. Schwenk, decomposition of indigotin and of indirubin by alkalis, 1910, A., i, 592.

Friedländer, Paul. See also A. Bezdzik, Paul Cohn, Leo Ettinger, and A. Felix.

Friedmann, A., new analyses of water from the Dead Sea, 1912, A., ii, 268. Friedmann, B. See Paul Pfeiffer.

Friedmann, Ernst, physiological relations of derivatives of proteins containing sulphur. I. Constitution of cystine, 1903, A., i, 75.

physiological relations of derivatives of proteins containing sulphur. II. a-Thiolactic acid, a decomposition product of keratin-substance, 1903,

A., i, 301. physiological relationships of proteins containing sulphur. III. Constitution of mercapturic acids, 1904, A., i, 165.

constitution and synthesis of adrenaline, 1904, A., i, 1069.

constitution of adrenaline, 1906, A.,

the degradation of carboxylic acids in the animal body. VI., 1908, A., i,

fate of carbon acids in the dog. I. Normal dl-a-amino-acids. II. Methylated dl-α-amino (normal)acids. III. Methylated dl-a-aminoacids containing side-chains. IV. Dimethylated dl-α-amino (normal)-acids. V. Synthesis of acetoacetic acid by perfusion through the liver, 1908, A., ii, 205.

Friedmann, Ernst, the degradation of carboxylic acids in the animal body. VII. The formation of acetoacetic acid from isovaleric acid by perfusion through the liver, 1908, A., ii, 719.

the degradation of carboxylic acids in the animal body. VIII. The behaviour of a\beta-unsaturated acids when perfused through the liver,

1908, A., ii, 719.

the degradation of carboxylic acids in the animal body. XI. behaviour of benzovlacetic acid in

the animal body, 1910, A., ii, 795. the degradation of carboxylic acids in the animal body. XIII. The behaviour of furylacrylic and furoylacetic acids in the animal body, 1911, A., ii, 910.

the degradation of carboxylic acids in the animal body. XIV. The removal of hydrogen in the animal

body, 1911, A., ii, 910.

Friedmann, Ernst, and Julius Baer. physiological relationships of proteins containing sulphur. 1906, A., i, 802.

Friedmann, Ernst, and S. Gutmann, the N-methyl derivatives of phenylalanine and tyrosine, 1910, A., i,

741.

Friedmann, Ernst, and C. Maase, the degradation of carboxylic acids in the animal body. IX. The behaviour of p-chlorophenylalanine, p-chlorophenylpyruvic acid, p-chlorophenyl-lactic acid in the animal body, 1910, A., ii, 794.

the degradation of carboxylic acids the animal body. X. The behaviour of aß-dihydroxy-acids in the animal body, 1910, A., ii, 795.

the degradation of carboxylic acids in the animal body. XII. A new method of formation of B-hydroxybutyric acid in the animal body, 1910, A., ii, 977.

Friedmann, Ernst, and H. Mandel, the formation of uric acid in the liver of

birds, 1908, A., ii, 1054.

Friedmann, Ernst, and Hermann Tachau, the formation of glycine in the animal body. I. The synthesis of hippuric acid in the liver of the rabbit, 1911, A., ii, 906.

Friedmann, Ernst. See also Walther

Brasch.

Friedmann, Hermann. See Antoine Paul Nicolas Franchimont and Amé

Friedmann, M. See Otto von Fürth.

Friedmann, Walther, See Rudolph Fittig.

Friedrich, Adolf. See Adolf Beythien. Friedrich, Gotthold. See Karl Löffler. Friedrich, Hermann. See

Behrend.

Friedrich, K., volatility of gold in presence of zinc, 1903, A., ii, 433. estimation of silver in commercial zinc, 1904, A., ii, 843.

copper and arsenic, 1906, A., ii, 29. lead and arsenic, 1906, A., ii, 230.

iron-arsenic alloys, 1907, A., ii, 552. freezing-point diagrams of the binary systems: lead sulphide-ferrous sulphide and lead sulphide-silver sulphide, 1907, A., ii, 687.

freezing-point diagrams of the binary systems: silver sulphide-cuprous sulphide and lead sulphide-cuprous sulphide, 1907, A., ii, 951.

freezing-point curve of the cobaltarsenic alloys, 1908, A., ii, 387.

freezing-point diagram of the cobalt sulphides, 1908, A., ii, 500.

metallographic and metallurgical notes [thermal diagrams; microscopy of alloys], 1908, A., ii, 1045.

two new forms of laboratory electric

furnace, 1909, A., ii, 210.

thermal analysis in metallurgical processes, 1910, A., ii, 267. estimation of small quantities of

antimony in lead-antimony alloys by means of the quartz mercury thermometer, 1912, A., ii, 1102. Friedrich, K., and F. Benningson,

nickel-arsenic alloys, 1907, A., ii, 553. Friedrich, K., and A. Leroux, silver

and arsenic, 1906, A., ii, 283. lead and sulphur, 1906, A., ii, 355. zinc and arsenic, 1906, A., ii, 671. silver and silver sulphide, 1906, A., ii,

751.

alloys of copper, silver, and lead, 1907, A., ii, 620.

freezing-point diagrams of the binary systems platinum-arsenic and bismuth-arsenic, 1908, A., ii, 300. freezing-point diagrams of the binary

systems, Cu-Cu₂Se, Ag-Ag₂Se, and Pb-PbSe, 1908, A., ii, 696.

alloys of platinum and antimony,

1909, A., ii, 245. Friedrich, K., and Puchta, lead and silver, 1906, A., ii, 541.
Friedrich, K., and P. Schoen, mixtures

of zinc sulphide with other sulphides, 1908, A., ii, 281.

the sulphides of lead, copper, silver, and iron, 1908, A., ii, 281.

Friedrich, Rudolf, chemical changes consequent on the wounding of plants, 1908, A., ii, 774.

Friedrichs, Franz, methyl alcohol and its impurities, 1908, A., ii, 990.

Friedrichs, Fritz, new gas wash-bottles, 1911, A., ii, 268.

a new extraction apparatus, 1912, A., ii, 37.

a phosphorus pipette of coloured glass, 1912, A., ii, 933.

a modified Soxhlet extraction apparatus with arrangement for distillation, 1912, A., ii, 1160.

some new forms of laboratory apparatus,

1912, A., ii, 1161.

Friedrichs, Gustav. See Julius Tafel. Friedrichs, Oscar von, heerabol myrrh,

1908, A., i, 96. Friemel, Carl. See Richard Stoermer.

Friend, John Albert Newton, estimation of hydrogen peroxide in the presence of potassium persulphate by means of potassium permanganate, 1904, T., 597; P., 65.

note on the influence of potassium persulphate on the estimation of hydrogen peroxide, 1904, T., 1533;

P., 198.

estimation of potassium permanganate in the presence of potassium persulphate, 1905, T., 738; P., 133.

estimation of hydrogen peroxide in the presence of potassium persulphate,

1905, T., 1367; P., 185.

a study of the reaction between hydrogen peroxide and potassium persulphate, 1906, T., 1092; P., 161.

valency, 1908, T., 260; P., 14. a criticism of Werner's theory and the constitution of complex salts, 1908,

T., 1006; P., 122.

the rusting of iron, 1908, A., ii, 698. estimation of iron by permanganate in the presence of hydrogen chloride, 1909, T., 1228; P., 150, 224.

action of steam on iron, 1909, P., 90;

1910, A., ii, 414.

the constitution of sulphurous, sulphurie, carbonic, and formic acids, 1909, P., 91.

the influence of persulphates on the estimation of hydrogen peroxide with permanganate, 1910, P., 88.

the action of pure air and water on iron and steel; preliminary note, 1910, P., 179.

the corrosion of iron, 1910, A., ii, 39;

1911, A., ii, 401.

the action of air and steam on pure iron, 1910, A., ii, 39.

Friend, John Albert Newton, the porosity of iron and its relation to passivity and corrosion, 1911, P., 311: 1912,

the corrosion and preservation of iron,

1911, A., ii, 805.

Friend, John Albert Newton, and Joseph Hallam Brown, the action of salt solutions and of sea-water on iron at various temperatures, 1911, T., 1302; P., 156.

Friend, John Albert Newton, Thomas Ernest Hull, and Joseph Hallam Brown, the action of steam on iron at high temperatures, 1911, T., 969; P., 124.

Friend, John Albert Newton. See also Wilhelm Manchot and Thomas Slater Price.

Fries. H., estimation of lactic acid in blood, 1911, A., ii, 994, 1038.

Fries, J. August, intestinal gases man, 1906, A., ii, 690.

estimation of carbon by means of the bomb calorimeter, 1909, A., ii,

electric combustion furnace for methane estimation, 1910, A., ii, 904.

adiabatic device for bomb calorimeter, 1912, A., ii, 535.

Fries, Karl, action of bromine on the salts of aromatic amines with halogen hydrides, 1904, A., i, 571.

action of bromine on aromatic amines; substitution products and perbromides, 1906, A., i, 644.

o-hydroxybenzoylformic acids and coumarandiones, 1909, A., i, 175.

Fries, Karl, and John Empson, 2:3quinone of 1-methylnaphthalene, 1909, A., i, 809.

Fries, Karl, John Empson, J. Kohlhaas, K. Noll, and Ernst Roth, dicyclic compounds and their comparison with naphthalene, 1912, A., i, 656.

Fries, Karl, and E. Engelbertz, aanthraquinonesulphenic acid, 1912,

A., i, 1005.

Fries, Karl, and George Fickewirth, ovinylphenols, 1908, A., i, 160.

reduction of coumarins with zinc dust in alkaline solution, 1908, A., i, 822.

coumarone and hydrocoumarone defrom 4:7-dimethylcourivatives marin, 1908, A., i, 824.

Fries, Karl, and Georg Finck, homologues of coumaranone and their

derivatives, 1909, A., i, 42. oxygen isologues of homologous indirubins, 1909, A., i, 44,

Fries, Karl, and A. Hasselbach, oxindigo [2:2-diketo-\Delta^1:1'-dicoumaran],

1911, A., i, 150.

Fries, Karl, and Ernst Hempelmann, keto-chlorides of 1-methyl-βnaphthol and their relation to Bnaphthaquinols, 1908, A., i, 730.

2:3-diketo-derivative of tetrahydro-1-methylnaphthalene, 1909, A., i,

809.

Fries, Karl, and Eduard Hübner, 1methyl-B-naphthol and its quinonoid

derivatives, 1906, A., i, 190. Fries, Karl, and Karl Kann, action of bromine and chlorine on phenols; substitution products, 4-bromides, and \(\psi\)-chlorides. XXI. \(\sigma\)-\(\psi\)-Haloids and o-methylenequinones from o-oxymesityl alcohol, 1907, A., i, 613.

Fries, Karl, and Wilhelm Klostermann. coumarins from m-cresol, 1906, A.,

i, 276.

conversion of coumarins into coumarinic acids and o-coumaric acids,

1908, A., i, 820.

Fries, Karl, and Paul Moskopp, o-4bromides from o-hydroxystyrene, their transformation products, and conversion into coumaran derivatives, 1910, A., i, 331.

Fries, Karl, Paul Moskopp, and Walther Volk, o-\psi-bromides of thymol and 4hydroxy-1-methyl-3-isopropylbenzene (4-hydroxy-m-cymene), their transformation products, and conversion into coumaran and coumaranone derivatives, 1910, A., i, 333.

Fries, Karl, and Wilhelm Pfaffendorff, a condensation product of coumaranone and its conversion into oxin-

dirubin, 1910, A., i, 186.

condensation products of 2-coumaranones, 1911, A., i, 149.

coumarandione, the oxygen analogue of isatin, 1912, A., i, 204.

Fries, Karl, and Wolfram Vogt, isomeric from thianthren, disulphoxides

1911, A., i, 395. chlorides and bromides of diphenyl sulphide, 1911, A., i, 538.

thianthren, 1911, A., i, 555.

Fries, Karl, and Walther Volk, thianthren [diphenylene disulphide], 1909, A., i, 406.

conversion of coumarins into coumarinic acids and o-coumaric acids.

II., 1911, A., i, 203.

Fries, Karl. See also Theodor Zincke. Friese, Walther, detection of benzoic acid in margarine, butter and other fats, 1911, A., ii, 1142.

Friessner, Alfred, electrolytic oxidation of sulphite and electrochemical formation of dithionate, 1904, A., ii, 480.

Friling, Bruno. See Leopold Rug-

heimer.

Frilley, R., some allows of metals with silicon and the density of alloys, 1911, A., ii, 879.

Frings, Heinrich, jun., new titration

apparatus, 1904, A., ii, 289.

Frion, Paul, inclusion of soluble substances by certain precipitates, 1908, A., ii, 477.

Frisbie, W. S. See George Henry

Alexander Clowes.

Frischauer, Louis, influence of radium on rate of crystallisation, 1909, A., ii, 532.

Frischer, Hermann, copper and iron salts in presence of alkalis and acids, 1908, A., ii, 947.

Frischmuth, Paul. See Conrad Will-

gerodt.

Frisell, Gunnar. See Hans Rupe.

Friske, Kurt, deposition of nitrogen in full-grown animals with abundant food, 1910, A., ii, 64.

Friske, Kurt. See also Theodor Pfeiffer. Frisoni, Erich. See Otto Dimroth.

Friswell, Richard John, observations on some intramolecular and originally reversible changes extending over prolonged periods of time, 1904; P., 36; discussion, P., 37.

an improved Kipp's apparatus, 1905,

A., ii, 20.

preparation of p-toluidine from mixed toluidines by means of p-toluidine hydrate, 1908, A., i, 332.

obituary notice of, 1909, T., 2204.

Fritsch, Carl, Fraunhofer lines of thallium and an error in Rowland's new table of standard wave-lengths, 1909, A., ii, 106.

Fritsch, Otto. See Gustav Heller.

Fritsch, Paul [Ernst Moritz], hydration of o-hydroxybenzoylformic acid,

1903, A., i, 174.

triphenylmethane derivatives and their oxidation products, obtained from tetramethyldiaminobenzhydrol and m-ethoxybenzoic acid, and its amide, methylamide, and dimethylamide, 1904, A., i, 58.

syntheses in the isoquinoline series. II. Attempts to synthesise papaver-

ine, 1904, A., i, 94.

Fritsch, Rodolfo, ether purifying and extraction apparatus, 1909, A., i, 547. detection of biliary acids [and acetone], 1910, A., ii, 165.

Fritsch, Rodolfo. See also Paul Friedländer and Eduard Lippmann. Fritsche, Oskar. See Johannes D'Ans.

Fritz, Immanuel. See Hugo Kauffmann. Fritzen, Adolf. See Otto Fischer.

Fritzmann, Ernest. See Alexei E. Faworsky and Otto Sackur.

Fritzmann, I. E., complex compounds of platinum with organic selenides, 1912, A., i. 71.

Fritzsche & Co., Franz, preparation of protocatechualdehyde, 1906, A., i, 513.

preparation of a hydroxyquinolinesulphonic acid, 1908, A., i, 208. preparation of normal salts of o-hydr-

oxyquinoline with polybasic acids, 1908, A., i, 287.

preparation of n-propyl p-aminobenzo-

ates, 1910, A., i, 32.

Fritzsche, Hermann. See Richard
Willstätter.

Fritzsche, Paul. See Otto Diels.

Fritzsche, Wilhelm. See Otto Wallach. Frobenius, Otto, and Eduard Hepp, 1:6-dihydroxyanthraquinone, 1907,

A., i, 428.
Frobess, Victor. See Franz Fischer.
Froebe, Wilhelm, and Armin Hochstetter, action of water on the bromides and chlorides of olefines, 1903, A., i, 320.

Fröhlich, Adolf. See Alfred Werner. Fröhlich, Alfred, the Munchi arrow

poison, 1905, A., ii, 411.

Fröhlich, Alfred, and Otto Loewi, action of nitrites and atropine on autonomic nerves, 1908, A., ii, 711.

the increase of susceptibility to adrenaline produced by cocaine, 1910, A., ii, 228.

Fröhlich, Alfred. See also Richard Chiari.

Fröhlich, Emil, preparation of NN-dialkylmethylenediaryldiamines and homologues, 1907, A., i, 346.

attempts to prepare isomeric asymmetric ammonium compounds, 1909, A i 375

A., i, 375.

resolution of asymmetric diammonium compounds into optical antipodes, 1911, A., i, 493.

Fröhlich, Emil, and Edgar Wedekind, asymmetric nitrogen. XXVIII.

Asymmetric ammonium salts of panisidine, 1907, A., i, 410.

asymmetric nitrogen. XXIX. Resolution of phenylbenzylmethylbutylammonium compounds, 1907, A., i, 512.

Fröhlich, Emil. See also Carl Adam Bischoff and Edgar Wedekind. Fröhlich, Friedrich W., the action of carbon dioxide and alcohol on muscle, 1907, A., ii, 40.

Fröhlich, Jaroslav, synthesis of unsymmetrical substituted thianthrenes, 1907, A., i, 632.

Fröhlich, Jaroslav. See also Fritz Fichter.

Froehner, A., analysis of wine vinegar, 1905, A., ii, 360.

estimation of fatty matter in butter, 1907, A., ii, 58.

Froger-Delapierre, F., preparation of vanillin, 1904, A., i, 808.

Frohneberg, Wilhelm. See Theodor Zincke.

Froidevaux, J., detection of fluorides in meat products, 1904, A., ii, 840.

Froloff-Bagreief, A. See W. Lubimenko.

Fromherz, Konrad, constituents of lignocelluloses which yield furfuraldehyde and methylfurfuraldehyde, 1907, A., i, 186.

estimation of methylfurfuraldehyde,

1907, A., ii, 141.

the resorption of parenterally administered magnesium, and its influence on calcium metabolism, 1909, A., ii, 918.

the behaviour of p-hydroxyphenylaminoacetic acid in the animal body, 1911, A., ii, 314.

the method of action of phenyleinchonic acid on the purine metabolism of the dog, 1911, A., ii, 1016.

Fromherz, Konrad, and Wilhelm Meigen, oximes of methylfurfuraldehyde, 1907, A., i, 232.

Fromherz, Konrad. See also Otto Neubauer.

Fromholdt, G., the behaviour of urobilin in the rabbit, 1907, A., ii, 902.

Fromm, Emil, fate of cyclic terpenes and camphor in the animal organism. V. Behaviour of sabinol, 1904, A., ii, 360.

unsaturated disulphides, 1906, A., i, 656.

sodium benzaldehydesulphoxylate; a correction, 1909, A., i, 108.

duplobenzylidenethioacetone; a correction, 1910, A., i, 490.

Fromm, Emil, and Oskar Achert, benzyl derivatives containing sulphur, and their decomposition by dry distillation, 1903, A., i, 340.

Fromm, Emil, Heinrich Baumhauer, and Arnold Weller, disulphides with neighbouring double linkings. III., 1908, A., i, 700. Fromm, Emil, and Paul Clemens, fate of cyclic terpenes and camphor in the animal system. IV. Behaviour of sabinol, 1904, A., i, 177.

Fromm, Emil, and Konrad van Emster, matico oil, 1903, A., i, 188.

Fromm, Emil, and Friederich Erfurt, benzyl sulphoxide and a-hydroxybenzyl sulphide, 1909, A., i, 902.

hydrolysis of thiosulphates and thiosulphonates by alkali, 1909, A., i, 902.

action of formaldehyde and alkali on sulphones, 1909, A., i, 903.

benzaldehydesulphoxylate and acetonesulphoxylate, 1909, A., i, 936:

Fromm, Emil, and Dionys von Gönez, derivatives of perthiocyanic acid and of cyanoimidodithiocarbonic acid; synthesis of new triazoles, 1907, A., i, 872.

Fromm, Emil, and Richard Heyder, action of p-toluenesulphonyl chloride on thiocarbamide, 1909, A., i, 903.

preparation and hydrolysis of phenylthiocarbimide oxide, 1909, A., i, 911.

Fromm, Emil, Hermann Hildebrandt, and Paul Clemens, cyclic terpenes and camphor in the animal system. III. Camphene in the animal system, 1903, A., i, 429.

Fromm, Emil, and Hermann Höller, action of ammonia sulphide on

ketones, 1907, A., i, 710.
thio-derivatives of ketones. V.
Duplobenzylidenethioacetone, a
substance with extraordinary additive powers, 1907, A., i, 710.

ditive powers, 1907, A., i, 710.

Fromm, Emil, Walther Lambrecht, and James L. McKee, thio-derivatives of ketones. VI., 1908, A., i, 989.

Fromm, Emil, and Gdalja Raiziss, basic properties of sulphoxides and their tautomerism, 1910, A., i, 554.

Fromm, Emil, Adolf Roesicke, and Otto Gaupp, lowest oxides of hydrogen sulphide, 1908, A., i, 968.

Fromm, Emil, Adolf Roesicke, and Max Tausent, fission of disulphides with neighbouring double linkings, 1909, A., i, 505.

Fromm, Emil, and Philipp Schmoldt, thiobenzoic acids, 1907, A., i, 702.

Fromm, Emil, and Kurt Schneider, dithiobiurets, 1906, A., i, 656.

action of phenylhydrazine on unsaturated disulphides; synthesis of triazoles, 1906, A., i, 714. Fromm, Emil, and José de Seixas Palma, benzylsulphinic acid and dibenzyl disulphoxide, 1906 A., i, 819.

oxides of hydrogen sulphide, 1906,

A., i, 819.

Fromm, Emil, and Emil Vetter, disulphides with neighbouring double linkings; action of amines and hydrazines on thiourets; new synthesis of triazoles. II., 1907, A., i, 982.

Fromm, Emil, and Jacob Wittmann, derivatives of p-nitrophenyl mercaptan,

1908, A., i, 631.

Fromm, Emil, and Paul Ziersch, thioderivatives of ketones. III., 1906, A., i, 930.

Fromme, Albert, a fat-hydrolysing ferment from the mucous membrane of the stomach, 1905, A., ii, 731.

Fromme, Johannes, pyknochlorite, a new chlorite, and other minerals from the Radauthal, Harz, 1903, A., ii, 382.

minerals from the Radauthal, Harz, 1910, A., ii, 314.

titrimetric estimation of ferrous oxide and boric acid in silicates, 1910, A., ii, 351.

Frommel, Wilhelm. See Wilhelm Steinkopf.

Frossard, Jos. See Luc. Baumann.

Frouin, Albert, possibility of maintaining life of animals after complete excision of the thyroid gland by the use of calcium or magnesium salts for their nourishment, 1909, A., ii, 686.

Frouin, Albert, and Arthur Compton, inactivation of trypsin by dialysis against distilled water; reactivation of the diastase by addition of salts, 1912, A., i, 60.

Frouin, Albert. See also Henri Bierry and M. Nicolle.

Frumina, (Mlle.) Cécile, dimethyldiethyldicarbinol [γδ-dimethylhexane-γδ-diol], 1910, A., i, 150.

Fry, Harry Shipley, new synthesis of methyl ethyl xanthate, 1906, A., i, 552.

constitution of benzene from the point of view of the corpuscular-atomic conception of positive and negative valency. I. An interpretation of the Crum Brown-Gibson rule. II. Dynamical formulæ and the ultraviolet absorption spectrum of benzene. III. Dynamical formulæ and the ultra-violet absorption spectrum of naphthalene, 1911, A., i, 431.

preparation of chromyl compounds,

1911, A., ii, 610.

Fry, Harry Shipley, critical survey of some recent applications of the electron conception of valence, 1912, A., ii, 546.

applications of the electron conception of positive and negative valencies. IV. Fluorescence: anthracene and phenanthrene, 1912, A., ii, 713.

Fry, Harry Shipley. See also Thomas Evans.

Fuchs, Charles. See Paul Thiébaud Muller.

Fuchs, Dénes. See Emil Abderhalden.

Fuchs, Dionys, the alteration in the excretion of amino-acids or substances titratable with formaldehyde as a cause of the increase in the Cal.: N ratio after great loss of blood, 1911, A., ii, 58.

the influence of prolonged inanition on the excretion of amino-acids or substances titratable with formaldehyde,

1911, A., ii, 58.

Fuchs, Dionys, and Nikolaus R6th, action of adrenaline on respiratory metabolism, 1912, A., ii, 654.

Fuchs, Gotthold, action of bismuth, 1904,

A., ii, 195.

a group of therapeutically active acid amides, 1904, A., ii, 832.

Fuchs, Julius. See Emil Knoevenagel.
Fuchs, Karl, continuity of states of aggregation and fluid crystals, 1907, A., ii, 17.

Fuchs, Karl. See also William Küster. Fuchs, Wilhelm, and Paul Wagner, estimation of phosphoric acid soluble in citric acid in Thomas slag, 1912, A., ii, 993.

Fuchs, Willy. See Leopold Nathan.

Füchtbauer, Christian, spontaneous crystallisation of supercooled liquids,

1904, A., ii, 610.

conductivity of non-luminous sodium vapour and the relationship between the ionisation of gases and the absorption of their line spectra, 1909, A., ii, 537.

conduction of electricity in saturated alkali metal vapour, 1911, A., ii, 361. Füeg, Gustav. See Fritz Fichter.

Fühner, Hermann, thalleioquinine reaction of quinine and Jaffé's kynurenic acid reaction, 1905, A., i, 828.

the action of alcohols on echinoderm

eggs, 1905, A., ii, 49.

physiological evidence as to the constitution of ammonium dye bases, 1906, A., ii, 622.

behaviour of quinoline in the animal body. I., 1906, A., ii, 692.

Fühner, Hermann, the thalleioquinine reaction, 1907, A., i, 150.

hæmolytic power of alcohols, 1907,

A., ii, 631.

action of organic ions; particularly of guanidine, 1907, A., ii, 901.

the quantitative estimation of synthetical muscarine by physiological methods, 1908, A., ii, 877.

the action of methyl-green, 1908, A.,

ii, 877.

the fate of synthetic muscarine in the animal body, 1908, A., ii, 1061.

mutual influence on solubility in aqueous solutions of ether, chloroform, phenol, etc., 1909, A., ii, 388.

toxicological detection of colchicine,

1910, A., ii, 1011.

the supposed immunity of toads to their own poison (secretion of skin glands), 1910, A., ii, 1096.

the toxicological detection of aconitine,

1912, A., ii, 105.

the degree of acidity of monatomic alcohols, 1912, A., ii, 188.

pituitrin and its active constituents, 1912, A., ii, 660.

the synergic action of poisons. I. The combination of heart poisons (methyl-violet with alcohol and glycerol), 1912, A., ii, 792.

Fühner, Hermann, and W. Greb, the synergic action of poisons. II. Mixed

hæmolysis, 1912, A., ii, 970.

Fühner, Hermann, and Ernst Neuhauer, estimation of the hemolytic action of monohydric alcohols, 1906, A., ii, 687.

hæmolysis by substances in homologous series, 1907, A., ii, 485.

Fühner, Hermann, and E. Rosenow, the behaviour of synthetic muscarine in the animal body. II., 1909, A., ii, 1042.

Führer, Eugen. See Gustav Schultz. Führer, Karl. See Josef Houben.

Fürstenau, Robert, a new method of calculating the ratio of the [electric] charge to the mass of the molecule of mercury vapour, 1909, A., ii, 12.

ratio of the specific heats of gases and its dependence on the temperature,

1909, A., ii, 17.

dependence of the ratio of the specific heats of gases on the temperature, 1909, A., ii, 375.

Fürstenberg, Albert. See Franz Kunckell

Fürstenberg, August. See Josef König. Fürstenberg, J. See Alfred Werner. Fürstenhoff, J. A., catalytic preparation of organic aluminium compounds, 1904, A., i, 382.

Fürstl von Teichek, Rudolf, distribution of the diastatic enzymes of green malt,

1904, A., ii, 761.

Fürth, Artur, hydramides, 1907, A., i,

Fürth. Hugo, mercury derivatives of nitrogen compounds, 1903, A., ii, 294. Fürth, Otto von, suprarenine (adrenaline),

1903, A., i, 669.

coagulation of muscle plasma, 1903,

A., ii, 440.

the behaviour of fat in germinating oil-containing seeds, 1904, A., ii, 70. oxidation of albumins, 1905, A., i,

497. new reactions of hæmatin, 1907, A., i,

a new modification of the forensic chemical test for blood, 1911, A., ii,

Fürth, Otto von, and D. Charnass, the estimation of lactic acid by the determination of the amount of acetaldehyde obtainable by scission therefrom, 1910, A., ii, 807.

Fürth, Otto von, and M. Friedmann. absorption of iodised proteins, 1908,

A., ii, 1050.

the distribution in the organs of ferments capable of splitting aspara-

gine, 1910, A., ii, 788. Fürth, Otto von, and Hiromu Ishihara, degradation of cholic acid. III. The capacity of cholic acid derivatives for combining with ozone, 1912, A., i, 749.

Fürth, Otto von, and Ernst Jerusalem. nucleic acid from the pancreas (guanylic acid), 1907, A., i, 993; 1908, A., ii, 119.

melanotic pigments and the fermentative formation of melanin, 1907, A.,

ii, 797.

degradation of cholic acid. I. Fusion of bilianic acid with potassium hydroxide, 1909, A., i, 697.

Fürth, Otto von, and Emil Lenk, degradation of cholic acid. II. distillation products of cholic and bilianic acids, 1910, A., i, 606.

the significance of imbibition phenomena on the onset and passing off of rigor mortis, 1911, A., ii, 750.

Fürth, Otto von, and Michele Russo, crystalline chitosan compounds from sepia shells, 1906, A., i, 720. Fürth, Otto von, and Emil Scholl, nitro-

chitins, 1907, A., i, 994.

Fürth, Otto von, and Julius Schütz, influence of bile on pancreatic ferments, 1906, A., ii, 871.

fat absorption in isolated loops of

intestine, 1907, A., ii, 976. Fürth, Otto von, and : Carl Schwarz, secretin, 1908, A., ii, 963.

the depressor substance in the thyroid.

1908, A., ii, 968.

the distribution of the nitrogen of the extractive substances from mammalian muscle, 1911, A., ii, 216.

Fürth, Otto von. See also Emil Abel. Ernst von Czyhlarz, and Gustav Emb-

den.

Füth, Heinrich, and Georg Lockemann, sarcolactic acid in the cerebrospinal fluid in eclampsia, 1906, A., ii, 472.

Füth, Heinrich. See also Georg Locke-

шанп.

Fuhrmann, Franz, precipitins and lysins, 1903, A., ii, 227.

Fuji, Shōzo. See Umetaro Suzuki. Fujitani, J., chemistry and pharmacology of insect powder, 1909, A., ii, 825.

Fukui, Matsuo. See Fritz Ullmann.

Fukutome, Yōji, influence of manganese salts on flax, 1904, A., ii, 766.

Fuld, Ernst, whey albumose, 1907, A., i. 807. the activity of trypsin and a simple

method for its estimation, 1908, A.,

Fuld, Ernst, and Louis A. Levison, estimation of pepsin by means of edestin, 1908, A., ii, 76.

Fuld, Ernst, and Karl Spiro, influence of inhibiting agents on the coagulation of bird's plasma, 1904, A., ii, 353.

Fuld, Ernst, and Julius Wohlgemuth, precipitation of casein from, and the nature of the inhibitory action on, rennet in human milk, 1907, A., ii,

behaviour of rennet and acid to human milk, 1908, A., ii, 311.

Fuld, Ernst. See also Leon Blum.

Fulda, Hugo Ludwig, conversion of hydrazones into oximes, 1903, A., i, 199.

Fulda, Hugo Ludwig. See also Paul Jacobson.

Fulda, W., the absorption of sulphur dioxide in water, 1909, A., ii, 309.

Fuller, Carl T. See Charles Lathrop Parsons.

Fuller, George Prescott. See Philip Howard Cobb and Arthur Michael.

Fuller, H. C., volatility of cocaine, 1911, A., i, 317.

Fuller, James Garfield. See Edwin Bret Hart.

Fuller, T. S. See Hermon C. Cooper.
Fulmer, Elton, Halphen's test for cotton-seed oil, 1903, A., ii, 249.

Funaro, Angiolo, and Igino Barboni, lecithin in wine, 1905, A., ii, 275.

Funaro, Angiolo, and A. Rastelli, organic combination of the phosphorus in wine, 1906, A., ii, 886.

Funaro, Roberto, estimation of reducing substances in infants' urine, 1908,

A., ii, 715.

creatinine of infants' urine, 1908, A., ii, 716.

Funk, Albert. See Wilhelm Autenrieth.
Funk, Casimir, the value of different methods used for estimating sugar in urine, 1908, A., ii, 902.

the reducing substances of urine, 1910,

A., ii, 1117.

synthesis of dl-3:4-dihydroxyphenylalanine, 1911, T., 554; P., 56.

probable formation of adrenaline in the animal body, 1911, A., ii, 907.

the animal body, 1911, A., ii, 907. the constitution of aminotyrosine and the action of oxydases on some tyrosine derivatives, 1912, T., 1004; P., 140.

the chemical nature of the substance which cures polyneuritis in birds induced by a diet of polished rice, 1912, A., ii, 186.

the effect of a diet of polished rice on the nitrogen and phosphorus of the

brain, 1912, A., ii, 467.

preparation from yeast and certain foodstuffs of the substance the deficiency of which in diet occasions polyneuritis in birds, 1912, A., ii, 856.

Funk, Casimir, and Stanislaus von Kostanecki, 2-methoxystilbene, 1905,

A., i, 352.

Funk, Casimir, and Albert Niemann, filtration of rennet and pepsin, 1910, A., i, 801.

Funk, Casimir. See also Emil Abder-

halden.

Funk, William, separation of iron from zinc by means of ammonia, 1906, A., ii, 54.

separation of iron from manganese, nickel, cobalt, and zinc by the acetate process, 1906, A., ii, 398.

separation of ferric iron from manganese, nickel, cobalt, and zinc by the formate process, 1906, A., ii, 707.

separation of iron and manganese from nickel and cobalt by treating the sulphides with dilute acids, 1906, A., ii, 806. Funk, William, separation of cobalt from manganese and iron by means of potassium nitrite, 1907, A., ii, 199.

separation of zinc from nickel, cobalt, iron, and manganese by means of hydrogen sulphide, 1907, A., ii, 398.

the decomposition of felspar by water, 1909, A., ii, 146.

Funke & Co., Paul, "permanent" apparatus for measuring liquids, 1907, A., ii, 18.

Funke, Yngve. See Hans von Euler. Furcht, Margarete, and Adolf Lieben, white and yellow silver levulates, 1909, A., i, 695.

Furcht, Margarete. See also Rudolf

Wegscheider.

Furlong, John Ralph. See Wilhelm
Manchot.

Furno, Alberto. See Emil Abderhalden. Fyffe, William Alexander. See James Walker.

G.

Gabbi, G. See Gualtiero Poma. Gabel, Werner. See Ernst Beckmann. Gabillon, M. See Victor Auger. Gablin & Cie, neuraemin, 1906, A., i,

546.

Gabriel, Siegmund, nitromethane and phthalic anhydride, 1903, A., i, 345.

quinazoline, 1903, A., i, 445.

conversion of phthalazine into pyridazine derivatives, 1904, A., i, 103. 2-methylpyrimidine, 1904, A., i, 1060.

phthalonimide and o-phenylenediamine, 1905, A., i, 97.

amino-derivatives of pyrimidine, 1905, A., i, 244.

aminoacetone, 1905, A., i, 265. isocysteine and isocystine, 1905, A., i,

265. γ-nitropropylphthalimide, 1905, A., i,

γ-nitropropylphthalimide, 1905, A., i, 441.

bromodihydrouraeil, 1905, A., i, 481. derivatives of β-aminoethyl and of α-aminopropyl alcohols, 1905, A., i, 649.

nitroso-derivatives of oxygenated imino-compounds, 1905, A., i, 650.

diaminoethyl ether, 1905, A., i, 862. action of bromine on α-lactylcarbamide and related compounds, 1906, A., i,

634; 1907, A., i, 90. acetophenone-o-carboxylic acid, 1907,

A., i, 214.

Gabriel, Siegmund, synthetical derivatives of glycine and its homologues, 1907, A., i, 625.

w-bromoacetophenone-o-carboxylic

acid, 1907, A., i, 1042.

derivatives of the amino-acids applicable for synthetical purposes, 1908, A., i, 181.

tautomerism in the iminazole series,

1908, A., i, 573. δ-amino-ketone derivatives, 1908, A.,

i. 648. preparation of pyridazine, 1909, A., i,

new methods of preparation of aliphatic amino-ketones, 1909, A., i,

e-amino-ketones, 1909, A., i, 492.

reduction of e-amino-ketones, 1909, A., i, 493.

(-amino-ketones, 1909, A., i, 891; 1910, A., i, 229.

synthesis of y-coniceine, 1909, A., i, 957.

synthesis of oxazoles and thiazoles. I. and II., 1910, A., i, 190, 431.

a-amino-ketones, 1911, A., i, 212. condensation product of ethyl phthali-

minoisobutyrylmalonate, 1911, A., i, 227. compounds of the propane series,

1911, A., i, 644, 982. a-aminoisobutyrophenone, NH2 CMe2

'COPh, 1911, A., i, 991.

reduction of acyl derivatives of onitrobenzylamine, 1912, A., 391.

Gabriel, Siegmund, and James Colman, aminoacetone, 1903, A., i, 13.

derivatives of pyrimidine and methylated pyrimidines, 1904, A., i,

2:4:6-trichloropyrimidine, 1904, A., i, 1059.

quinazoline, 1904, A., i, 1060; 1905,

A., i, 944. quinazoline alkyl haloids, 1906, A., i, 209.

tertiary and quaternary bases from piperidine, 1906, A., i, 881; 1907, A., i, 237.

supposed penthiazole derivatives, 1906, A., i, 889.

derivatives of γ-aminobutyric acid, 1908, A., i, 274.

€-amino-ketones, 1908, A., i, 649. phthaliminoacyl chlorides and ethyl sodiomalonate, 1909, A., i, 491.

aminosulphones and allied compounds,

1912, A., i, 115.

Gabriel, Siegmund, and James Colman. B-aminoethyl mercaptan, 1912, A., i,

Gabriel, Siegmund, and Albert Lieck. transformations of amino-ketones.

1908, A., i, 464.

Gabriel, Siegmund, and Adolf Sonn, formation of pyrazine compounds from quinoxaline derivatives, 1908. A., i, 60.

Gabrilowitsch, O. E. See Efim Semen London.

Gabritschewski, V., electrical graphy, 1905, A., ii, 218. radio-

Gabutti, Emilio, distinction between chloral and butylchloral, 1904, A., ii, 300.

colour reactions of morphine and codeine, 1904, A., ii, 375.

detection of abrastol in wine, 1904, A., ii, 787.

analytical reactions of coniine, 1906, A., ii, 711.

detection of sulphonal in trional or tetronal, 1907, A., ii, 512.

new reaction of formaldehyde, applicable in pharmacology, 1907, A., ii,

chloral chloroacetate, 1911, A., i, 261. Gachot, Charles. See Emilio Noelting.

Gadais, J. See L. Gadais. Gadais, L., and J. Gadais, detection and estimation of lead in cream of tartar,

1905, A., ii, 357. estimation of sodium chloride in yolk

of egg, 1906, A., ii, 631. estimation of calcium citrate and of lemon juice, 1909, A., ii, 446.

analyses of liquorice juices, 1911, A., ii, 948.

Gadamer, Johannes [Georg], alkaloids of calumba root (Jateorhiza columba syn. Cocculus palmatus), 1903, A., i, 50; 1906, A., i, 976.

corydalis alkaloids, 1904, A., i, 185; 1905, A., i, 462; ii, 411; 1910, A.,

i, 418.

d-sec.-butylamine, 1904, A., i, 375. action of amyl alcohol on chloral

ethyl-alcoholate, 1905, A., i, 326. constitution of \psi-ammonium bases with reference to the alkaloids and the products these yield by transformation, 1905, A., i, 368.

berberine, 1905, A., i, 369.

condensation of 4-ammonium bases with hydroxylamine and p-dimethylaminoaniline, 1905, A., i,

constitution of \(\psi \)-ammonium bases. II., 1908, A., i, 322.

Gadamer, Johannes [Georg], isomerism of ephedrine and ψ-ephedrine, 1909, A., i, 49.

dihydroberberine, 1911, A., i, 152.

alkaloids of the perennial Papaveraceæ; Papaver orientale and P. lateritium, 1911, A., i, 317.

corydalis alkaloids. VII. (Protopine, glaucine), 1911, A., i, 483.

corydalis alkaloids. XI. Corytuberine, 1912, A., i, 46.

corydalis alkaloids. XII. Corydine, isocorydine, 1912, A., i, 47.

corydalis alkaloids. XIII. Glaucine sub-group, 1912, A., i, 48.

cyclic ammonium bases, 1912, A., i, 127. theory of racemisation, substitution, and the Walden inversion, 1912, A., i, 934.

Gadamer, Johannes, and T. Amenomiya, sesquiterpenes and sesquiterpenealcohols, 1903, A., i, 353.

optical function of the asymmetric carbon atoms in ecgonine, 1904, A., i, 337.

Gadamer, Johannes, and Walter Klee, corydalis alkaloids; corycavidine, a new alkaloid of the corycavine series, 1911, A., i, 318.

Gadamer, Johannes, and Fritz Kuntze, corydalis alkaloids. IX. Corytuberine sub-group, 1911, A., i, 1011.

corydalis alkaloids. X. Bulbocapnine, 1911, A., i, 1012.

Gadamer, Johannes, and Ernst Steinbrecher, corydalis alkaloids. V. R-Corydaline and phenylberberine, 1911, A., i, 153.

Gadamer, Johannes. See also Arthur Voss.

Gadaskin, D. D., laboratory separation of liquids with slightly different boiling points by a process of distillation, 1909, A., ii, 378.

Gadaskin, D. D., and A. E. Makovetzki, preparation of a mixture of constant boiling point and maximum vapour pressure by distillation, 1910, A., ii, 101.

Gademann, Ferdinand. See Hans Stobbe.

Gadomska, Stephani, and Herman Decker, diphenyldimethylammonium salts, 1903, A., i, 692.

Gadomska, Stephani. See also Herman Decker.

Gaebel, Gustav Otto, hordenine, 1906, A., i, 979.

corycavine, 1910, A., i, 501.

Reischauer's titration process for the estimation of diabetic sugar, 1911, A., ii, 73.

Gaebel, Gustav Otto, "salvarsan" in medico-legal investigations, 1911, A., ii, 448.

titration of "salvarsan" with iodine solutions, 1911, A., ii, 676.

estimation of unsaturated organic compounds with potassium bromidebromate solutions, 1912, A., ii, 497.

Gaebel, W. See Theodor Zincke. Gaebelé, Robert, phthalones, 1904, A., i,

Gaehlinger, H., and A. Tilmant, action of certain lipoids in producing caseation, 1912. A., ii, 72.

tion, 1912, A., ii, 72. Gärtner, Richard. See Heinrich Biltz

and Ludwig Claisen.

Gärtner, Simon, chloroamino-compounds, 1904, A., i, 788; 1905, A., i, 130. a soluble polychloral, 1906, A., i, 481. preparation of a solid modification of chloral, 1906, A., i, 628.

Gaess, Franz, 4-formylamino-a-naphthol,

1904, A., i, 809.

Gagarine, (Prince) G., molybdite from Ilmen Mountains, 1907, A., ii, 704.

Gage, George Edward, biology and chemistry of nitroso-bacteria, 1910, A., ii, 531.

Gage, Robert B., estimation of ferrous oxide in magnetite, 1909, A., ii, 350.

Gage, Stephen de Meritte, contribution to the biochemistry of sewage purification; the bacteriolysis of peptones and nitrates, 1905, A., ii, 474.

Gageur, Rudolf. See Fritz Fichter.
Gagnauz, Léon. See Paul Dutoit.
Gahl, Willi. See Wilhelm Biltz.
Gahren, A. See Daniel Vorländer.
Gahrtz, Georg. See Walther Borsche.
Gaidukov, N., brown colouring matter
of algæ (phycophain and phy-

coxanthin), 1904, A., i, 439.

Gailhat, J., modification in the methods of estimation of total carbon and nitro-

gen in urine, 1907, A., ii, 986.
Gaillard, Gaston, time interval before precipitation is observed in thiosulphate solutions, 1905, A., ii, 241. time taken by substances in dissolving, 1908, A., ii, 567.

difference in the speed of dissolution of sucrose crystals at their different

faces, 1910, A., ii, 193.

Gaillard, L., viscosity of ethyl alcohol, 1908, A., i, 73.Gaillard, L. See also Ch. Achard.

Gain, Edmond. See Brocq-Rousseu.
Gain, Gustave, preparation of hydrated
hypovanadic acid, 1907, A., ii, 32.
some sulphates of quadrivalent
vanadium, 1907, A., ii, 97.

Gain. Gustave, some double sulphites of hypovanadic acid, 1907, A., ii, 558. compounds of hypovanadic acid with

some oxygen acids, 1907, A., ii, 627. an isomeric modification of hydrated

hypovanadic acid, 1908, A., ii, 284. hypovanadic acid and some of its

compounds, 1908, A., ii, 598. Gair. Charles John Dickenson, estimation of naphthalene in coal gas and in spent oxide of iron, 1906, A., ii, 201; 1908,

A., ii, 135.

Gair, D. See Edward Frank Harrison. Gaisbock, Felix, the influence of diuretics of the purine series on the permeability of the blood-vessels, 1912, A., ii, 181.

the action of pilocarpine on the heart,

1912, A., ii, 189.

Gajewski, Fritz. See Arthur Hantzsch. Galatty, Lucas. See Herman Decker. Gale. R. D. See Forris Jewett Moore.

Galeati, Domenico. See Maurizio Padoa

and Ettore Viviani.

Galecki, Antoni von, estimation of the valency of glucinium by colloidal experiments, 1909, A., ii, 43.

coagulation of gold hydrosols, 1912, A., ii, 263.

action of Röntgen rays on gold hydrosol, 1912, A., ii, 417.

reduction of auric chloride by an ethereal solution of phosphorus, 1912, A., ii, 1060.

Galecki, Antoni von. See also Ludwik Bruner and Richard Zsigmondy.

Galeotti, Gino, the so-called metallic derivatives of proteins from the point of view of chemical equilibrium, 1904, A., i, 355.

concentration of metallic ions in silver nitrate solutions containing albumin,

1904, A., ii, 649.

electromotive forces produced at the surface of animal membranes on contact with various electrolytes, 1904, A., ii, 802.

equilibrium between proteins and elec-I. Equilibrium in the trolytes. system egg-albumin, ammonium sulphate, and water, 1905, A., ii,

512.

equilibrium between proteins and III. Solubility of electrolytes. globulin in magnesium sulphate: influence of temperature, 1906, A., i. 912.

is the phase rule valid in the case of colloids ? 1906, A., ii, 273.

the isolation of a uricoclastic ferment, 1911, A., ii, 131.

Galeotti, Gino, dilatometric investigations of hydrolytic decompositions, 1911, A., ii, 257.

dilatometric investigations on the precipitation of proteins, 1912, A.,

dilatometric investigation of certain synthetic processes, 1912, A., ii, 738.

Galeotti, Gino, and G. Giampalmo, solubility of zein in different solvents,

1908, A., i, 929.

Galeotti, Gino, and Ernesto Signorelli, the water balance in the human organism when at rest and at work in high altitudes, 1912, A., ii, 781.

Galeotti, Gino. See also Angelo Mosso. Galimard, J., albumin of frog's eggs,

1904, A., ii, 496.

Galimard, J., and L. Lacombe, genesis of protein by a pathogenic microbe,

1907, A., ii, 121.

Galimard, J., L. Lacombe, and Albert Morel, the true nature of Lepierre's a-glucoproteins, 1906, A., i, 776. culture of micro-organisms in definite

chemical media, 1906, A., ii, 695. Galimard, J., and E. Verdier, arsenic in

" pure glycerins," 1906, A., ii, 306. Galimard, J. See also Louis Hugou-

nenq.

Galine, A. See Iwan A. Kablukoff. Galitzenstein, Eugen G. See Herzig.

Galkin, Xenia, hornblende and augite from the Rhön basalts, 1910, A., ii,

Gallagher, Francis E., alloys of antimony and tin, 1906, A., ii, 367. allotropic silver and its colours, 1907, A., ii, 84.

Galle, Ernst, spontaneous ignition of coal, 1910, A., ii, 1097.

Galleh, Wilhelm E. See Gustav Heller.

Galler, H. See William Küster. Gallerani, Guido Tartarini. See Giu-

seppe Venturoli. Galletly, John Clark, and George Gerald Henderson, quantitative separation of lead and bismuth, 1909, A., ii, 833.

Galletly, John Clark. See also George Gerald Henderson and David Spence.

Galliot. See Antoine Guntz.

Gallo, Gino, estimation of tellurium by the electrolytic method, 1904, A., ii, 639.

electrochemical equivalent of tellurium, 1905, A., ii, 242.

electrochemical equivalent of iodine, 1906, A., ii, 278.

401

DD

Gallo, Gino, analysis of products of the iron industry containing high proportions of chromium, 1907, A., ii, 302.

volumetric estimation of titanium, 1907, A., ii, 402; 1908, A., ii, 780

microscopic study of mortar, 1908, A., ii, 843,

microscopic study of mortar and pozzuolana, 1908, A., ii, 844.

radioactivity of the rocks in the region traversed by the line to the Simplon, 1908, A., ii, 917.

laboratory apparatus for the preparation of fluorine. I., 1910, A., ii, 405.

oxygenated compounds of fluorine, 1910. A., ii. 405, 705.

1910, A., ii, 405, 705.

Gallo, Gino, and G. Cenni, electrolytic estimation of thallium and probable existence of a new oxide of this metal, 1908, A., ii, 986.

Gallo, Gino. See also Giovanni Giorgis. Gallo, Nicolò, correction of acidity and a new method for the estimation of free volatile acidity in wines, 1909, A., ii, 524.

Gallo, Paolo. See Gino Abati.

Galloway, T. C., jun. See H. Otten.
Gambarjan, Stefan, decomposition of tetraphenylhydrazine with hydrogen chloride, 1908, A., i, 1016.

diphenylamine and acylperoxides, 1909, A., i, 910.

Gambarjan, Stefan. See also Heinrich Wieland.

Gamble, (Sir) David, obituary notice of, 1908, T., 2279.

Gamble, Mercier, clinical estimation of the alkalinity of the blood, 1906, A., ii, 296.

Gamgee, Arthur, and Arthur Croft Hill, optical activity of hemoglobin and of globin, 1903, A., i, 451.

Gamgee. Arthur, and Walter Jones, optical activity of nucleo-proteins, 1903, A., i, 374, 451.

optical activity of the nucleic acid of the thymus gland, 1903, A., i, 780.

Gammeltoft, S. A., the ammonia of the urine and its relationship to gastric secretion, 1911, A., ii, 1115.

Gammeltoft, S. A. See also Valdemar Henriques.

Gams, Alphonse. See Amé Pictet. Ganassini, Domenico, detection of hydrogen sulphide, 1903, A., ii, 40.

Solera's test and new methods for the detection of thiocyanic acid, 1903, A., ii, 765.

Ganassini, Domenico, detection of free chlorine and bromine, 1904, A., ii, 441. hydrogen cyanide and its toxicological detection, 1904, A., ii, 758; 1905, A., ii, 867; 1907, A., ii, 313.

characteristic reaction of uric acid, 1909, A., ii, 100.

new chemical reaction for blood, 1911, A., ii, 556.

Ganassini, Domenico, and Everardo Scandola, formation of acetaldehyde by the pyrogenic decomposition of some oxalates, 1911, A., i, 421.

Gandolfo, Diego. See Arnaldo Piutti. Gandurin, A. L., preparation of dimethylglyoxime, 1908, A., i, 400.

the structure of guaiol, 1909, A., i, 98. Gandurin, A. L. See also Wassili W. Scharwin.

Gane, Eustace H., and W. H. Webster, estimation of iodine in iodoform and thymol iodide, 1909, A., ii, 613.

Ganghofer, August. See Carl Bülow and Carl Paal.

Gafiguli, Atul Chandra. See Prafulla Chandra Rây.

Gans, G. See Jacques Pollak. Gans, J. See Ludwig Vanino.

Gans, R., purification of potable waters from manganese by aluminatesilicates, 1907, A., ii, 353.

the shape of ultra-microscopic gold particles, 1912, A., ii, 508.

Gansser, Emil, the next homologues of sarcosine and creatine, 1909, A., i, 702.
 Gansser, Emil. See also Gustav von

Hüfner. Garavini, O. See Mario Giacomo Levi. Garbarini, Guido, purification of ethyl

ether, 1909, A., i, 625.

Garbowski, Ludwik, use of polyhydroxyphenols, phenolic acids, aldehydes, and phenolic aldehydes in the preparation of colloidal solutions of

gold, platinum, and silver, 1903, A., ii, 432.
Garbs, Heinrich. See Wilhelm Meigen.
Garcia, C. Alberte, some new ureometers, 1907, A., ii, 994.

new mercury nitrometer, 1909, A., ii, 92.

Garciá Banús, Antonio. See José Rodriguez Mourelo and Julius Schmidlin.

Garde, G., results of the geological and mineralogical exploration of Eguéï, 1909, A., ii, 676.

Gardiner, A. D. See Thomas Cockburn. Gardiner, J. A., the conductivity of mixtures of dilute solutions, 1910, A., ii. 95.

Gardiol, August. See Carlo Baezner. Gardner, D., and Dmitrij G. Gerasimoff. determination of the solubility of salts of weak acids from measurement of their conductivity, 1904, A., ii, 544.

Gardner, D. See also Harold Lundén. Gardner, Henry Dent, jun., and Walter

Norman Haworth, the condensation of ketones and aldehydes with the sodium derivatives of ethyl cyanoacetate, 1909, T., 1955; P., 250.

Gardner, Henry Dent, William Henry Perkin, jun., and Hubert Watson, carboxylic acids of cyclohexanone and some of its derivatives, 1910, T., 1756; P., 136, 215.

Gardner, Henry Dent, jun. See also

William Henry Bentley.

Gardner, John Addyman, the bromoderivatives of camphorpyric acid, 1905,

T., 1516; P., 230.

Gardner, John Addyman, and George Alfred Buckmaster, action of hydrogen peroxide on hæmin, 1907, A., i, 738.

Gardner, John Addyman, and G. D. Knox, percentage of cholesterol in ox-

bile, 1907, A., ii, 795.

Gardner, John Addyman, and William Legge Symes, physiological action of some sodium camphenephosphinates, 1911, A., ii, 314.

Gardner, John Addyman. See also George Alfred Buckmaster, Charles Dorée, George William Ellis, and

(Miss) Mary Taylor Fraser.

Gardner, Thomas Edward, and William Henry Perkin, jun., the action of tribromopropane on the sodium derivative of ethyl acetoacetate, 1907,

T., 848; P., 115.

Gardner, Walter Myers, and Herbert
Henry Hodgson, the iodination of phenols and the iodometric estimation of, and action of reducing agents on, tannic acid, 1908, P., 272, 273; 1909,

T., 1819.

Gardner, Walter Myers, and Barker North, stability of standard solutions potassium permanganate ammonium oxalate, 1904, A., ii, 591.

Garelli, Felice, new tanning materials; mineral tanning agents, 1907, A., ii,

465.

Garelli, Felice, and Giuseppe A. Barbieri, new additive compounds of 1-phenyl-2:3-dimethylpyrazolone (antipyrine), 1906, A., i, 985.

Garelli, Felice, and Pietro Falciola, cryoscopic researches on solutions of gases in liquids, 1904, A., ii, 312.

Garelli, Felice, and Felice Gorni. iodo-saline water of Castel S. Pietro dell' Emilia, 1904, A., ii, 572.

solid solutions between organic compounds, 1904, A., ii, 711.

Garfunkel, Abraham. See Arthur Rosenheim.

Garland. Charles Samuel. See Martin Onslow Forster.

Garmus, Antonius, the physiological permeability of cells. IV. The permeability and the partition coefficient of gland cells for dyes, and a new method of "vital" observation, 1912, A., ii, 578.

Garner, Frederick Basil. See James

Charles Philip.

Garner, James Bert, \(\Delta^2\)-ketocycloheexne derivatives, 1904, A., i, 252.

certain reactions of benzoin, 1905, A., i. 143.

reduction of mercuric chloride by phosphorous acid and the law of mass

action, 1912, A., ii, 146. Garner, James Bert, John E. Foglesong, and Roger Wilson, reduction

mercuric chloride by phosphorous acid and the law of mass action,

1911, A., ii, 972. Garner, James Bert, and Walter E. King, germicidal action of potassium permanganate, 1906, A., ii, 245.

Garner, James Bert, Guy A. Reddick, and Gail J. Fink, yy'-diketonic acids,

1909, A., i, 551.

Garner, James Bert, Blair Sexton, and H. O. Parker, anhydrous formic acid, 1911, A., i, 831.

Garner, William Edward, a model of an asymmetric carbon atom, 1912, P., 65.

dioximes of benzil, 1912, A., i, 995.

Garner, Wightman Wells. See Arthur Michael.

Garnett, J. C. Maxwell, colours in metal glasses, in metallic films, and in metallic solutions. II., 1905, A., ii, 783.

Garnier, Charles, estimation of lipase activity, 1903, A., ii, 660.

lipolytic power of icteric urine, 1904, A., ii, 62.

lipase of the blood, 1904, A., ii, 184. lipase in cultures of Sterigmatocystis (Aspergillus), 1904, A., ii, 280.

Garnier, Charles. See also Allyre Chassevant, Paul Joyi, and Joseph de Kowalski.

Garnier, Jules, titration of chloral hydrate, 1908, A., ii, 782.

Jules. See also Timothée Garnier. Klobb.

See

Garnier, Léon, disappearance of carbon monoxide from the blood of persons poisoned by that gas, 1903, A., ii, 560.

estimation of purine compounds, uric acid, and alloxuric bases in urine by a combination of the processes of Folin, Shaffer and Denigès, 1903, A., ii, 583.

nascent sodium hypobromite does not liberate all the nitrogen of urea,

1904, A, ii, 300.

colour reactions of the toxic glucosides of Digitalis, 1908, A., ii, 544.

modification of Halphen's reaction,

1909, A., ii, 447.

influence of potassium dichromate on certain analytical constants of milk, 1911, A., ii, 161.

Garnier, Léon. See also Georges Favrel. Garnier, Maurice. See Julien Delauney. Garratt, Frank, the rapid estimation of

vanadium in steel, 1912, A., ii, 1102. Garratt, George Campbell, exercise and urinary secretion, 1903, A., ii, 313.

Garrett, Albert Edward, electrical conductivity produced by heating salts, 1907, A., ii, 524.

positive electrification due to heating aluminium phosphate, 1910, A., ii,

923.

Garrett, Charles Scott. See James Colqu-

houn Irvine.

Garrett, Frederic Charles, and Ernest L. Lomax, estimation of sulphur in petroleum and bituminous minerals, 1906. A., ii. 123.

1906, A., ii, 123.

Garrett, Frederic Charles, and John Armstrong Smythe, the bases contained in Scottish shale oil. Part II., 1903, T., 763; P., 164.

Garrey, Walter Eugene, twitchings of skeletal muscles produced by salt solutions, 1905, A., ii, 334.

saliva of the dog, 1907, A., ii, 706.

Garrigou, [Joseph Louis] Félix, the diffusion of arsenic in nature, 1903, A., ii, 140.

detection of minute amounts of arsenic, 1903, A., ii, 181.

calcium sulphide for dodder and other injurious parasites, 1904, A., ii, 637.

detection of metalloids and metals in quantity in mineral waters, 1910, A., ii, 549.

presence of metals and metalloids in drinking waters; practical consequences, 1910, A., ii, 705.

Garrigue, L., action of formic acid on the organism, 1904, A., ii, 430. Garrod, Archibald Edward, reaction of urochrome with acetaldehyde, 1903, A., ii, 520.

hæmatoporphyrinuria not due to sulphonal, 1904, A., ii, 629.

Garrod, Archibald Edward, and Thomas Wood Clarke, alcaptonuria, 1907, A., ii, 495.

Garrod, Archibald Edward, and Thomas Shirley Hele, uniformity of homogentisic acid excretion in alcaptonuria, 1906, A., ii, 108.

the H:N quotient in alcaptonuria,

1907, A., ii, 376.

Garrod, Archibald Edward, and William Holdsworth Hurtley, estimation of homogentisic acid in urine, 1906, A., ii, 130.

cystinuria, 1906, A., ii, 471. uroleucic acid, 1908, A., ii, 54.

Garrod, Ralph Eddowes, Humphrey Owen Jones, and Percy Edwin Evans, some quinoline and tetrahydroquinoline derivatives obtained from aldol bases, 1912, T., 1389; P., 164.

Garrod, Ralph Eddowes. See also (Miss)

Muriel Gwendolen Edwards. Garrod-Thomas, Richard Noel.

Theodore William Richards. Garroni, E. See Italo Bellucci.

Garsed, William, assay of crude cocaine, 1904, A., ii, 100.

Gartner, P. See Felix Robin.

Gartner, Rudolf. See Conrad Willgerodt.

Gartrell, Herbert William, [anorthoclase] from Port Victor, South Australia, 1909, A., ii, 61.

Garuti, Virginio. See Louis Pelet-Jolivet.

Garver, Madison Monroe, kinetic interpretation of osmotic pressure, 1910, A., ii, 22.

energy relations of solute and solvent,

1910, A., ii, 398.

relation of osmotic pressure to the intrinsic pressure of liquids, 1910, A., ii, 935.

transference and transformations of energy with applications to the theory of solutions, 1911, A., ii, 192.

a new method of determining the range of molecular action and the thickness of liquid films, 1912, A., ii, 536.

a thermodynamic measure of the degree of polymerisation of liquid substances, 1912, A., ii, 830.

molecular attraction in liquids and in liquid films, 1912, A., ii, 831.

Gascard, Albert, determination of the molecular weights of alcohols and of phenols by the use of benzoic anhydride, 1906, A., i, 722.

action of light on milk preserved with potassium dichromate, 1909, A., ii,

three normal saturated hydrocarbons: triacontane, tetratriacontane, and hexatriacontane, 1912, A., i, 65.

Gascard, Albert, and Devalment, a thermo-soluble protein, said to be that

of Bence Jones, 1908, A., ii, 519. Gascard, Albert. See also L. Georges. Gasching, Pascal. See Henry Tissier.

Gasda, Georg, condensation of p-methyl-[2:6-dimethylquinoline] quinaldine with aromatic aldehydes, 1906, A., i,

Gaskell, John Foster, estimation of cystine in urine, 1908, A., ii, 75.

the suprarenal medullary tissue in Petromyzon fluviatilis, 1912, A., ii, 464.

Gasnier, Maxime, continuous apparatus for preparation of gases evolved in the cold, 1909, A., ii, 223.

Gasparinetti, Bruno. See Camillo

Manuelli.

Oreste, Gasparini, new method for destroying organic matter in toxicological analyses, 1904, A., ii, 785.

oxidations by means of electrolysis in quantitative analyses, 1907, A., ii, 650.

See also Celso Ulpi-Gasparini, Oreste. ani.

Gasser, H. S. See Harold Cornelius Bradley.

Gassmann, Theodor, chemical investigations of teeth, 1908, A., ii, 609; 1910, A., ii, 57.

chemical investigations of healthy and rachitic bones, 1911, A., ii, 129.

Gassmann, Theodor. See also Paul Pfeiffer.

Gastaldi, Carlo, some solid ammoniates, 1911, A., i, 185.

behaviour of some nitroazo-derivatives towards phenylhydrazine, 1911, A., i, 1047.

[detection of ferricyanides], 1911, A., ii, 234.

chemical composition of a telluride of gold and silver from Nagyag, 1911, A., ii, 901.

chemical composition of goldschmidt-

ite, 1911, A., ii, 901.

the saponification of a cyanohydrazone, 1912, A., i, 700.

Gastaldi, Carlo. See also Giacomo Ponzio. Gastaldi, E., Halphen's reaction for cottonseed oil, 1912, A., ii, 1108.

Gasteff. A. See Leo A. Tschugaeff.

Gastine, G., microscopical examination of flours and detection of rice in wheat flour, 1906, A., ii, 587.

use of polarised light for the microscopical detection of rice starch and maize starch in wheat flour, 1907,

A., ii, 137.

Gatecliff, John. See Julius Berend Cohen. Gates, Charles Baldwin, replacement of metals in non-aqueous liquids and the solubility of metals in oleic acid, 1911, A., ii, 394.

Gates, Frederick Lamont. See Frank

Austin Gooch.

Gatin-Gružewska, (Mme.) Z., pure glycogen, 1904, A., i, 295, 838

molecular weight of glycogen, 1904,

A., i, 717.

behaviour of glycogen under the influence of the electric current, 1904, A., ii, 533.

action of adrenaline on muscular gly-

cogen, 1906, A., ii, 566. composition of starch grains, 1908, A., i, 320.

course of the exidation and hydrolysis of starch and its constituents by hydrogen peroxide, 1909, A., i, 209.

oxidation and hydrolysis of glycogen under the action of hydrogen peroxide, 1910, A., i, 610.

characteristic properties of amylose and amylopectin, 1911, A., i, 357.

Gatin-Gružewska, (Mme), Z., and Henri Bierry, action of pancreatic juice on glycogen, starch, and its compounds, 1909, A., ii, 818.

Gatin-Gružewska, (Mme.) Z., and Wilhelm Biltz, ultramicroscopic observations on solutions of pure glycogen, 1904, A., i, 976.

Gatterbauer, Josef, nature of the so-called gallisin in commercial starchsyrup, 1911, A., i, 837.

Gattermann, Ludwig, syntheses of aromatic aldehydes. I. and III., 1906, A., i, 589; 1912, A., i, 984.

syntheses of aromatic aldehydes. The hydrogen cyanide method, 1908,

A., i, 28.

mercaptans of anthraquinone, 1912, A., i, 998.

Gattermann, Ludwig, and Hans Liebermann, constitution of dyes containing negative substituents derived from sulphonic acids of a-naphthylamine and of a-naphthol, 1912, A., i, 1038.

Gattermann, Ludwig, and Francesco Maffezzoli, preparation of aldehydes by the aid of organo-magnesium compounds, 1904, A., i, 172.

Gatz, E., and Ryotaro Inaba, the theory of the Wassermann reaction, 1910, A.,

ii, 1093.

Gaubert, Paul, influence of the colouring matter of the mother liquor on the form of crystals deposited in it (phthalic acid), 1906, A., ii, 152.

condition of the colouring matter in artificially coloured crystals, 1906,

A., ii, 343.

isomorphous crystals of lead and barium nitrates, 1907, A., ii, 24. artificial coloration of minerals, 1907,

A., ii, 479.

liquid crystals of two new compounds of cholesterol, 1907, A., ii, 939.

liquid crystals of ergosteryl esters,

1908, A., i, 882.

artificial reproduction of barytes, celestine, and anglesite, and isomorphous mixtures of these substances, 1908, A., ii, 38.

helical structures, 1908, A., ii, 475. causes modifying the dominant faces

of crystals: solid solutions, 1908, A., ii, 933.

liquid crystals of compounds of cholesterol and ergosterol with carbamide, 1909, A., i, 920.

a new highly fluorescent substance derived from physostigmine [eserine], 1910, A., i, 62.

polychroism of artificially coloured

crystals, 1910, A., ii, 4.

influence of foreign substances dissolved in the mother liquor on the faces of crystals of meconicacid and on their pseudopolychroism, 1911, A., ii, 101.

determination of minerals by colour reactions, 1911, A., ii, 337.

refractive indices of liquid crystals, 1911, A., ii, 949.

refractive indices of mixed liquid crystals, 1912, A., ii, 109.

circular polarisation of liquid crystals,

1912, A., ii, 510. Gaucher, Louis, reservoir for storing aseptic liquids, 1908, A., ii, 613.

the gastric digestion of caseinogen 1909, A., ii, 249.

gastric digestion of human and asses' milk, 1909, A., ii, 326.

digestion of casein, 1911, A., ii, 1109.

Gauchmann, S. See Alexander Tschirch.

Gaudechon, Henry, action of the electric discharge on cyanogen, 1906, A., i, 731.

[Millon's base], 1907, A., ii, 621.

thermochemical data relating to [Millon's] base and its hydrates, 1907, A., ii, 667.

thermochemical constants in the atropine and cocaine series, 1907.

A., ii, 738.

thermochemical data relating to the chlorinated compounds derived from Millon's base, 1908, A., ii, 85.

dissociation by water of the double chlorides of ammoniun and dimercuriammonium, 1908, A., ii, 188.

ammoniacal dimercuriammonium chlorides, 1908, A., ii, 383.

dimercurammonium bromides, 1909, A., ii, 670; 1910, A., ii, 296. dimercurammonium compounds, 1911,

A., ii, 398.

Gaudechon, Henry. See also Daniel Berthelot, Marcellin Berthelot, and Achille Müntz.

Gaudion, Georges, general method for the preparation of aliphatic amines by catalytic reduction of alkyl nitrites, 1912, A., i, 163.

Gauge, Arthur Josiah Hoffmeister, See James Johnston Dobbie and John Jacob

Fox.

Gault, Henri, the pyran series. II. Condensation of ethyl oxalacetate with cyclic aldehydes, 1907, A., i, 147.

the pyran series. III. Condensation of ethyl oxalacetate with aliphatic

aldehydes, 1907, A., i, 148. the pyran series. IV., 1907, A., i, 181. preparation of primary amino-alcohols,

1907, A., i, 752.

dibasic ketonic acids. II. Ethyl a-oxalylglutarate; a-ketoadipic acid, 1909, A., i, 362.

condensation of ethyl oxalate with ethyl tricarballylate, 1910, A., i, 487. acidity of derivatives of ethyl oxal-

acetate, 1910, A., i, 542.

lactonisation of a-ketonic esters, 1911, A., i, 709.

lactonisation of a-ketonic esters; ethyl pyruvate, 1912, A., i, 237.

preparation of glutaric acid by Knoevenagel's method, 1912, A., i, 412.

dibasic ketonic acids; a-ketoadipic acid, 1912, A., i, 412.

Gault, Henri, and G. Thirode, condensation of secondary amines with ethyl γ-bromo-aa-dimethylacetoacetate, 1910, A., i, 356.

Gault, Henri. See also Edmond Emile Blaise.

Gaunt, Percy. See Gilbert John Fowler. Gaunt, Rufus, estimation of alcohol in aqueous solutions by the freezing-

point, 1905, A., ii, 288.

Gaunt, Rufus, Frederick Thomas, and William Popplewell Bloxam, analysis of indigo (III) and of the dried leaves of Indigofera arrecta, and Indigofera sumatrana, 1908, A., ii, 76.

See also Eduard Gaunt, Rufus.

Buchner.

Gaupp, Otto, a colour reaction of patho-

logical urine, 1908, A., ii, 875. Gaupp, Otto. See also Emil Fromm. Gaus, Otto. See Richard Stoermer.

Gauthier, D., compounds of sucrose with metallic salts, 1904, A., i, 144, 373.

method of preparing the oxynitriles, OR·CH2·CN, 1907, A., i, 20.

derivatives of monohalogenated ethers, 1909, A., i, 353.

synthesis of secondary a-keto-alcohols,

1911, A., i, 415. synthesis of tertiary a-keto-alcohols,

1911, A., i, 513. Gautié, Albert, estimation of Bacillus

coli in potable waters, 1905, A., ii, 660. Gautier, André, bauxite, 1911, A., ii,

497. application of methyl-orange in the colorimetric estimation of titanium,

1911, A., ii, 1035.

Gautier, [Emile Justin] Armand, presence of arsenic in animals, 1903,

A., ii, 91. normal localisation of arsenic in certain organs of animals and plants, 1903, A., ii, 92.

improvement in Marsh's apparatus,

1903, A., ii, 102.

amount of free hydrogen in the air and the density of atmospheric nitrogen, 1903, A., ii, 138.

diffusion of arsenic in nature, 1903, A., ii, 140.

the proportion of hydrogen in the atmosphere, 1903, A., ii, 202.

composition of the gas from the fumaroles of Mont Pelée; origin of volcanic phenomena, 1903, A., ii, 222.

arsenic in sea-water, salt deposits, table salt, mineral waters, etc.; its estimation in some ordinary reagents, 1903, A., ii, 593, 645.

new method of estimating small traces of arsenic, 1903, A., ii, 612.

Gautier, [Emile Justin] Armand, delicacy of tests for arsenic in organic matter, 1903, A., ii, 612.

does arsenic exist in the organs of the animal economy? 1903, A., ii,

purification of hydrogen sulphide to be used in the detection of arsenic, 1903, A., ii, 694.

estimation of carbon monoxide in air by means of iodine pentoxide, 1906,

A., ii, 125.

use of copper as an accelerator in Marsh's apparatus, 1906, A., ii, 393.

action of carbon monoxide at a red heat on water vapour, and of hydrogen on carbon dioxide; application of these reactions to the study of volcanic phenomena, 1906, A., ii,

action of water vapour on sulphides at a red heat; production of free metals; application to volcanic phenomena, 1906, A., ii, 548.

action of hydrogen sulphide on certain oxides; application to volcanic phenomena and thermal springs,

1906, A., ii, 548.

the ultimate red coloration of certain leaves, and the colour of autumn leaves, 1906, A., ii, 884.

tyrosamines, 1907, A., i, 134.

crystalline chlorophylls, 1909, A., i, 402.

gas from volcanic fumaroles, 1909, A., ii, 674.

nature and origin of gases forming volcanic fumaroles or issuing from craters of ancient volcanoes, 1909, A., ii, 744.

methods for the collection and preservation of gases from fumaroles and volcanic springs or soils, 1909, A., ii, 745.

decomposition of formaldehyde at a red heat, 1910, A., i, 542.

action of heat on carbon monoxide from a geological and chemical standpoint, 1910, A., ii, 607.

action of hydrogen on carbon mon-oxide; formation of water and methane: action of water at a red heat on carbon monoxide; applications to volcanic phenomena, 1910, A., ii, 708.

Gautier, Armand, and Paul Clausmann, alimentary origin of arsenic in man, 1904, A., ii, 626.

some difficulties in the estimation of carbon monoxide in gaseous mixtures, 1906, A., ii, 251.

Gautier, Armand, and Paul Clausmann, action of iron and its oxides on carbon monoxide at a red heat; application to geological data, 1910, A., ii, 709.

action of mixtures of carbon monoxide or carbon dioxide with hydrogen on oxides of iron, 1910, A., ii, 855.

detection and estimation of minute quantities of fluorine in minerals, waters, and living tissues, 1912, A., ii, 681.

colorimetric estimation of very small quantities of fluorine, 1912, A., ii, 805. control of the new method for the

estimation, and tests for the merest traces, of fluorine, 1912, A., ii, 806.

Gautier, Armand, and Georges Halphon, changes correlative with the formation of alcohol in fermenting saccharine juices; distinction between alcoholated musts and true vinous liquors, 1903, A., ii, 564.

Gautier, Armand, and Charles Moureu, a new thermal water; prototype of a modern physico-chemical study of a mineral water; methods for the estimation of small quantities of lithium, manganese, antimony, bromine, fluorine, rare gases, etc., 1911, A., ii, 300.

estimation of bromine, fluorine, lithium, and antimony in mineral

waters, 1911, A., ii, 329.

Gautier, Armand. See also G. Reboul.

Gautier, Maurice. See Philippe Auguste

Gautrelet, Emile, partial transformation of alimentary fatty matter into mannitols by peptic and pancreatic digestion in vitro, 1910, A., ii, 140.

Gautrelet, Émile. See also Albert
Desmoulières.

Gautrelet, Jean, presence of lactic acid in the muscles of invertebrates and the lower vertebrates, 1908, A., ii, 659.

reaction of the blood; its function in nutrition, 1906, A., ii, 372.

action of certain metallic ions on the frog's heart, 1908, A., ii, 120.

physiological action of the sulphurous acid contained in white wines, 1910, A., ii, 734.

action of extracts of invertebrate tissues on blood-pressure, 1911, A., ii, 1107.

Gautrelet, Jean, and Henri Gravellat, physiological action of some colouring matters and their urinary elimination, 1907, A., ii, 711.

Gauvry, E., detection of boric acid in butter and milk, 1910, A., ii, 156.

Gauvry, E. See also Bertainchand.

Gavard, Marius, new reaction for certain alcohols and allied substances, 1903, A., ii, 514.

Gavelle, Jean. See Maurice Arthus. Gawalowski, A., red pigments of alkanna

root, 1903, A., i, 109,

volumetric estimation of sulphuric acid in sulphates, 1903, A., ii, 99.

estimation of the hardness of potable and service waters by aqueous soap solution, 1903, A., ii, 185.

siphon pipette, 1903, A., ii, 237. elaidin and elaidic acid, 1905, A., i,

318; 1911, A., i, 416.

nicotine camphorate, 1905, A., i, 371. inadmissibility of soap for estimating hardness of ferruginous water, 1905, A., ii, 68.

behaviour of hydrofluosilicic acid with various reagents, 1905, A., ii, 387.

various reagents, 1905, A., ii, 387. "aluminium carbonicum," 1905, A., ii, 713; 1906, A., ii, 450.

solubility of barium sulphate in hydrogen peroxide, 1906, A., ii, 669.

detection of sucrose in presence of lactose, 1906, A., ii, 811.

behaviour of carbon disulphide towards nascent hydrogen, 1907, A., ii, 21. mercury chromates, 1907, A., ii, 25.

crystallised aluminium sulphate, 1907, A., ii, 27.

cylinder for micro-hydrometers, 1908, A., ii, 479.

turbine funnel for mixing solutions, 1908, A., ii, 939.

three laboratory instruments, 1910, A., ii, 446.

micro-distilling apparatus, 1910, A., ii, 1038.

burette for the volumetric estimation of gaseous mixtures, especially of furnace gases, 1911, A., ii, 651.

sodium carbonate and sodium hydrogen carbonate, 1912, A., ii, 940.

Gawiński, Witold, proteic acids in urine in health and disease, 1909, A., ii,

Gawrilow, N. See Albrecht Kossel.
Gawrilow, Wladimir. See Julius von

Gay, Frederick Parker, and Thorburn Brailsford Robertson, a comparison of paranuclein split off from caseinogen with a synthetic paranuclein based on immunity reactions, 1912, A., i, 737. Gay, L., osmotic equilibrium between two fluid phases, 1910, A., ii, 935, 1043.

ideal solutions, 1911, A., ii, 192.

mixtures of acetic acid with normal liquids, 1911, A., ii, 260.

the conception of the pressure of expansion, 1911, A., ii, 850.

expansion pressure of a normal liquid, 1911, A., ii, 1058.

Gay, L. See also Emile Baud.

Gayda, Tullio, calorimetric investigations of the precipitation of proteins by salts of heavy metals, 1910, A., i, 527.

investigations by means of the dilatometer on the heat coagulation and solution of albumin, 1912, A., i, 399.

Gayon, Ulisse, and Elisée Dubourg. mannitic fermentation, 1904, A., ii,

759.

Gazarian. See Ter-Gazarian.

Gazdar, (Miss) Maud, and Sumuel Smiles, the interaction of hydrogen dioxide and sulphides, 1908, T., 1833; P., 216.

aromatic hydroxy-sulphoxides, 1910,

T., 2248; P., 253.

Gazdar, (Miss) Maud. See also Edward Charles Cyril Baly.

Gaze, Rudolf, urea, 1905, A., ii, 277. the yellow colour of alcoholic potash, 1911, A., ii, 225.

Gaze, Rudolf. See also Ernst Schmidt.

Gazzetti, C., and C. Sarti, red coloration given by Esbach's reagent [with urine], 1911, A., ii, 150.

Geba, Josef. See Robert Kremann.

Gebhard, Kurt, relation between the constitution of dyes and their sensitiveness to light, 1909, A., ii, 284.

action of light on dyes, 1910, A., i, 405.

photochemical phenomena in connexion with solutions of dyes, 1910, A., ii, 248.

photochemical reactions in laboratory

work, 1911, A., ii, 66.

the nature of solvates and the relationships between adsorption and dissociation, 1912, A., ii, 141.

relation between the photosensitiveness and constitution of dyes, 1912, A., ii, 242.

theory of vat dyeing, 1912, A., ii, 242.

bleaching of methylene-blue in the visible spectrum, 1912, A., ii, 513.

Gebhard, Norman Leslie, a simple apparatus, with stirrer, for treating a liquid at its boiling point with two or more gases, 1907, P., 34.

a simple manometer for vacuum dis-

tillation, 1908, P., 51.

Gebhard, Norman Leslie, and Herbert Bryan Thompson, diazohydroxylamino-compounds and the influence of substituting groups on the stability of their molecules. Parts I. and II, 1909, T., 767, 1115; P., 70, 149.

an apparatus for continuously extracting solids, 1909, A., ii, 393.

Gebhard, Norman Leslie. See also Percy Faraday Frankland.

Gebhardt, A., vapour pressure of mercury

and sodium, 1906, A., ii, 9. Gebhardt, Heinrich, See Alexander

Gutbier.

Gebrüder von Niessen, ureides of the dialkylacetic acids, 1903, A., i, 798.

preparation of CC-dialkylbarbituric acids, 1903, A., i, 799.

Geddert, Heinrich. See Emil Abderhalden.

Geddes, Alexander E. M., absorption of carbon dioxide by charcoal, 1909, A., ii, 645.

Gedel, Louis, iron sulphides and the purification of coal gas from hydrogen sulphide, 1905, A., ii, 714.

sulphide, 1905, A., ii, 714.

Gedroiz, K. K., action of acids, alkalis, and some inorganic salts on plants, 1912, A., ii, 482.

Gee, Frank Houghton. See David Leonard Chapman.

Gee, William Winson Haldane, use of balanced electrodes, 1905, A., ii, 670.

Geelmuyden, Hans Christian, estimation of the nitrogenous constituents in sea water, with remarks on colorimetric methods, 1903, A., ii, 577.

[acetone and diabetes], 1904, A., ii,

275.

acetone substances in the organs of cases of diabetic coma. II., 1909, A., ii, 253.

estimation of the various sugars occurring together in diabetic urines,

1909, A., ii, 354.

the behaviour of acetone substances in intermediary metabolism, 1911, A., ii, 904.

Geer, William Chauncey, orystallisation in three component systems, 1904, A., ii, 473.

Geer, William Chauncey. See also

Louis Munroe Dennis.

Geerligs, Hendrik Coenraad Prinsen, green colour of kajeput oil, 1905, A., i, 223.

influence of sodium salts in the soil on the composition of sugar-cane, 1905,

A., ii, 346.

the rapid change in composition of certain tropical fruits during ripening, 1908, A., ii, 977.

precipitation of lævulose by basic lead

acetate, 1908, A., ii, 991.

Geest, Jan, magnetic double refraction of sodium vapour, 1905, A., ii, 621.

Geffcken, Gustav, comparative solubility of gases, etc., in water and in aqueous solutions, 1904, A., ii, 708.

solubility of lithium carbonate in solutions of salts of the alkali metals,

1905, A., ii, 247.

Gehe & Co., preparation of double compounds of carbamide with alkalineearth bromides, 1911, A., i, 118.

Gehlhoff, Georg, cathode potential fall and spectra in some compound

gases, 1908, A., ii, 11.

cathode fall [of potential] in argon at a potassium electrode and its diminution by the photoelectric effect, 1910, A., ii, 571.

the glow discharge in rubidium and cæsium vapours, 1911, A., ii, 82.

the emission of the series and fundamental spectra in the glow discharge of the alkali metal vapours, 1911, A., ii, 83.

the glow discharge and the emission of the alkali-metal vapours, 1911,

A., ii, 349.

a simple method for the preparation of inert gases, hydrogen and nitrogen in the pure state, 1911, A., ii, 487.

Gehlhoff, Georg, and Karl Rottgardt. electrical and optical measurements in the glow discharge in sodium and potassium vapour, 1910, A., ii, 679.

See also Gehlhoff, Georg. Arnold

Eucken.

Gehrcke, Ernst, and Otto Reichenheim, anode rays, 1907, A., ii, 421; 1908, A., ii, 343.

the Doppler spectrum of the hydrogen coal rays, 1911, A., ii, 166.

Gehrcke, Ernst, and R. Seeliger, luminosity of gases under the influence of cathode rays, 1912, A., ii, 517.

Gehringer, Heinrich. See Josef Herzig

and Rudolf Wegscheider.

Geibel, Wilhelm, electrical and mechanical properties of alloys of the noble metals, 1911, A., ii, 10, 361.

Geibel, Wilhelm. See also Wilhelm Biltz, Wilhelm C. Heraeus, Friedrich Wilhelm Küster, and Theodor Zincke.

Geigel, Robert, absorption of gravitation energy by radioactive matter, 1903, A., ii, 258.

Geiger, Arthur, artificial production of

krugite, 1904, A., ii, 268.

Geiger, Arthur, See also Max Bodenstein and Jacobus Henricus van't Hoff. Geiger, Carl. See Friedrich Wüst.

Geiger, George Augustus. See Marston

Taylor Bogert.

Geiger, Hans, scattering of the a-particles by matter, 1908, A., ii, 795; 1910, A., ii, 472

diffuse reflection of the a-particles.

1909, A., ii, 782.

ionisation produced by an a-particle, 1909, A., ii, 782.

the ionisation produced by an a-particle. II. Connexion between ionisation and absorption, 1910, A., ii, 473.

the transformation of the actinium emanation, 1911, A., ii, 683.

Geiger, Hans, and Alois F. Kovarik, the relative number of ions produced by the \$-particles from the various radioactive substances, 1911, A., ii, 954.

Geiger, Hans, and Ernest Marsden, the number of a-particles expelled from the actinium and thorium emanations,

1910, A., ii, 92.

Geiger, Hans, and J. M. Nuttall, the ranges of a-particles from various radioactive substances and a relation between the range and period of transformation, 1911, A., ii, 953.

the ranges of the a-particles from

uranium, 1912, A., ii, 408.

the ranges of the a-particles from the thorium and actinium products, 1912, A., ii, 1022.

Geiger, Hans, and Ernest Rutherford, the number of a-particles emitted by uranium and thorium and by uranium minerals, 1910, A., ii, 917. photographic registration of a-particles,

1912, A., ii, 1021. Geiger, Hans. See also Ulrich Behn and

Ernest Rutherford.

Geiger, Ludwig, a powerful stigmatic grating spectrograph without glass, and its application to the photographic determination of the red and ultra-red iron arc spectrum between $\lambda = 6750$ and $\lambda = 9809$, 1912, A., ii, 1113.

Geiger, Walter. See Hermann Leuchs. Geigy, Joh. Rud. & Co., preparation of indigotin from a-thioisatin, 1903, A., i, 33.

Geigy, Joh. Rud. & Co. See also Anilinfarben- & Extraktfabriken vorm. Joh. Rud. Geigy & Co.

See Zdenko Hanns Geinsperger, Ernst.

Skraup.

Geipert, Rudolf, condensation of benzilic acids with phenols, 1904, A., i, 318. Geis. Theodor. See Ernst Mohr.

Geisel, Emil. See Otto Ruff.

Geisler, Hermann, anomalous dispersion of light in metallic vapours, 1909, A., ii, 357.

Geisow, Hans, oxidation of formaldehyde by peroxides, 1904, A., i, 289.

Geisow, Hans, and Paul Horkheimer, quantitative separation of iron from zirconium; zirconium peroxide, 1903, A., ii, 109.

Geissler, J. E. A., concentration cells with ternary electrolytes, 1912, A., ii,

Geisthoff. Gerhard. See Gustan

Wimmer.

Geitel, Hans [Friedrich Carl], spontaneous ionisation of air and other gases, 1906, A., ii, 329, 518.

Geitel, Hans. See also Julius Elster. Gelbke, M., new example of the coupling of short- and long-waved fluorescence bands, 1912, A., ii, 713.

Gelderen, Frederik Marinus van.

Martin Onslow Forster.

Geleznoff, Antonina. See Amé Pictet. Gelhaar, Julius. See Birger Carlson. Gelmo, P., halogen derivatives of 4-

aminodiphenyl, and of 4-aminodiphenyl-4-oxamic acid, 1907, A., i,

amides of p-aminobenzenesulphonic acid, 1908, A., i, 409.

Gelmo, P., and Wilhelm Suida, process of dyeing animal textile fibres, 1905, A., i, 714; 1906, A., i, 445; 1907, A., i, 231.

action of aliphatic aldehydes on aromatic glycines, 1909, A., i, 382.

Gelstharp, F., electrolytic recovery of tin, 1905, A., ii, 168.

Gember, Leo van. See Carl Paal.

Gemberling, Adelaide. See Samuel Lawrence Bigelow.

Gemmell, Alexander, improved method for the estimation of titanium, 1910, A., ii, 550.

[titaniferous melanite from Assynt, Sutherlandshire, 1911, A., ii, 300. Gemmell, Alexander. See also Alex-

ander Charles Cumming.

Gemmell, William, and Sydney Leonard Archbutt, estimation of phosphorus in phosphor tin, 1908, A., ii, 629.

Genequand, Paul. See Amé Pictet.

Generaich, Wilhelm von, detection and estimation of boric acid, salicylic acid, and benzoic acid in foods, etc., 1908, A., ii, 906.

Octave, agglutination and Gengou, hæmolysis by chemical precipitates, 1904, A., ii, 496.

Gengou, Octave. See also Jules Bordet.

Genssler, Otto. See Julius Sand.

Gentil, Louis, the volcano of Siroua, in the Morocco Atlas, 1908, A., ii, 203.

Gentsch, Curt, crystalline double compounds of phenols with alkali phenoxides, 1905, A., i, 341.

catecholmonosulphonic acid, 1910, A.,

i. 619.

Gentzen, Max. See Alexander Ellinger. Genvresse, Pierre, pulegone nitrosite, 1904, A., i, 73.

action of paraformaldehyde on sesqui-

terpenes, 1904, A., i, 602.

Genvresse, Pierre, and E. Chablay, ethereal oil of Calamintha nepeta, called "marjolaine" in the south of France, 1903, A., i, 354.

Genvresse, Pierre, and P. Faivre, action of bromine on pinene in presence of

water, 1903, A., i, 711.

Genvresse, Pierre, and G. Langlois, essential oil of vetiver, 1903, A., i, 187.

Genzken, Ulrich. See Hugo Strache.

Georges, Hans. See Otto Ruff.

Georges, L., and Albert Gascard, colorimetric estimation of morphine, 1906, A., ii, 507.

Georgi, Robert, and Alexander Schwyzer, attempts to combine d-fenchone or camphor with phenyl styryl ketone and other as-unsaturated ketones, 1912, A., i, 787.

Georgi, Robert, and Hans Volland, semicyclic 1:5-diketones from cyclopentanone and phenyl styryl ketone, 1912,

A., i, 780. Georgi, Robert. See also Hans Stobbe.

Georgievics, Georg [Cornelius Theodor] von, theory of dyeing, 1904, A., i, 81.

a new formula for the basic triphenylmethane dyes, 1904, A., i, 351.

ketonic fission of carbinols, 1905, A., i, 357.

connexion between the constitution and the colour and dyeing power with mordants of the hydroxyanthraquinones and their sulphonic acids, 1905, A., i, 447.

constitution and colour of nitrophenols,

1906, A., i, 420.

Georgievics, Georg [Cornelius Theodor] von, dyeing with pieric acid, 1911, A., i, 537.

anthraquinone derivatives as mordant dyes, and nature of the lakes. I .. 1911, A., i, 546.

octahydroxvanthraquinone, 1911, A.,

adsorption in solution. II. Dualistic nature of adsorption phenomena, 1912, A., ii, 140.

adsorption in solutions. III. Relations between the adsorbability and other properties, 1912, A., ii,

Georgievics, Georg von, and Artur Pollak, adsorption in solution. I. Retention of acids by sheep's wool, 1911, A., ii, 1070.

Georgiewsky, A. N., contraction on mixing chloroform with ethyl ether, 1903, A., i, 223.

Georgitses, Néoptolème. See Georges Baume.

Gephart, Frank. See John Harper Long and Stanley Rossiter Benedict. Gérard, A., the resin of Khaya Madagas-

cariensis, 1912, A., ii, 481. Gérard, Adhémar, ethyl-n-hexylcarbinol, 1907, A., i, 376.

See A. Christiaens. Gérard, Aime.

Gérard, Ernest, and J. Leroy, action of intestinal and pancreatic extracts on various organic derivatives, 1912, A., ii, 461.

Gérard, Ernest, and Verhaeghe, lipoids of animal organs, 1911, A., ii, 508.

Gérard, Georges, a reaction of theobromine, 1906, A., ii, 507.

reactions which lead to the formation of iodine derivatives, 1911, A., i,

Gérard, Pierre, potassium and sodium content of the different organs of a dog, 1912, A., ii, 463.

influence of the diet on the amount of sodium and potassium in the dog, 1912, A., ii, 656.

the characterisation and estimation of potassium and sodium, 1912, A., ii,

Gerasimoff, Dmitry G., affinity of alkali oxides towards various anhydrides, 1905, A., ii, 85.

Gerasimoff, Dmitry G. See also D. Gardner and Wladimir E. Pawloff.

Gerb, Ludwig, compounds of tervalent cobalt with ethylenediamine, 1905, A., i, 328.

Gerb, Ludwig. See also Alfred Werner.

Gerber, Adolphe, preparation of alkyl haloids and alkyl nitrates of tropeine and scopoleine alkaloids, 1911, A., i. 152.

preparation of alkyl-halogen derivatives of morphine alkaloids, 1911,

A., i, 154.

Gerber, C., influence of a momentary increase in the tension of oxygen on the respiration of fruits containing volatile esters during the period of maturity in which they emit perfume, 1903, A., ii, 387.

respiration of odoriferous fruits at the time of complete maturity when placed, in the green and odourless state, in air enriched in oxygen.

1903, A., ii, 387.

specific accelerating action of sodium fluoride on the coagulation of milk by vegetable rennet, 1907, A., i, 1100.

method for the determination of the accelerating action of sodium and potassium salts on the coagulation of milk by ferments, 1908, A., i, 71.

action of acids on the coagulation of milk by vegetable rennets, 1908, A.,

the rennet from decaped crustaceans,

1909, A., i, 74.

the effect of dialysis on juices of vegetable origin containing rennet, 1909, A., i, 74.

action of rennet at various temperatures, 1909, A., i, 196.

basiphil rennets, 1909, A., i, 278. coagulation of fresh milk by the rennet of the Papaw tree (Carica

papaya), 1909, A., i, 278. distribution of rennet in the parts and tissues of plants, 1909, A., ii,

512. rennet of belladonna, 1909, A., ii,

824.

localisation of proteolytic ferments in Vasconcellea quercifolia; the rennet and spontaneously coagulable latex, 1910, A., ii, 64.

coagulation of fresh milk by the ferments of boiled milk, 1910, A., ii,

527.

comparison between the mode of action of certain retarding salts and the proteins of milk coagulable by heat on the coagulation by rennets

of boiled milk, 1910, A., ii, 633. diastases of the latex of the Japanese mulberry tree (Broussonetia papyri-

fera), 1911, A., ii, 647.

Gerber, C., hydrolysis of starch by hydrogen peroxide, alone or in the presence of animal and vegetable amylases, 1912, A., i, 538.

the latex of the fig tree, a vegetable pancreatic juice with proteclytic diastase predominating, 1912, A.,

ii. 801.

Gerber, C., and P. Flourens, rennet ferment of Calotropis process latex, 1912, A., ii, 977.

Gerber, Emil, chemical constituents of Para cress (Spilanthes oleracea), 1903, A., ii, 609.

Gercke, E., the system iron-phosphorus, 1908, A., ii, 1041.

Gerhardt, Carl, new safety valve for water pumps, 1909, A., ii, 724. Gerhardt, Ph. See Alfred Werner.

Gerhardt, Ph. See Alfred Werner.
Gerhart, Hilda, influence of substances in solution on the crystal-habit of double sulphates, 1910, A., ii, 276.

habit of crystals of artificial barytes,

1911, A., ii, 262.

Gerich, S. See Wojciech Sventoslavsky. Gerlach, Ferdinand. See Emil Fischer. Gerlach, Max, action of the solid con-

stituents of farmyard manure, 1903, A., ii, 38.

agricultural employment of calcium cyanamide, 1904, A., ii, 839.

Gerlach, Max, and Ignaz Vogel, nitrogenfixing bacteria, 1903, A., ii, 744, ammoniacal nitrogen as plant food,

1905, A., ii, 346.

Gerlach, Oscar. See Wilhelm Lossen.
Gerlinger, Paul, transformation of true colour bases into carbinol bases and of true cyanide dyes into leucocyanides, 1904, A., 1, 1040.

iodometric estimation of copper, 1906,

A., ii, 308.

Gerlinger, Paul. See also Emilio Noel-

Germain, A., oxidation of sparteine with potassium permanganate, 1912, A., i, 579.

Germain, A. See also Emilio Carlinfanti. Germain, E. See Ach. Grégoire.

Germann, Albert F. O., and Ettore Cardoso, a mercury pump (laboratory type), 1912, A., ii, 933.

Germann, Albert F. O. See also Georges Baume, Frank Curry Mathers, and

Joseph Howard Mathews.

Gernez, Désiré [Jean Baptiste], change of colour shown by mercuric iodides at different temperatures, 1903, A., ii, 428.

the form in which mercuric iodide dissolves, 1903, A., ii, 481.

Gernez, Désiré [Jean Baptiste], a combination of two substances which takes place by rise of temperature and decomposes below — 79°, 1903, A., ii, 598.

the yellow and red varieties of thallous iodide, the determination of the normal point of their reciprocal transformation, 1904, A., ii, 617.

the form in which thallous iodide separates from solution, 1904, A., ii,

661.

the light emitted by crystals of arsenious oxide, 1905, A., ii, 365.

triboluminescence of potassium sulphate, 1905, A., ii, 430.

triboluminescence of metallic compounds, 1905, A., ii, 431.

triboluminescence of racemic compounds, 1908, A., ii, 748.

triboluminescence, 1909, A., ii, 108. supposed influence of crystallisation in modifying the properties of the solution of a substance prepared by mixing two solutions, 1909, A., ii, 388.

slowness of the spontaneous transformation of the unstable variety of certain dimorphous substances at low temperatures, 1909, A., ii, 466.

nature of change which crystals of sodium sulphate heptahydrate undergo in contact with crystals of the decahydrate, 1909, A., ii, 729.

restoration of phosphorescence to sulphides of the alkaline earths, 1910,

A., ii, 173.

nature of the product described as black phosphorus, 1910, A., ii, 707.

colour suddenly assumed by colourless solutions of coloured substances at the moment of solidification of the colourless solvent, 1910, A., ii, 853.

Gerngross, Otto, 5-methylpyrimidine, 1905, A., i, 942.

a synthesis of thymine, 1905, A., i,

experiments on the synthesis of histidine, 1909, A., i, 189.

condensation of 5(4)-methylglyoxaline with chloral, 1912, A., i, 314.

Gerngross, Otto. See also Emil

Geromanos, H. W. See George William Rolfe.

Geronimus, Josef. See Eduard Buchner.

Gerrans, B. Henry. See Charles Edward Cassal and Noel Charles Cassal.

Gerrits, G. C., Px curves of mixtures of acetone and ethyl ether and of carbon tetrachloride and acetone at 0°, 1904, A., ii, 807.

Gers, J. Gaube du, and Ladislus Kopaczewski, preparation of colloidal

copper, 1912, A., ii, 51.

Gersten, Ewald. See Otto Ruff. Gerum, Josef. See Carl Paal.

Gesché, Louis, synthesis of benzene; action of potassium hydroxide on dypnone, 1903, A., i, 484.

Gesché, Louis. See also Maurice

Delacre.

Gesellschaft für Chemische Industrie in Basel, preparation of o-chlorotoluene, 1903, A., i, 331.

azo-dyes from aminoalphylhydroxynaphthyltriazolesulphonic acids.

1904, A., i, 353.

p-acetylaminophenylcarbamidohydroxynaphthylsulphonic acid, 1904, A., i, 492.

dyes containing aminoarylacyl or aminoarylaminoacyl groups, 1904, A., i, 638.

azo-dyes from ethers of diaminocresol and chlorodiaminophenol, 1904, A., i, 1064.

preparation of sulphineazo-compounds,

1906, A., i, 323.

preparation of aminoarylacylaminonaphtholsulphonic acids, 1906, A., i, 659.

[the diazotisation of substituted metadiamines], 1906, A., i, 718.

[the diazotisation of 1-amino-β-naphtholsulphonic acids], 1907, A., i, 987.

interaction of aniline, formaldehyde, and sodium hyposulphite, 1908, A., i, 151.

preparation of tri- and tetra-bromoindigotin, 1908, A., i, 468.

preparation of stable chloroindigotins, 1908, A., i, 695.

preparation of halogen derivatives of B-naphthindigotin, 1908, A., i, 695.

preparation of tri-, tetra-, and hexahalogenated derivatives of indigotin, 1908, A., i, 798.

preparation of chlorobromoindigotin, 1908, A., i, 1019.

preparation of a sulphur derivative of isatin, 1909, A., i, 735.

[preparation of substituted ω-halogenmethylanthraquinones], 1909, A., i, 941.

[preparation of p-aminophenyl-2-azimino-5-naphthol-7-sulphonic acid], 1910, A., i, 206. Gesellschaft für Chemische Industrie in Basel, [preparation of isomeric nitrobenzoyl derivatives of nitroanilines, nitrotoluidines, and their reduction products], 1910, A., i, 481.

preparation of oxyarylurethane carbamido- and thiocarbamido-cinnamic acid esters, 1910, A., i, 739.

[preparation of a "chlorothioin-digo"], 1911, A., i, 481.

preparation of indoxyl derivatives, 1911, A., i, 675.

preparation of derivatives and substitution products of 3-keto-(1)-thionaphthen, 1912, A., i, 487.

Gesellschaft für Teerverwertung, sodium derivative of indene, 1909, A., i,

preparation of indigotin from indole, 1911, A., i, 497.

preparation of derivatives and homologues of indole, 1912, A., i, 128.

Geserick, Arthur, the standardisation of sodium hydroxide solution for nitrogen by means of ammonium chloride, 1912, A., ii, 490.

Geserick, Arthur. See also Hermann

Leuchs.

Gesing, Richard. See August Michaelis. Gessard, C., reaction of oxydases with hydrogen peroxide, 1903, A., i, 590. animal tyrosmase, 1903, A., ii, 165.

animal antityrosinase, 1903, A., ii, 165.

antilaccase, 1903, A., ii, 316.

oxydases in cuttle-fish, 1903, A., ii, 441.

pigment of the suprarenal capsules, 1904, A., i, 539.

colour reactions; the result of the action of tyrosinase, 1904, A., i, 539. tyrosinase of Lucilia Caesar, 1904, A.,

ii, 831. anti-oxydasic serum, 1906, A., ii, 373.

the catalase from blood, 1909, A., ii, 682.

fibrin-ferment, 1910, A., i, 599. action of salts on the coagulation of the blood, 1912, A., ii, 181.

Gessard, C., and Jules Wolff, serum containing anti-amylase, 1908, A., i, 379. Gessler, Albert. See Kurt Arndt.

Gessner, L. See Hermann Ost.

Gestewitz, Kurt, the behaviour of carbon monoxide blood to certain precipitating agents, 1912, A., i, 325.

Getman, Frederick Hutton, viscosity of binary liquid mixtures, 1906, A., ii, 832.

viscosity of some salt solutions, 1907, A., ii, 744. Getman, Frederick Hutton, study of the solutions of some salts exhibiting negative viscosity, 1908, A., ii, 464.

viscosity of non-aqueous solutions of potassium iodide, 1908, A., ii, 668.

viscosity and ionic volume, 1908, A., ii. 930.

surface tensions of some unsaturated organic compounds, 1910, A., ii, 832.

optical properties of some unsaturated ketones, 1911, A., ii, 677.

differences of potential between cadmium and alcoholic solutions of some of its salts, 1911, A., ii, 888.

Getman, Frederick Hutton, and Vernette L. Gibbons, potentials of zinc in alcoholic solutions of zinc chloride, 1912, A., ii, 894.

Getman, Frederick Hutton, and Helen T. Gilroy, the refractive indices of solutions of the cadmium haloids, 1912, A., ii, 873.

Getman, Frederick Hutton, and F. B. Wilson, refractive indices of solutions, 1908, A., ii, 1001.

solubility determinations with the refractometer, 1909, A., ii, 357.

Getman, Frederick Hutton. See also Harry Clary Jones.

Gettler, A. O. See Henry Clapp Sherman.

Geuns, John Waterloo van. See Cornelis Adriaan Lobry de Bruyn.

Genter, Peter, emission spectra of phosphorus, 1907, A., ii, 725.

Geutsch, Curt. See Rütgerswerke-Aktiengesellschaft.

Gewecke, Julius, decomposition of mercurous chloride by solutions of alkali chlorides, 1904, A., ii, 125.

phosphides of titanium and zirconium, 1908, A., ii, 597.

some new compounds and double compounds of tervalent thallium, 1909, A., ii, 576.

the thallic salts of halogen oxy-acids, 1912, A., ii, 646.

Gewin, Jan Willem Anton, pepsin and chymosin (rennin), 1908, A., i, 71. Geyer, Alfred. See Wilhelm Autenrieth.

Geyer, Arno. See Walther Borsche.

Geys, K., the chemistry of barley glumes, 1911, A., ii, 529.

Gèze, J. B., effect of mineral manures on certain Cyperaceæ, 1909, A., ii, 429.

Gherardi, G. See Federico Giolitti. Ghiel, Benno von. See August Michaelis. Ghiglieno, Mario, new trimethylenepyrrole derivatives. I. and II., 1910, A., i, 427, 505.

Ghiglieno, Mario, new diethyltrimethylenepyrrole derivatives, 1911, A., i, 321.

GIB

action of phorone on catechol and pyrogallol, 1912, A., i, 186.

Ghosh, Atul Chandra. See Prafulla Chandra Rây.

Giacomo, Amatore de, a microchemical method for demonstrating the presence of guanine in tissues, 1911, A., ii,

Giaconi, Jakov. See Moritz Kohn. Giacosa, Piero, behaviour of carbon monoxide in the organism, 1904, A., ii, 56, 429.

Giaja, Jean, isolation of a biose derived from amygdalin, 1910, A., i, 300.

Giaja, Jean. See also Henri Bierry. Gialdini, Cesare, complex salts of iridium ; irido-oxalates, 1907, A., i, 1005; 1908. A., i, 3.

Gialdini, Cesare. See also Guido Bargel-

lini and Arturo Miolati.

Giampalmo, G. See Gino Galeotti. Gianfranceschi, Giuseppe, velocity of ions produced by a flame, 1906, A., ii,

Gianoli, Giuseppe, direct synthesis of the glycerides, 1911, A., i, 349; 1912, A., i, 72.

Gibbons, Vernette L. See Frederick Hutton Getman.

Gibbons, Willis A. See John William Turrentine.

Gibbs, Harry Drake, bunsen burners and combustion apparatus without gas, 1904, A., ii, 770.

boiling points of ammonia, methylamine, methyl chloride, and sulphur dioxide, 1905, A., ii, 570.

liquid methylamine as a solvent, and a study of its chemical reactivity, 1906, A., i, 933.

separation and estimation of salicylic acid and methyl salicylate; hydrolysis of methyl salicylate, 1908, A., ii, 906.

the compounds which cause the red colour in phenol, 1909, A., i, 221.

methyl salicylate. II. Solubility in water at 30°, 1909, A., i, 231.

the oxidation of phenol; the effect of some forms of light and of active oxygen on phenol and anisole, 1909, A., i, 640.

compounds which cause the red coloration of aniline. I. Effect of oxygen and ozone, and the influence of light in the presence of oxygen, 1910, A., i, 550.

Gibbs, Harry Drake, compounds which cause the red coloration of aniline. II. Effect of sunlight in the absence of oxygen and oxidising influences, and a comparison with the behaviour of mono- and di-methylaniline, 1911, A., i, 534.

action of sunlight on methyl alcohol,

1912, A., ii, 1119.

interference of hydrogen peroxide with the milk tests for formaldehyde, 1912, A., ii, 1218.

Gibbs, Harry Drake, and Carlton C. James, occurrence of arsenic in wines,

1906, A., ii, 197.

Gibbs, Harry Drake, R. R. Williams. and David Shepard Pratt, methyl salicylate. III. Coloration of methyl salicylate and some allied compounds in sunlight, 1912, A., ii, 1119.

Gibbs, Harry Drake. See also Edward

Curtis Franklin.

Gibbs, [Oliver] Wolcott, memorial lecture on (Clarke), 1909, T., 1299; P., 171. Gibello, Charles. See Alphonse Seyewetz.

Gibson, Charles Stanley, some molecular compounds of styphnic and pierie acids, 1908, T., 2098; P., 241.

Charles Stanley. See also

William Jackson Pope.

Gibson, George Ernest, nitrogen pentoxide as a nitrating agent, 1909, A., i, 11. an improved method of esterification, 1909, A., ii, 31.

Gibson, George Ernest. See also Alexander Crum Brown and John Gibson.

Gibson. John, conductivity of concentrated aqueous solutions of electrolytes, 1906, A., ii, 722.

significance of maximum specific electrical conductivity in chemistry,

1912, A., ii, 726.

John, and Robert Beckett Denison, precipitation of soluble chlorides by hydrochloric acid, 1911,

A., ii, 203.

Gibson, John, and George Ernest Gibson. electrically controlled thermostat and other apparatus for the accurate determination of the electrolytic conductivity of highly conducting solutions, 1910, A., ii, 260.

Gibson, James Andrew. See Hans Hugo Pringsheim, Charles Robert Sanger,

and Henry Augustus Torrey.

Gibson, Robert Banks, urine of the musk rat, 1903, A., ii, 672. estimation of nitrogen by Kjeldahl's

method, 1904, A., ii, 206. concentration of antitoxin for therapeutic use, 1906, A., ii, 110.

Gibson, Robert Banks, origin of taurocholic acid, 1909, A., ii, 504.

the nature of so-called artificial globulin, 1912, A., i, 669.

Gibson, Robert Banks, and Katharine R. Collins, fractionation of agglutinins and antitoxin, 1907, A., i, 884.

Gibson, Robert Banks, and Clarence Estes, estimation of phosphoric acid with uranium acetate, 1909, A., ii, 518.

colorimetric estimation of phosphorus with uranium acetate and potassium ferrocyanide, 1909, A., ii, 829.

Gibson, Robert Banks. See also Edwin J. Banzhaf and Lafayette Benedict

Mendel.

Gibson, R. J. Harvey, physiological properties of West African boxwood,

1906, A., ii, 187.

Gibson, William Howieson, Christopher Maurice Walter Grieb, estimation of iodates in presence of chlorates, 1907, A., ii, 985.

Giemsa, G., melting point of glycuronic acid semicarbazone, 1904, A., i,

690.

a new rapid filter, 1904, A., ii, 722. storage and retention of quinine in the human organism, 1909, A., ii, 77.

the excretion of quinine by the dog, and a new method for the estimation of this alkaloid, 1912, A., ii,

Gierig, Emil. See Karl Auwers.

Gierke, Edgar, iodine in bony tumours with thyroid-like structure, 1903, A., ii. 164.

Gies, William John, mucoids, 1903, A., i, 374.

influence of the hydrogen ion in peptic proteolysis, 1903, A, ii, 309. a protein reaction involving the use of

chromate, 1903, A., ii, 399.

irritability of the brain during anæmia, 1903, A., ii, 443.

peptic proteolysis, 1903, A., ii, 559. Sarracenia purpurea, 1903, A., ii, 569.

metabolism experiments, 1904, A., ii, 185.

urea of human urine, 1904, A., ii, 192.

cage for metabolism experiments, 1905, A., ii, 839.

the identity of Thudichum's phrenosin and Thierfelder's cerebron, 1906, A., i, 871.

protagon, 1907, A., i, 995.

a reagent for the biuret test, 1910, A.,

Gies, William John, enzymes as possible factors in the development of cedema,

1912, A., ii, 856.

Gies, William John, and Samuel James Meltzer, influence of artificial respiration on strychnine spasms, 1903, A., ii. 317.

Gies, William John. See also William N. Berg, Arthur F. Chase, Frank R. Elder, A. D. Emmett, Philip Bouvier Hawk, H. D. House, J. L. Kantor, J. E. Kirkwood, William Wolfe Lesem, Jacques Loeb, Clarence Earl May, Gustave M. Meyer, Edward R. Posner, Jacob Rosenbloom, Bert Russell, Christian Siefert, Matthew Steel, and William Allan Taltavall.

Giese, Oscar. See Johannes Thiele. Giese, Wilhelm. See Heinrich Biltz. Giesecke, E. See Walter Cronheim.

- Giesel, Friedrich Oscar, radium and radioactive substances, 1903, A., ii, 20.
 - emanation-substance from pitchblende and radium, 1903, A., ii, 193. polonium, 1903, A., ii, 299.

polonium and the inductive property of radium, 1903, A., ii, 603.

emanation substance; emanium, 1904,

A., ii, 462, 800.

occurrence of radium and of radioactive noble earths in Fango mud and soil from Capri, 1905, A., ii, 132.

emanium, 1905, A., ii, 220.

simple recognition of helium from radium bromide, 1905, A., ii, 496.

"thorium activity" of monazite, 1905, A., ii, 498.

β-polonium, 1906, A., ii, 212, 260. spectrum of helium from radium bro-

mide, 1906, A., ii, 514.

the first decomposition products of actinium (emanium); a new emanation; formation of helium from actinium, 1907, A., ii, 597.

extraction of polonium, and its properties, 1908, A., ii, 342.

polarisation phenomena in liquid crystals of cholesterol ester, 1910, A., ii, 371.

Gieseler, Erich. See Hermann Leuchs. Gieser, Karl. See August Klages. Giffen, H. J. van, Vortmann's nitro-

Giffen, H. J. van, Vortmann's nitroprusside reaction for hydrogen cyanide, 1910, A., ii, 1009.

Giffon, Jan van. See Mario Betti.
Gifford, J. William, refractive indices of water and of sea-water, 1907, A., ii, 205.

Gifford, J. William, and William Ashwell Shenstone, optical properties of vitreous silica, 1904, A., ii, 332.

Gigli, Torquato, benzidine as a reagent for the recognition of blood stains, 1911, A., ii, 348.

natural gas in the neighbourhood of Pisa, 1912, A., ii, 564.

estimation of uric acid in urine by means of iodine, 1912, A., ii, 814.

Giglioli, *Italo*, probable function of the essential oils and other volatile products of plants as the cause of the movement of sap in living tissues, 1912. A., ii. 79.

Giglioli, *İtalo*, and *Giulio* Masoni, the biological absorption of methane, and the distribution of Kaserer and Söhngen's organism in soils, manure, etc., 1910, A., ii, 435.

Gigon, Alfred, the influence of protein and carbohydrate on metabolism,

1909, A., ii, 683.

influence of intake of food on gaseous metabolism and energy production, 1911, A., ii, 741.

1911, A., ii, 741.

Gigon, Alfred, and T. Rosenberg, action of manganese and iron sulphates on diastatic ferments, 1908, A., ii, 870.

Gigon, Alfred. See also Emil Abderhalden, Wilhelm Falta, and Walther Frey.

Gil, Manuel T., modification of V. Meyer's vapour density apparatus, 1912, A., ii, 537.

Gilbard, John Francis Hutchins, a reaction for caulophyllin, 1911, A., ii, 670.
 Gilbert, A., M. Herscher, and Swigel

Posternak, estimation of bilirubin in serum, 1904, A., ii, 303.

Gilbert, Adolph, analysis of native molybdenum sulphide, 1906, A., ii, 707. method of dissolving tinstone, 1911, A., ii, 71.

Gilbert, Adolph. See also Paul Hett.
Gilbert, L. O. See Frederick Levy
Dunlap.

Gilbert, Ralph Davis. See Frank Austin Gooch and Thomas Burr Osborne.

Gilchrist, J. Milton, the fruit of Aralia hispida, 1909, A., ii, 513.

Gilchrist, Lachlan, electrolysis of acid solutions of aniline, 1905, A., i, 45.

Gildemeister, Eduard, and Hugo Köhler, occurrence of a β-pinene and l-pinocamphone in hyssop oil, and some observations on isomerides in the pinene series, 1910, A., i, 180.

Gildemeister, Eduard, and Wilhelm Müller, constituents of oil of lemon,

1910, A., i, 185.

Gile, P. L. See David William May. Giles, William Brantingham, bakerite (a new borosilicate of calcium, and howlite from California, 1904, A., ii,

estimation and separation of thoria from the oxides of the yttriumcerium group, 1905, A., ii, 615.

the opening-up of minerals containing tantalum, niobium, and titanium, 1909, A., ii, 352.

Gill, Augustus Herman, and Laurence R. Forrest, hydrocarbons of the wool

grease oleins. I., 1910, A., i, 705. Gill, Augustus Herman, and Charles G. Tufts, does cholesterol occur in maize oil? 1903, A., i, 417.

does cholesterol occur in olive oil? 1903, A., i, 557.

sitosterol, a possible test for maize oil, 1903, A., ii, 517.

Gill. Eugene Edward. See Harmon

Northrop Morse.

Gill, Ernest Walter Brudenell, and Frederick Bernard Pidduck, genesis of ions by collision of positive and negative ions in a gas; experiments on argon and helium, 1908, A., ii, 798.

ionisation by collision in helium, 1912,

A., ii, 515.

Gill, F. W., F. G. Allison, and Harry Sands Grindley, estimation of urea in urine, 1910, A., ii, 82.

Gill, F. W., and Harry Sands Grindley. estimation of total sulphur in urine,

1909, A., ii, 263, 516.

preservation of urine [for analysis] by thymol and refrigeration, 1909, A., ii, 772.

total nitrogen estimation by the Kober method, 1909, A., ii, 1051.

Gill, F. W., Harry Sands Grindley, and J. B. Peterson, estimation of phosphorus in foods, fæces, and urine, 1909, A., ii, 518.

Gillels, M. R. See Efim Semen

London.

Gillet, Alf., mechanism of osmosis, 1912, A., ii, 1043.

Gillet, Camille, aqueous solutions, 1909, A., ii, 388.

nature of electricity and its connexion with chemical reactions, 1910, A., ii,

transformation of ferricyanic acid into ferrocyanic acid and the hydrolysis of ferric, zinc, and aluminium chlorides, 1912, A., i, 614.

reduction of zinc oxide by hydrogen,

1912, A., ii, 554.

Gillet, Camille, osmotic pressure of aqueous solutions, 1912, A., ii, 1043. influence of sodium chloride on the composition of calcareous waters.

Gillett, Horace Wadsworth, electrolytic separation of silver and copper, 1908, A., ii, 226.

cuprous hydroxide and cuprous oxide,

1912, A., ii, 1171.

1909, A., ii, 483. constant current electro-analysis,

1909, A., ii, 521.

temperature measurements in an experimental carborundum furnace.

1911, A., ii, 486. Gillett, Horace Wadsworth. See also J. A. Wilkinson.

Gillette, C. E., fruit of Viburnum lentago, 1911, A., ii, 529.

the effect of continued grinding on water of crystallisation, 1912, A., ii, 150.

Gilli, Emilio. See Fritz Ullmann.

Gilliad, P., Monnet & Cartier. See Société Chimique des Usines du Rhône.

Gillièron, Ernest. See Louis Pelet-Jolivet.

Gilling, Charles, the constituents of Simaruba bark, 1908, A., ii, 527.
Gilling, Charles. See also Arthur

William Crossley.

Gillot, Henri, properties of mixtures; melting points of some mixtures of sugars, 1904, A., ii, 804.

Gillot, Henri, and A. Grosjean, application of the pyknometric method to the determination of the weight and volume of precipitates suspended in liquids, 1906, A., ii, 488.

Gilmour, Robert, the mutarotation of glucose and its nitrogen derivative,

1909, P., 225.

Gilmour. Robert. See also James Colquhoun Irvine. See Carl Hamilton

Gilmour, Walter. Browning.

Gilpin, Joseph Elliott, and Oscar Ellis Bransky, diffusion of crude petroleum through fuller's earth, 1910, A., ii, 963.

Gilpin, Joseph Elliott, and Marshall Perley Cram, fractionation of crude petroleum by capillary diffusion, 1909, A., i, 1.

Gilroy, Helen T. See Frederick Hutton Getman.

Gilson, Eugène, two new glucotannoids, 1903, A., i, 355.

Gimel, Gilbert, adaptation of yeast to sulphurous acid, 1906, A., ii, 477.

Gimel, Gilbert, influence of inorganic salts, particularly of stannous chloride. on fermentation, 1909, A., ii, 171.

Gimel. Gilbert. See also Henri Alliot. Gimingham, Conrad Theodore, action of carbon dioxide on Bordeaux mixture. 1911, A., ii, 764.

formation of calcium carbonate in the soil by bacteria, 1912, A., ii, 75.

Gimingham, Conrad Theodore. See also Alfred Daniel Hall and Robert Le Rossignol.

Gin, Gustave, electrolytic preparation of vanadium and its alloys, 1904, A., ii,

electrolytic preparation of aluminium,

1904, A., ii, 341.

preparation of iron phosphide from calcium phosphate, 1905, A., ii, 92.

treatment of uranium-vanadium metals and the electrolytic preparation of vanadium, 1906, A., ii, 862.

a new manganese silicide, 1907, A., ii, 92.

Ginneken, P. J. H. van, mercurous sulphate as depolariser in Weston and Clark normal cells, 1911, A., ii,

sugar solution and lime, 1912, A.,

Ginneken, P. J. H. van, and Hugo Rudolph Kruyt, normal elements, 1911, A., ii, 962.

Ginneken, P. J. H. van. See also Ernst

Cohen.

Ginsberg, Alexander Semenovitsch, determination of the constitution of amines and other ammonia derivatives by aid of permanganates, 1903, A., i, 794.

isomorphism of calcium and manganese bisilicates, 1908, A., ii, 842.

compounds of magnesium and sodium sulphates, 1909, A., ii, 143.

some artificial aluminosilicates of the type RO, Al₂O₃, 2SiO₂, 1912, A., ii,

fusion experiments with calcium and magnesium [and potassium] silicates and sulphates, 1912, A., ii, 919.

Ginsberg, Theoph. See Carl Engler. Ginsberg, Wilhelm, oxyproteic acid in urine, 1907, A., ii, 980. diuresis, 1912, A., ii, 1079.

Gintl, Wilhelm Heinrich, experiments on the reduction of nitrobenzene, 1903, A., i, 242.

Ginzberg, Alexander, the chemical reactions of kumiss and kephir fermentation. I. The kumiss of the steppes, 1911, A., ii, 140.

Ginzberg, Alexander, the chemical reactions of kumiss and kephir fermen-II. Artificial kumiss and tation. kephir, 1911, A., ii, 140.

Giolitti, Federico, periodates of lead and

copper, 1903, A., ii, 211.

action of phosphorus pentachloride on chloral, 1904, A., i, 557.

estimation of uranium, 1904, A., ii. 783.

dilatometric measurements of tautomeric substances, 1905, A., ii, 12.

normal basicity of alkali periodates. 1905, A., ii, 311.

conditions of stability of certain suspensions, 1905, A., ii, 823.

properties of ammonium uranate,

1905, A., ii, 861.

use of metallic deposits in the micrographical examination of alloys, 1906, A., ii, 759; 1908, A., ii, 945.

nature of pseudo-solutions of ferric hydroxide, 1906, A., ii, 857; 1908, A., ii, 950.

Giolitti, Federico, and Giovanni Agamennone, oxyfluoride of uranium,

1905, A., ii, 255. Giolitti, Federico, and L. Astorri. manufacture of cementation steel. IV. Specific functions of gaseous and solid cementation agents, 1910, A., ii, 507.

Giolitti, Federico, and Battisti, nature of pseudo-solutions of ferric hydroxide. II., 1906, A., ii, 857.

Giolitti, Federico, and G. Bucci, equilibrium phenomena with the hydrates of uranous sulphate. I. Properties of uranous sulphate, 1905, A., ii, 827.

equilibrium phenomena with the hydrates of uranous sulphate. II. Octahydrate and tetrahydrate of uranous sulphate, 1905, A., ii, 827.

Giolitti, Federico, and Federico Carnevali, manufacture of cementation steel. V. Cementation with strongly compressed gases, 1910, A., ii, 507. manufacture of cementation steel.

VI., 1910, A., ii, 616.

cementation of nickel steel. I., 1911, A., ii, 609.

the cementation of chromium steels, 1911, A., ii, 728.

Giolitti, Federico, Federico Carnevali, and G. Gherardi, the production of malleable cast-iron, 1909, A., ii, 240.

Giolitti, Federico, and O. Ceccarelli, corrosion of bronzes in solutions of electrolytes, 1910, A., ii, 217.

Giolitti, Federico, and G. Liberi, equilibrium phenomena with the hydrates of uranous sulphate. III. The hexahydrate, pentahydrate, and sulphates, 1906, A., ii, 861.

Giolitti, Federico, and Mario Marantonio, special bronzes. I. Lead bronzes, 1910,

A., ii, 504.

Giolitti. Federico, and Ernesto Pannain, variations in the structure of coinage bronze during working, 1909, A., ii,

Giolitti, Federico, and Giovanni Tavanti, alloys of copper and tin, 1908, A.,

ii, 946.

preparation of uranium, 1908, A., ii, 951.

manufacture of cementation steel. VII. Cementation based on the specific action of carbon monoxide, 1910, A., ii, 780.

Giolitti, Federico, and V. Vecchiarelli, double carbonate of uranyl and am-

monium, 1905, A., ii, 826.

Giorgis, Giovanni, and Gino Gallo, pozzuolana and its technical value, 1906, A., ii, 447.

Giovetti, R., action of water on nitrosohydrazines, 1909, A., i, 738.

Giovetti, R. See also Giacomo Ponzio. Giran, Henri, transformation of pyrophosphoric into orthophosphoric acid, 1903, A., ii, 139.

thermochemistry of metaphosphoric acid, 1903, A., ii, 197.

heat of combustion of phosphorus; phosphoric oxide, 1903, A., ii, 270. heat of transformation of white phos-

phorus into red phosphorus, 1903,

A., ii, 362.

researches on phosphorus and phosphoric acids, 1904, A., ii, 166.

combustion of sulphur in the calorimetric bomb, 1905, A., ii, 76, 505. existence of sulphides of phosphorus,

1906, A., ii, 226.

apparatus for cryoscopic determinations, 1907, A., ii, 329.

hydrates of the phosphoric acids, 1908, A., ii, 685.

molecular weights of the phosphoric acids determined by cryoscopy, 1908, A., ii, 686.

Girard, Charles, and E. Rousseaux, fertilising principles required by the tobacco plant, 1905, A., ii, 345.

Girard, J. See Volcy-Boucher.

Girard, [Marcel Marie] Joseph de, and Antoine de Saporta, use of hydrazine sulphate in gasometric analysis, 1904, A., ii, 678.

Girard, [Marcel Marie] Joseph de, and Antoine de Saporta, gasometric estimation of copper salts by means of hydrazine sulphate, 1907, A., ii, 400. Girard, Max. See Herman Decker.

Girard, Pierre, variation of the electromotive force of liquid chains by polarisation of interposed phragms, 1908, A., ii, 456.

part played by contact electrification in the permeability of membranes to electrolytes, 1909, A., ii, 463.

physico-chemical interpretation of the differences of potential existing in living tissues, 1909, A., ii, 537.

preponderating rôle of two electrostatic factors in the osmosis of solutions of electrolytes; normal osmotic movements, 1911, A., ii, 860.

the electrical charge of the red blood

corpuscle, 1912, A., ii, 954. Girard, Pierre, and Victor Henri, molecular state of substances in solution, 1912, A., ii, 24.

Girardet, Fernand, dissociation of ammoniacal ferrous chlorides and the formation of ferrous nitride, 1911, A.,

ii, 43.

Girard-Mangin. (Mme.), and Victor Henri, agglutination of red corpuscles by colloidal ferric hydroxide, sodium chloride, and different serums, 1904, A., ii, 496.

Giraud, M., behaviour of phenolphthalein towards neutral and acid carbonates of

the alkalis, 1903, A., ii, 543.

Girdwood, Gilbert P., apparatus for evaporating ethereal solutions, 1910, A., ii, 117.

Girsewald, Conway von, the action of hydrogen peroxide on hexamethylenetetramine, 1912, A., i, 835.

Girsewald, Conway von, and A. Wolokitin, potassium perborates, 1909, A., ii, 312.

Conway von. See also Girsewald, Frederick Pearson Treadwell.

Girvan, Arthur Frank, the union of carbon monoxide and oxygen, and the drying of gases by cooling, 1903, P., 236; discussion, P., 238.

Gisiger, Erwin, di-p-methylbenzilic acid (pp'-tolilic acid), 1906, A., i, 958.

Gisiger, Erwin. See also Fritz Fichter. Githens, Thomas Stotesbury, influence of inanition and removal of blood on the composition of blood-plasma, 1904, A., ii, 747.

Gittel, Willy, action of hydroxylamine on dimethyldihydroresorcin, 1906, A.,

i, 169.

Gittelmacher-Wilenko, Gerson, estimation of xanthine bases and uric acid in urine, 1903, A., ii, 48.

hippocoprosterol, 1906, A., i, 759.

Gittins, James Mylam. See John Joseph Sudborough.

Giua, Michele. See Guido Bargellini and

Hermann Leuchs.

Giuffrida, G., and A. Chimienti, action of pyruvic and pyrotartaric acids on the p-aminophenols, 1904, A., i, 1047.

Giuganino, L. See Francesco Marino-Zuco.

Giulini. Wilhelm. See Theodor Curtius. Giumelli, D. See Giuseppe A. Plancher. Giusti, G., estimation of lead in alloys of tin and lead, 1906, A., ii, 581.

Giustiniani, Ercole. See Raoul

Bouilhac.

Givaudan, Léon. See Rudolf Barge. Given, Arthur, constant temperature

bath for low temperatures, 1906, A., ii,

Givens, Maurice Hope. See Andrew Hunter.

Gizelt, A., influence of alcohol on the activity of the pancreatic enzymes, 1906, A., ii, 373.

Valdemar Gjaldbak, J. K.See

Henriques. Gladstone, John Hall, obituary notice of, 1905, T., 591.

Gläser, Moritz. See Alfred Coehn.

Glaessner, Arthur, formation of formaldehyde from methyl alcohol under the influence of colloidal metallic solutions, 1903, A., i, 8.

Glaessner, Arthur. See also Emil Baur.

Glaessner, Karl, protein digestion in the stomach, 1903, A., ii, 85.

antitryptic action of the blood, 1903, A., ii, 493.

human pancreatic juice, 1904, A., ii, 270; 1912, A., ii, 778.

Glaessner, Karl, and Ernst Peter Pick, phloridzin diabetes, 1907, A., ii, 141. behaviour of phloridzin after extirpation of the kidneys, 1910, A., ii, 639, 1094.

the relationship between the pancreas and suprarenals, 1912, A., ii, 782.

Glaessner, Karl, and Alice Stauber, the real relation of trypsin to erepsin, 1910, A., ii, 627.

Glagoleff, M., the minute structure of the spectral lines of mercury, 1911,

A., ii, 450.

Glagoleff, P., the regeneration of proteins in the mucous membrane of the stomach, 1911, A., ii, 625.

Glahn, Wilhelm. See Theodor Zincke. Glamser, Fidel. See Emil Abderhalden. Glascock, Ben Leon, metallic strontium, 1910, A., ii, 954.

Glascock, Ben Leon. See also Joel H.

Hildebrand.

Aladar, new receiver Glaser. for vacuum distillations, 1912, A., ii, 548.

Glaser, Erhard, action of hydrogen cyanide on methyloldimethylacetaldehyde, 1904, A., i, 284.

thermometers as thermo-regulators,

1910, A., ii, 101.

Glaser, Ferdinand, reduction of metallic oxides in a current of hydrogen, 1903,

A., ii, 646.

Glaser, Fritz, electrolytic estimation of mercury and the solubility of platinum in potassium cyanide, 1903, A., ii, 242.

the valuation and technical extraction of uranium mieas, 1912, A., ii,

Glaser, Fritz, and A. Isenburg, detection of mercury in urine, 1910, A., ii, 75.

See also Ferdinand Glaser, Fritz. Henrich.

Glaser, Heinrich. See Fritz Fichter. Glaser, Rudolf. See Theodor Curtius.

Glasmann, Boris, volumetric estimation of p-nitrotoluene in crude nitrotoluene, 1904, A., ii, 151.

iodometric estimation of uranium in uranyl compounds, 1904, A., ii, 214. separation of vanadium from alu-

minium and iron, 1904, A., ii, 450. volumetric estimation of chromium

and iron simultaneously present, 1904, A., ii, 844. reduction of molybdenum compounds

sulphuric acid solution by magnesium, 1905, A., ii, 168. combined oxidimetric method for the estimation of molybdenum trioxide and vanadium pentoxide in presence

of one another, 1905, A., ii, 208. new iodometric estimation of alkali

heptamolybdates, 1905, A., ii, 209. two new methods for the estimation

of dextrose, 1906, A., ii, 203. estimation of urea, 1906, A., ii, 314. quantitative separation of glucinum

from aluminium, 1906, A., ii, 902. estimation of glucinum, 1906, A., ii, 902.

constitution of the salts of glucinum with the fatty acids and the valency of glucinum, 1907, A., i, 109.

bivalency of glucinum; glucinum picrate, 1907, A., i, 695. glucinum chromate, 1907, A., ii, 545.

421

Glasmann, Boris, theoretical consideration of the isomerism of fumaric and maleic acids, 1911, A., i, 261.

Glasmann, Boris, and A. Novicky, constitution of glucinum salts of fatty acids; new glucinum ortho-salts and salts of other elements with organic ortho-acids, 1908, A., i, 120.

Glasmann, Boris. See also Armand

Roesler.

Glasser, E., nepouite, a new hydrated silicate of nickel and magnesium, 1907, A., ii, 101.

Glassner, Fritz, 4-hydroxydeoxybenzoin-3-carboxylic acid, 1907, A., i, 583. Glassner, Fritz, and Wilhelm Suida,

cause of the decoloration of coloured liquids by means of various charcoals, 1907, A., ii, 932; 1908, A., ii, 669. Glasson, J. L., secondary Röntgen rays

from metallic salts, 1910, A., ii, 674. Glattfeld, J. W. E. See Charles E. Bolser.

Glatz, Ernst. See Julius Schmidt. Glatzel, C., triple acting wash and absorption bottle, 1904, A., ii, 20.

Glatzel, Emanuel, normal sodium thiophosphate, containing water crystallisation, 1905, A., ii, 318.

barium orthothioarsenate, Ba₃As₂O₈,6H₂O, 1911, A., ii, 282.

potassium barium orthothioarsenate, KBaAsS₄, 6H₂O; (K₃AsS₄, Ba₃As₂S₈,-18H₂O), 1911, A., ii, 801.

potassium barium orthothioanti-

monate, 1911, A., ii, 980.
Glauser, R. Th., preparation of selenie acid from selenious acid, 1907, A., ii, 614.

thallous selenate, Tl₂SeO₄, 1910, A., ii, 504.

Glawe, Alfred. See Carl Liebermann. Gleditsch, (Mlle.) Ellen, tert.-amylbenzene derivatives, 1907, A., i, 24. the lithium contained in radioactive

minerals, 1908, A., ii, 9, 246. radium and uranium in radioactive minerals, 1909, A., ii, 533, 714; 1911, A., ii, 845.

Gleditsch, (Mlle.) Ellen. See also (Mme.) Marie Curie.

Glegg, Robert Ashleigh, hay-fever, 1904, A., ii, 578.

Glendinning, William Gerald, and Alfred Walter Stewart, some time-reactions suitable for lecture experiments, 1912,

Glendinning, William Gerald. See also

Cecil Reginald Crymble.

Glenn, T. H., variation and carbohydrate metabolism of bacilli of the Proteus group, 1911, A., ii, 639.

Glenn, T. H. See also Albert Prescott Mathews.

Glenny, A. T., and George Stanley Walpole, the action of rubber on mercurial antiseptic solutions, 1911, A., ii, 141.

Gley, Eugène, toxicity of Selachian blood. 1904, A., ii, 578.

Gley, Eugène. See also Lucien Camus.

Glikin, J. See Richard Meyer. Glikin, W., estimation of fat in animal

matters, 1903, A., ii, 458. lecithin in bone-marrow, 1907, A., ii,

the biological importance of lecithin, 1908, A., ii, 120; 1909, A., ii, 750.

percentage of iron in fats, lipoids, and waxes, 1908, A., ii, 407.

the biological significance of lecithin. III. The lecithin and iron content of human milk and cow's milk, 1909, A., ii, 1038.

the biological significance of lecithin. IV. The blood-content of phosphorus and iron in lipoid form in cases of Polycythaemia rubra megalosplenica, 1910, A., ii, 58.

Glikin, W., and Adolf Loewy, the autolytic and hydrolytic degradations of protein under normal and pathological conditions, 1908, A., ii, 714.

Glimm, Engelhardt, estimation of nitrogen in barley, 1905, A., ii, 201.

Glimm, Engelhardt. See also Alfred Wohl.

Glinin, S. See Leo A. Tschugaeff. Glinka, Konstantin D., weathering processes, 1909, A., ii, 493.

See Glinka, Nikolaus. Nicolai D. Zelinsky.

Glinka, Sergei F., crystals of calcium hydroxide in Roman cement, 1909, A., ii, 482.

Stanislaus, precipitation of Glixelli, metals by hydrogen sulphide; action of hydrogen sulphide on zinc salts, 1907, A., ii, 868.

Glogau, Arthur, methyl hydrogen phthalonate, 1904, A., i, 673.

Rudolf Glogau, Arthur. See also

Wegscheider. Gloth, Hans Waldemar. See Alfred

Heiduschka.

Glover, Walter Hamis, a-methylcamphor and fenchone, 1908, T., 1285; P.,

studies of the processes operative in Part XIV. The detersolutions. minations of apparent hydration values by means of raffinose, 1910, P., 298; 1911, T., 371.

Glover, Walter Hamis, studies of the processes operative in solutions. Part XV. The changes effected by the reciprocal interference of sugar (and glucosides) and salts in aqueous solutions, 1910, P., 298; 1911, T., 379.

Glover, Walter Hamis, and Thomas Martin Lowry, studies of dynamic isomerism. Part XIII. Camphorcarboxylamide and camphorearboxypiperidide; an illustration of Barlow and Pope's hypothesis, 1910, P., 162; discussion, P., 163; 1912, T., 1902; P., 185.

Glover, Walter Hamis. See also Henry Edward Armstrong, Arthur Hantzsch, Thomas Martin Lowry, Oswald Silberrad, and Frederick Palliser Worley.

Rachmil. See Joachim Glücksberg, Biehringer.

Glund, Wilhelm. See Emil Fischer. Gmeiner, Max. See August Michaelis. Gmelin, Erwin. See Heinrich Wieland. Gmelin, Walter, the gastric juice of newborn dogs, 1904, A., ii, 672.

Gmo-Salazar. See Henri Bierry. Gnädinger. See Fritz Frank.

Gnehm, Robert, benzylethylaniline, 1905, A., i, 273.

Gnehm, Robert, and Leo Bauer, oxazones, 1905, A., i, 831.

Gnehm, Robert, and Hermann Bots, some amino- and aminohydroxy-diphenylamines, 1904, A., i, 451.

Gnehm, Robert, and Felix Kaufler, immedial-pure-blue, 1904, A., i, 687, 935.

estimation of methyl alcohol in formaldehyde, 1904, A., ii, 520; 1905, A., ii, 209.

thiazines, 1906, A., i, 389.

Gnehm, Robert, and Oskar Knecht, nitrophenolsulphonic acids, 1906, A., i, 578, 835.

Gnehm, Robert, and Alfred Schindler, thiazines. II. Derivatives of tetraethylthionine, 1908, A., i, 110.

Gnehn, Robert, and Albert Schönholzer, thiazines. III. Derivatives of alkylated benzylanilines, 1908, A., i, 112.

Gnehm, Robert, and Walther Schröter, indamines and thiazines, 1906, A., i,

Gnehm, Robert, and Emil Walder, methylene-green, 1906, A., i, 390. thiazines. I. Derivatives of methylene-blue, 1908, A., i, 63.

Gnehm, Robert, and Gottlieb Weber, some amino- and aminohydroxy-diphenylamines, 1904, A., ii, 532.

Gnehm, Robert, jun. See Carl Graebe. Gnesotto, Tullio, and Maria Binghinotto, magnetic constants of feebly magnetic alloys, 1911, A., ii, 251.

Gnesotto, Tullio, and Giuseppe Crestani, specific rotatory power of nicotine dissolved in mixtures of water and ethyl alcohol, 1905, A., ii, 130.

Gnezda, Julius, indoxyl in pathological

urines, 1903, A., ii, 563.

colour reactions of indole derivatives with sugars, 1909, A., ii, 451.

Goadby, Kenneth, experimental lead poisoning, 1909, A., ii, 508.

Gobbi, Emile, metallic filter with adjustable uniform interstices reducible to ultramicroscopic dimensions, 1909, A., ii, 600.

Gockel, Albert, amount of radioactive emanation in air from the soil, 1908. A., ii, 452.

radioactivity of the atmosphere, 1909, A., ii, 363.

radioactivity of preparations of zirconium, 1909, A., ii, 956.

the radioactivity of rocks, 1911, A., ii,

the penetrating radiation present in the atmosphere, 1912, A., 416.

Gockel, Albert, and Th. Wulf, radioactivity of the atmosphere on moun-

tains, 1909, A., ii, 109. Gockel, Heinrich. See Theodor Curtius. Godby, Michael Harry, the isomerism of the double sulphites of sodium and potassium, 1907, P., 241.

Godchot, Marcel, tetrahydro- and octahydroanthracenes, 1904, 987.

oxidation products of octahydroanthracene, 1905, A., i, 201.

some derivatives of octahydroanthracene and perhydroanthracene, 1906,

A., i, 76. me hydroanthracene some derivatives. 1906, A., i, 494.

constitution of octahydroanthracene, 1907, A., i, 308.

octahydroanthracene and its derivatives, 1907, A., i, 836.

hexahydroanthrone and its derivatives, 1907, A., i, 840.

dihydro-9-hydroxyanthranol and its

derivatives, 1907, A., i, 841. formation of phthalide, 1907, A., i, 849.

the hydroanthracenes and their derivatives, 1908, A., i, 16.

hydrogenation of triphenylmethane; tricyclohexylmethane, 1909, A., i, 19. Godehot, Marcel, derivatives of phenyldicyclohexylmethane, 1910, A., i, 104.

hexahydroacetophenone [cyclohexyl methyl ketone] and hexahydrobenzoylacetone, 1911, A., i, 134.

hexahydrohippuric acid, 1911, A., i,

369.

Godchot, Marcel, and Jules Frézouls, cyclohexylglycollic acid, 1910, A., i, 480.

Godchot, Marcel, and Felix Taboury, catalytic hydrogenation of cyclopentanone, 1911, A., i, 385.

derivatives of cyclopentanone, 1912,

A., i, 34.

some cyclopentane glycols, 1912, A., i, 552.

Godchot, Marcel. See also Émile Jungfleisch.

Goddard, Walter Horace, alcohol as a

food, 1904, A., ii, 827.

Godden, William, condensation products from aminopinenedicarboxylic acid,

1908, T., 1171; P., 144. Godden, William. See See also Arthur Clayton, Gilbert Thomas Morgan, and Frederick William Pavy.

Godefroy, L. See Eugène Varenne.

Godet, Ch. See W. I. Baragiola and Ernst Schulze.

Godfrin, P., bismuth benzoates, 1910, A., i, 842.

Godlewski, Emil, formation of proteins in plants, 1903, A., ii, 678.

intramolecular respiration of plants,

1904, A., ii, 507.

Godlewski, Tadeusz, dissociation of electrolytes in alcoholic solutions, 1904, A., ii, 701.

actinium and its successive products, 1905, A., ii, 497.

some radioactive properties of ura-

nium, 1905, A., ii, 498. absorption of the \$\beta\$- and \$\gamma\$-rays of

actinium, 1905, A., ii, 666. Godlewsky, J. O., cyclene bromide (solid pinene bromide), 1905, A., i, 654.

Goebel, Erich. See EmilAbderhalden.

Goebel, J. B., numerical examples of the new theory of solutions, 1903, A., ii, 63.

more exact equation of condition for gases, 1904, A., ii, 311, 706; 1905,

A., ii, 149.

modification of van't Hoff's theory of the depression of the freezing point, 1905, A., ii, 679; 1906, A., ii, 332.

Goebel, J. B., relations between the freezing-point depression, ionic concentration and conductivity of electrolytes, 1910, A., ii, 268.

calculation of equilibrium constants from cryoscopic measurements, 1911,

A., ii, 1078.

Goecke, Emil, electrolytic reduction of p-nitrotoluene dissolved in hydrochloric acid in presence of formaldehyde, 1903, A., i, 615.

electrolysis of tetraethylammonium

iodide, 1904, A., i, 559.

Goecke, Otto, the electric vacuum furnace, 1911, A., ii, 1053.

Goecke, Otto. See also Otto Ruff.

Göckel, Heinrich, report on graduated vessels at the Sixth International Congress for Applied Chemistry at Rome, 1906, A., ii, 576.

air-trap for burettes, reagent reservoirs,

etc., 1911, A., ii, 328.

laboratory apparatus of coloured glass for working with substances sensitive to light, 1912, A., ii, 1160.

Göddertz, Albert. See Emil Fischer. Gödecker, H., and Rudolf Rose, new condenser for vacuum distillations, 1911, A., ii, 468.

Göhl, Friedrich. See Richard Stoermer. Göhlich, Wilhelm, a case of poisoning by sewer-gas, 1911, A., ii, 221.

Goehring, Alfred. See Ernst Schmidt. Göller, Hermann. See Carl Bülow and Hermann Staudinger.

Göncz, Dionys von. See Emil Fromm. Goerens, Paul, influence of foreign substances on the diagram of condition of the alloys of iron and carbon, 1909, A., ii, 892.

Goerens, Paul, and W. Dobbelstein, the ternary system: iron-phosphorus-carbon, 1908, A., ii, 1042.

Goerens, Paul, and K. Ellingen, the influence of antimony and tin on the iron-carbon system, 1910, A., ii, 298.

Goerens, Paul, and A. Stadeler, influence of chromium on the solubility of carbon in iron and on the formation of graphite, 1907, A., ii, 92.

Goerges, Hans, and Arthur Stähler, reduction of titanium chloride by hydrogen, 1909, A., ii, 894.

Görgey, R., occurrence of salts at Hall, Tyrol, 1910, A., ii, 309. mesolite, 1910, A., ii, 312.

Görner, P. See Leopold Rosenthaler. Göschke, A., and Josef Tambor, synthesis of butein, 1912, A., i, 30.

synthesis of butin, 1912, A., i, 195.

Göschke, A., and Josef Tambor, a contribution to the knowledge of phloroglucinol, 1912, A., i, 446.

Gössel, Fr., importance of calcium and magnesium salts for plants, 1905, A.,

ii, 51.

Goessmann, G., alkaloids of Anagyris

foetida, 1906, A., i, 378.

Goetsch, Emil, Harvey Cushing, and Conrad Jacobson, carbohydrate tolerance and the posterior lobe of the hypophysis cerebri, 1911, A., ii, 745.

Goetsch, Emil. See also Harvey Cush-

ing.

Göttler, Maximilian. See Alfred Ein-

horn and Rudolf Pummerer.

Goettsch, Henry Max, absorption coefficients of uranium compounds, 1907, A., ii, 4.

Goettsch, Henry Max. See also Launcelot Winchester Andrews and Herbert

Newby McCoy.

Götz, C. See Arthur Kötz.

Götz, J. See Jean Danysz.

Goetze, Gustav, a new arrangement for the correct reading of burettes, 1911, A., ii, 531.

Goetze, Robert, circulation stirrer for

liquids, 1908, A., ii, 681.

Götzen, G. de, pelagosite, 1903, A., ii, 27. Goetzl, Alberto, analysis of carborundum (silicon carbide), 1903, A., ii, 104. estimation of oil in linseed, 1903, A., ii, 191.

estimation of sulphur in liquid fuel and in petroleum, 1905, A., ii, 761. Göz, Hermann. See Wilhelm Wisli-

cenus.

Gogitidse, S., is the passage of food-fat into the milk proved by Winternitz's experiments with iodised fats? 1906, A., ii, 295.

Goguelia, G. See H. Cantoni.

Goissedet, P. See André Job.

Goitein, Sándor, calcium and magnesium metabolism, 1906, A., ii, 870.

Gokun, effect of electrolytes on the viscosity of colloids, 1908, A., ii, 821.
Golblum, Henryk, chemical affinity in

Golblum, Henryk, chemical affinity in reversible systems, 1909, A., ii, 558.

estimation of perchloric acid in certain perchlorates, 1912, A., ii, 87.

Golblum, Henryk, and (Mile.) Hélène Gunther, electrolytic estimation of manganese and its separation from iron, 1912, A., ii, 869.

Golblum, Henryk, and (Mme.) L. Lew, the order of the reaction between hydriodic and chromic acids, 1912,

A., ii, 924.

Golblum, Henryk, and G. Stoffella, chemical affinity; the system PbCO₃ + K₂CrO₄ = PbCrO₄ + K₂CO₃, 1910, A., ii, 698.

Golblum, Henryk, and F. Terlikowski, preparation and properties of some perchlorates, 1912, A., ii, 261.

solubility of nickel perchlorate and cobalt perchlorate, 1912, A., ii, 354.

Goldacker, Paul. See Walter Schoeller. Goldbaum, Jacob S., determination of the ratio between chlorine and bromine and sodium, 1911, A., ii, 271.

Goldbaum, Jacob S., and Edgar Fahs Smith, separation of the alkali metals in the electrolytic way, 1908, A., ii, 1072.

attempt to separate the alkaline earths in the electrolytic way, 1909,

A., ii, 763.

electrolytic estimation of chlorine in hydrochloric acid with the use of a silver anode and a mercury cathode, 1910, A., ii, 1107.

Goldbeck, W. See Wilhelm Biltz.

Goldberg, Alwin [Heinrich], and K. Naumann, p-nitrophenol as indicator,

1903, A., ii, 684.

Goldberg, Emanuel, kinetics of photochemical reactions. I. Reaction between chlorine and benzene in light, 1906, A., ii, 513.

reaction between chromic acid and quinine in light, 1906, A., ii, 514.

See also Robert

Goldberg, Emanuel. Luther.

Goldberg, Harry, behaviour of potassium trinitride [azoimide] towards manganese dioxide at high temperatures, 1912, A., ii, 845.

Goldberg, (Frl.) Irma, a new preparation of alphylthiosalicylic acids, 1905,

A., i, 59.

phenylation in the presence of copper as a catalyst, 1906, A., i, 426.

preparation of p-nitrodiphenylamine and its derivatives, 1907, A., i, 1027.

preparation of diphenylamine derivatives, 1908, A., i, 288.

Goldberg, (Frl.) Irma, Marie Nimerovsky, and Rudolf Maag, triphenylamine and triphenylamine-o-carboxylic acid (diphenylanthranilic acid), 1907, A., i, 621.

Goldberg, (Frl.) Irma, and (Frl.) C. Sissoeff, phenyl derivatives of primary aromatic amines, 1908, A., i, 17.

Goldberg, (Frl.) Irma, and Fritz Ullmann, preparation of arylanthranilic acids, 1906, A., i, 953. Goldberg, Z. See Paul Pfeiffer.

Goldberger, Felix, and Rudolf Tandler, action of dilute sulphuric acid on the pinacone formed from ethyl propyl ketone, 1906, A., i, 58.

Goldemann, Johannes. See Theodor

Zincke.

Golden, Ross. See Arthur Wayland Dox. Goldenberg, Fritz. See Alfred Wohl.

Goldenberg, Geromont & Co. Chemische Fabrik vorm. Goldenberg, Geromont & Co.

Goldenburg, H. See Richard Josef

Meyer.

Goldenthal, Klara. See Hans Busch. Goldhaber. Max. See Fritz Fichter.

Goldhammer, Dmitri A., theory of corresponding states, 1910, A., ii, 270.

Golding, John, experiments on peas in water culture, 1903, A., ii, 748.

Golding, John, and Martin Ernest Feilmann, taint in milk due to contamination with copper, 1906, A., ii, 205. Golding, John, and Sydney Gross Paine,

composition of milk yielded by cows fed on pasture manured with phosphates and potash, 1910, A., ii, 646.

Goldmann, A., [the ionisation of liquid hydrocarbons], 1912, A., ii, 515.

Goldmann, F., estimation of diabetic sugar in urine by fermentation, 1906, A., ii, 586.

Goldmann, H., Jósef Hetper, and Léon Marchlewski, colouring matter of blood. V., 1905, A., i, 725.

Goldmann, H., and Léon Marchlewski, colouring matter of blood. IV., 1905, A., i, 399.

Goldmann, Max. See Richard Willstätter.

Goldmann, Reszö. See Iwan Koppel. Goldsbrough, Harold Albert. See Philip Schidrowitz.

Goldschmidt, Carl, reactions of formaldehyde, 1903, A., i, 82.

formation of flavaniline, 1903, A.,i, 440. estimation of formaldehyde, 1905, A., ii, 867.

detection of formaldehyde, 1906, A., ii, 132.

estimation of silver and gold, 1906, A., ii, 309.

estimation of cadmium, 1906, A., ii,

Goldschmidt, Eugen. See Ernst Cohen and Richard Josef Meyer.

Goldschmidt, F. See Fritz Haber.

Goldschmidt, Franz, variation of the absorption coefficient of ammonia in water by the addition of carbamide, 1903, A., ii, 638,

Goldschmidt, Franz, theory of saponification, 1904, A., i, 468.

Goldschmidt, Franz, and L. Weissmann, physico-chemical investigation of soft soap, 1912, A., ii, 728.

Goldschmidt, Hans, rate of autoracemisation of optically active ammonium

salts, 1906, A., ii, 612.

dependence of the reaction velocity on the temperature in homogeneous gaseous systems, 1909, A., ii, 390, 651.

Goldschmidt, Heinrich, isomeric m-nitrobenzaldoximes, 1904, A., i, 250.

desmotropic compounds, 1905, A., i, 249.

phenylcarbimide as a reagent for determining the constitution of tautomeric compounds, 1905, A., i, 340.

hydrolysis of esters in heterogeneous

systems, 1905, A., ii, 578.

kinetic study of organic reactions, 1905, A., ii, 691.

kinetics of alkylation, 1909, A., ii, 129. [formation of esters], 1909, A., ii, 650,

Goldschmidt, Heinrich, M. Asriel, V. Koren Lund, and Olaf Udby, researches on the formation of esters, 1909, A., ii, 129.

Goldschmidt, Heinrich, and A. Bakscht, aminolysis. II., 1907, A., ii, 244.

Goldschmidt, Heinrich, and Robert Bräuer, formation of anilides, 1906, A., i, 158.

kinetics of the fission of carbon dioxide from trichloroacetic acid in aniline solution, 1906, A., i, 159.

Goldschmidt, Heinrich, and Moritz Eckardt, reduction of nitro-compounds by alkaline solutions of stannous oxide, 1906, A., i, 825.

reduction of hydroxyazo-compounds,

1909, A., i, 678.

Goldschmidt, Heinrich, and Kristian Ingebrechsten, reduction of nitrocompounds by stannous haloids, 1904, A., ii, 608.

Goldschmidt, Heinrich, and Hans Keller, dynamical experiments on the formation of azo-dyes. V., 1903, A., i, 134.

Goldschmidt, Heinrich, and Halfdan Larsen, catalytic action of metallic chlorides, 1904, A., ii, 609.

catalysis; reduction of the nitrogroup by hydrogen sulphide, 1910,

A., ii, 282. Goldschmidt, Heinrich, and Oscar Löw-Beer, hydroxyazo-compounds, 1905, A., i, 389.

Heinrich, Goldschmidt, and Victor Scholz, velocity of hydrolysis of and affinity constants of ethyl malonate, 1903, A., i, 458.

velocity of hydrolysis of keto- and hydroxy-esters, 1907, A., ii, 244.

Goldschmidt, Heinrich, and Einar Sunde, ester formation, 1906, A., ii, 219.

reduction of nitro-compounds by tin haloids. II., 1906, A., i, 734.

Goldschmidt, Heinrich, and Arthur Thuesen, ester formation in methyl alcohol, 1912, A., ii, 1154.

Goldschmidt, Heinrich, and Olaf Udby, ester formation, 1907, A., ii, 852. ester formation with weak acids as catalysts, 1910, A., ii, 283.

Goldschmidt, Martin, stannous formate and its decomposition products, 1907,

A., i, 673.

Goldschmidt, Robert, electrolytic depositions on inclined electrodes, 1908, A., ii, 536.

producing coloured apparatus for flames, 1908, A., ii, 787.

a light accumulator, 1908, A., ii, 924. thermal conductivity of liquids, 1911, A., ii, 579.

Goldschmidt, Sven, detection of nitrates in presence of bromides, iodides, and ammonium compounds, 1910, A., ii,

Goldschmidt, Th., preparation of calcium, strontium, and barium silicides,

1908, A., ii, 1037. preparation of the anhydrides of fatty acids from their salts, 1910, A., i, 650.

Goldschmidt, Th. See also Volkmar Kohlschütter

Goldschmidt, Victor, realgar from Allchar, Macedonia, 1904, A., ii, 416. loss on ignition as a mineralogical character, 1906, A., ii, 237.

Goldschmidt, Victor, and Paul Herrmann, loss on ignition of zeolites as mineralogical characters, 1906, A., ii, 237.

Goldschmidt. Victor. also Dreyer.

Goldschmidt, Victor Moritz, pyroluminescence of quartz, 1906, A., ii, 409.

argyrodite from Bolivia, 1909, A., ii,

the laws of mineral association from the point of view of the phase rule, 1911, A., ii, 991.

Goldschmidt, Victor Moritz. See also C.

N. Riiber.

Goldschmiedt, Guido, idryl (fluoranthrene) and fluorenonecarboxylic acid, 1903, A., i, 161.

benzoylfluorene, 1904, A., i, 66.

products of the condensation of oaldehydocarboxylic acids, 1905, A., i. 527.

ellagic acid, 1905, A., i, 900.

influence of alkyloxy-groups on the reactivity of a-halogen atoms in aromatic compounds, 1906, A., i, 241.

behaviour towards boiling hydriodic acid of alkyl groups attached to nitrogen, 1907, A., i, 30, 894.

structure of pyrene, 1907, A., i, 310. a product obtained in the technical preparation of benzoic acid from coal tar, 1907, A., i, 922. preparation of anhydrous hydrogen

fluoride, 1907, A., ii, 450.

some methods of preparation of tri-

azans, 1908, A., i, 572. reaction of phenylhydrazine and ahalogen aryl derivatives, 1909, A., i,

122. new reaction for glycuronic acid, 1910,

A., ii, 555. detection of glycuronic acid in urine, 1910, A., ii, 759.

Goldschmiedt, Guido, and Otto Hönigschmid, estimation of methyl attached to nitrogen, 1903, A., ii, 578. methylbetaine of papaveric acid, 1904,

A., i, 86. estimation of methoxyl- and methylimino-groups, 1904, A., ii, 94.

Goldschmiedt, Guido, and Alfred Lipschitz, o-fluorenoylbenzoic acid and its isomeric methyl esters, 1904, A., i, 168.

isomeric esters of o-keto-acids, 1905, A., i, 132.

Goldschmiedt, Guido, and Karl Spitzaner, condensation products of di-benzyl ketone and benzaldehyde, 1904, A., i, 64.

Goldschmiedt, Guido, and Ernst Zerner, scutellarin, 1910, A., i, 576.

Goldsmith, Edward, jerseyite, 1908, A., ii, 401.

Goldsobel, A., and E. Sonnenberg, Nylander's test for dextrose, 1911, A., ii, 339.

Goldsobel, Andreas G., preparation of θκ-diketostearic acid, 1907, A., i, 888. Goldsobel, G. L., structure of the acids of drying oils, 1910, A., i, 216.

Goldstein, Eugen, action of cathode rays on inorganic and organic substances, 1903, A., ii, 524.

Goldstein, Eugen, formation of ozone, 1903, A., ii, 723.

discontinuous glow spectra of solid organic substances, 1904, A., ii, 689.

emission spectra of aromatic compounds, 1904, A., ii, 690.

removal of oxygen by platinum, 1904, A., ii, 825.

double line spectra of chemical ele-

ments, 1907, A., ii, 725. production of line spectra, 1909, A.,

special type of discontinuous emission spectra of solid substances, 1910, A., ii, 469.

three-fold emission spectra of solid aromatic compounds, 1910, A., ii,

production of the fundamental spectra of potassium, rubidium, and cæsium, 1910, A., ii, 669.

investigation of emission spectra of solid aromatic substances by means of the ultra-violet filter, 1911, A., ii,

production of canal rays in potassium, rubidium, and cæsium, 1912, A.,

emission spectra of aromatic compounds exposed to ultra-violet light, cathode rays, radium rays, and canal rays, 1912, A., ii, 216.

excitation of the principal spectra of aromatic compounds by ultra-violet light, 1912, A., ii, 614.

Goldstein, J. See Jacques Pollak.

Goldthwait, J. E., C. F. Painter, R. B. Osgood, and Francis H. McCrudden, metabolism in osteomalacia, 1905, A., ii, 845.

Goldthwaite, Nellie Esther, substituted benzhydrol derivatives and ethyl bromocyanoacetate, 1904, A., i,

effects of carbohydrates on the artificial digestion of casein, 1910, A., ii, 224.

Goleff, F. See Wladimir Schaposchnikoff.

Goll, Georg. See Arnold Reissert. Golla, Frederick Lucien, blood-coagula-

tion time, 1908, A., ii, 766. Golla, Frederick Lucien. See also Charles Dorée.

Gollmann, Richard. See Otto Diels. Gollnitz, Friedrich. See Carl Dietrich Harries.

Gollücke, Ferdinand. See Hans Stobbe. Golmberg, O. J. See Efim Semen London.

Golodetz, A., new methods of resolving mixtures of liquids with adjacent boiling points or constant-boiling mixtures, 1911, A., ii, 1064; 1912, A., ii, 430.

fractional distillation with steam,

1912, A., ii, 234.

fractional distillation in the laboratory and a new rectifying apparatus, 1912, A., ii, 626.

Golodetz, L., salicylic ester of cholesterol, 1908, A., i, 20.

new reactions for cholesterol and oxycholesterol, 1908, A., ii, 328.

a colour test for formaldehyde and benzoyl peroxide, 1908, A., ii,

the action of fats on osmium peroxide, 1910, A., ii, 464.

Golodetz, L. See also Paul G. Unna. Goloubkine, (Mlle.) G., halogen compounds of rhodium, 1911, A., ii,

Golowinski. See Carl Jacobj.

Golnbeff, P. G., crystalline products of the ethereal oil of the Siberian fir, 1905, A., i, 74.

action of piperidine on l-pinene chloroxime, 1908, A., i, 902.

l-camphene, 1909, A., i, 943.

action of sulphuric acid on borneol, 1912, A., i, 787.

Golubinzeff, A., rapid estimation of ferric oxide in cement, 1911, A., ii,

Gomberg, Moses, triphenylmethyl; condensation to hexaphenylethane, 1903, A., i, 81, 244.

action of zinc on triphenylchloromethane, 1903, A., i, 472.

existence of a class of substances analogous to triphenylmethyl, 1904, A., i, 32.

triphenylmethyl. XVI. Tautomerism in the triphenylmethane series, 1907, A., i, 504; 1909, A., i, 144.

Gomberg, Moses, and H. W. Berger, tetraphenylmethane, 1903, A., i, 473. Gomberg, Moses, and Lee Holt Cone,

triphenylmethyl, 1904, A., i, 658, 988; 1905, A., i, 426, 641; 1906, A., i, 414, 821, 822.

triphenylmethyl. XIX. Quinocarbonium salts, 1910, A., i, 869.

Gomberg, Moses, Lee Holt Cone, and A. J. Lynn, triphenylmethyl. VIII., 1904, A., i, 489.

Gomberg, Moses, Lee Holt Cone, and O. B. Winter, triphenylmethyl. XVIII. Quinocarbonium salts, 1910, A., i, 55.

Gomberg, Moses, and Grant Train Davis, triphenylmethyl acetate, 1904, A., i. 32.

Gomberg, Moses, and Donald D. ran Slyke, triphenylmethyl. XX., 1911, A., i, 361.

Gomberg, Moses, and C. J. West, action of halogen acids on hydroxyarvlxanthenols, 1911, A., i, 737.

See also Moses. Nelson Gomberg, Elbridge Tousley.

Gomes, Jacinto Pedro, libollite, 1903.

A., ii, 27. Gómez, L. See Enrique Moles.

Gomolka, Franz. See Alfred Stock.

Gonder, Karl Ludwig. See Heinrich Biltz, Karl Andreas Hofmann, and Leopold Rügheimer.

Gonet, L. See Gabriel Guérin.

Gonnard, Ferdinand, cordierite-pinites from Central France, 1909, A., ii, 61. phillipsite from Mont Simiouse, Loire, 1909, A., ii, 63.

Gonnard, Ferdinand, and Philippe Barbier, analyses of French felspars,

1912, A., ii, 359.

augite and hornblende from volcanic rocks of Central France, 1912, A., ii,

Gonnard, Ferdinand, See also Philippe Barbier.

Gonnermann, Max, hydrolysis of acid imides and amic acids by ferments, 1903, A., i, 590.

molasses food, 1903, A., ii, 507.

inhibitory influence of foreign molecules on the action of histozymes and ferments on amides and glucosides, 1904, A., i, 792.

invertase of the beet, 1904, A., ii, 635. hydrolytic activity of liver histozymes and enzymes on some glucosides and

alkaloids, 1906, A., i, 780. aspidin and filmarone, 1907, A., ii, 801. decomposition of the active constituents of the rhizome of Aspidium Filix mas by animal energies, 1907, A., ii, 976. darkening of beet juice, 1908, A., ii,

saponification of sinigrin, 1911, A. i. 139.

Gontermann, W., antimony-lead alloys, 1907, A., ii, 968.

iron-silicon-carbon alloys, 1908, A., ii,

851; 1911, A., ii, 1091.

Gooch, Frank Austin, handling of precipitates for solution and reprecipitation, 1905, A., ii, 608.

Gooch, Frank Austin, and F. B. Beyer, use of the filtering crucible in electrolytic analysis, 1908, A., ii, 529.

Gooch, Frank Austin, and F. B. Bever. electrolytic estimation of lead and of manganese by the use of the filtering crucible, 1909, A., ii, 268.

Gooch, Frank Austin, and John Charles Blake, estimation of bromic acid by the direct action of arsenious acid.

1903, A., ii, 178.

Gooch, Frank Austin, and Rowland Sherwood Bosworth, gravimetric estimation of silver as chromate. 1909, A., ii, 346.

the iodometric estimation of silver, potassium chromate being employed as precipitating agent, 1909, A., ii,

438.

Gooch, Frank Austin, and Clarence Norman Boynton, separation and estimation of barium in the presence of calcium and magnesium by the action of acetyl chloride in acetone on the mixed chlorides, 1911, A., ii, 334.

Gooch, Frank Austin, and W. L. Burdick, electrolytic analysis with platinum electrodes of light weight, 1912, A., ii,

986.

Gooch, Frank Austin, and Robert William Curtis, action of the halogen acids on vanadic acid, 1904, A., ii, 267.

Gooch, Frank Austin, and Ernest Arthur Eddy, separation of magnesium from the alkalis by alcoholic ammonium carbonate, 1908, A., ii, 632.

Gooch, Frank Austin, and Graham Edgar, reduction of vanadic acid by zinc and

magnesium, 1908, A., ii, 540.

Gooch, Frank Austin, and Jacob Plummer Feiser, the estimation of silver by electro-deposition from an ammoniacal solution of the oxalate, 1911, A., ii, 227.

Gooch, Frank Austin, and Frederick Lamont Gates, phenomena of the electrolytic decomposition of hydrochloric acid, 1909, A., ii, 964.

Gooch, Frank Austin, and Ralph Davis Gilbert, application of zinc for reduction in the estimation of vanadic acid,

1903, A., ii, 616.

Gooch, Frank Austin, and Fred Harvey Heath, iodometric estimation of copper,

1907, A., ii, 720.

Gooch, Frank Austin, and Simon Boghos Kuzirian, use of sodium paratungstate in the estimation of carbon dioxide in carbonates and nitric pentoxide in nitrates by loss on ignition, 1911, A., ii, 657.

Gooch. Frank Austin, and Frank Mitchell McClenahan, behaviour of typical hydrous chlorides when heated in hydrogen chloride, 1904, A., ii, 484.

Gooch, Frank Austin, and Herbert Edwin Medway, employment of a rotating cathode in the electrolytic estimation of metals, 1903, A., ii, 613.

Gooch, Frank Austin, and Howard Douglass Newton, estimation of iron in presence of titanium, 1907, A., ii, 507.

Gooch, Frank Austin, and Raymond William Osborne, reaction between potassium aluminium sulphate and a bromide-bromate mixture, 1907, A., ii,

Gooch, Frank Austin, and Claude Clair Perkins, the gravimetric estimation of free iodine by the action of metallic

silver, 1909, A., ii, 932.

Gooch, Frank Austin, and Martha Austin Phelps, separation of arsenic from copper as ammonium magnesium

arsenate, 1907, A., ii, 130.

Gooch, Frank Austin, and Henry Lewis Read, electrolytic estimation of chlorine in hydrochloric acid with the use of a silver anode, 1910, A., ii, 67.

Gooch, Frank Austin, and Lyman Brumbaugh Stookey, reduction of vanadic acid by the action of hydrochloric acid,

1903, A., ii, 110.

Gooch, Frank Austin, and Hiram Lee Ward, precipitation of copper oxalate in analysis, 1909, A., ii, 703.

Gooch, Frank Austin, and Lewis Hill Weed, estimation of chromium as silver chromate, 1908, A., ii, 737.

Goodall, Alexander, George Lovell Gulland, and Diarmid Noël Paton, digestive leucocytosis, 1903, A., ii, 669.

Goodall, Alexander, and Diarmid Noël Paton, digestive leucocytosis. II. The source of the leucocytes, 1905, A., ii, 742.

Goodall, Alexander. See also George Lovell Gulland and Diarmid Noël Paton.

Goodall. Edwin. See Robert Lauder Mackenzie Wallis.

Goode, John Archibald, and Frederick Mollwo Perkin, the Gutzeit test for arsenic, 1906, A., ii, 629.

Goode, Philip Burwell. See Gregory

Paul Baxter.

Goodman, Edward H., influence of nutrition on the excretion of bile salts and cholesterol, 1907, A., ii, 115. the excretion of iron in the urine in

pneumonia, 1912, A., ii, 787.

Goodson, (Miss) Ethel Elizabeth. Harry Medforth Dawson.

Goodson, William H. See Waldemar Koch.

Goodwin, Harry Manley, and R. D. Mailey, density, electrical conductivity, and viscosity of fused salts, 1907, A., ii, 931.

Goodwin, Joseph H., electrolytic production of calcium, 1903, A., ii, 725. electrolytic calcium, 1906, A., ii, 25. estimation of tin and antimony in

soft solder, 1912, A., ii, 496. Goodwin, William, and William Henry Perkin, jun., the reduction of isophthalic acid. Part II., 1905, T.,

841; P., 187.

Goodwin, William, and Bernhard Tollens, composition of furfuraldehydephloroglucide, 1904, A., i, 262.

Goodwin, William. See also Maquenne.

Goos, F., wave-length normals from the arc spectrum of iron in the international system, 1912, A., ii, 404, 1016.

Goppelsroeder, Friedrich, new capillary and capillary-analytical investigations.

1908, A., ii, 529.

Friedrich. Goppelsroeder.

Wolfgang Ostwald.

Gorboff, Alex., static character of the equilibrium of physico-chemical systems, 1906, A., ii, 339.

invariant systems and the regularity of composition of certain eutectics,

1910, A., ii, 111.

chemical formulæ of certain eutectics and transition points, 1911, A., ii,

Gorce, P. de la. See F. Laporte. Gordan, Paul, is hydrogen peroxide suitable for sterilising milk? 1905, A., ii, 108.

experiments with Röhrig's modification of the Gottlieb-Röse apparatus,

1906, A., ii, 501.

Gordin, Harry Mann, estimation of strychnine in mixtures of strychnine and brucine, 1903, A., ii, 342.

crystalline alkaloid of Calycanthus glaucus, 1905, A., i, 295; 1906, A., i,

crystalline substances of prickly ash bark, 1907, A., i, 68.

marrubiin, 1908, A., i, 344.

crystalline alkaloid of Calycanthus III. isoCalvcanthine. glaucus. isomeric with calycanthine, 1910, A., i, 62.

crystalline alkaloid of Calycanthus glaucus. IV. Some salts of a new quaternary base obtained by methylating isocalycanthine, 1911,

A., i, 903.

Gordon, Clarence McCheyne, and Friend Ebenezer Clark, polarisation capacity of iron and its bearing on passivity, 1907, A., ii, 5.

Gordon, Dora. See Rudolf Höber.

Gore, Herbert C., high vacua in the Scheibler type of desiccator, 1906, A., ii, 605.

studies on apple juice, 1907, A., ii, 715. Gore, Herbert C. See also Willard

Dell Bigelow.

Gorgeu, Alexandre, series of artificial quadratic spinels of the hausmannite type. I and II., 1904, A., ii, 126. Swedish hausmannites, 1904, A., ii, 133.

Gorgolewski, M. See Charles Dhéré. Gorham, Frederic Poole, and Ralph Winfred Tower, does potassium cyanide polong the life of the unfertilised egg of the sea-urchin? 1903, A., ii, 89.

Gorham, L. W., and A. W. Morrison, the action of the proteins of the blood on the isolated mammalian heart,

1910, A., ii, 324.

Gorhan, Adolf, condensation of n-butaldehyde by means of dilute sulphuric acid, 1905, A., i, 171.

Gori, G. See Giuseppe Inghilleri.
Goris, A., localisation of esculin and tannin in horse chestnut, 1903, A., ii, 507.

a new crystalline substance from fresh cola, 1907, A., i, 631.

a second crystalline compound of phenolic character from fresh or preserved cola-nut, 1912, A., i, 375.

Goris, A., and L. Crété [comparison of] the pulp of Parkia biglobosa: "Farine de Netté," 1908, A., ii, 218.

nupharine, 1910, A., i, 419.

Goris, A., and G. Fluteaux, composition of natural scammony, 1910, A., i, 402.

Goris, A., and M. Mascré, presence of urea in certain higher fungi, 1909, A., ii, 175.

existence of two new glucosides, decomposable by a ferment, in Primula officinalis, 1910, A., ii, 63. chemical composition of some higher

fungi, 1912, A., ii, 79. Gorke, Herbert, chemical processes in frozen plants, 1906, A., ii, 793.

conductivity of pieric acid solutions and the ionic conductivity of hydrogen, 1908, A., ii, 150.

Gorke, Herbert, Ernst Köppe, and Fritz Staiger, measurement of the effect of certain hypsochrome and bathochrome groups on the colour of azobenzene, 1908, A., i, 477. Gorke, Herbert. See also Arthur Hantzsch and Heinrich Lev.

Gorkow, Richard. See Felix Benjamin Ahrens.

Gornaja, Sossja, tetraethylarsonium iodide and its pharmacological action, 1909, A., ii, 822.

Gornall, Frank Howorth. See Frederick Belding Power.

Gorni, Felice, detection of salicylic acid in foods, 1905, A., ii, 658; 1906, A., ii, 313.

Gorni, Felice. See also Felice Garelli.

Gorsky, Alexander I., methylisopropylethylene [δ-methyl-Δβ-amylene], 1911, A., i, 249.

mechanism of the Grignard reaction, 1912, A., i, 622.

Gorsky, Alexander I. See also Nicolai D. Zelinsky.

Gorslin, E. E. See Robert A. Cooke.
Gorsline, Ernest E. See William Albert
Noyes and John Bishop Tingle.

Gorter, E., and Willem Cornelis de Graaff, the estimation of indole in faces by Herter and Foster's method, 1908, A., ii, 783.

Gorter, K., Baptisia glucosides, 1906, A., i, 973.

Baptisia glucosides. IV. ψ-Baptisin, 1908, A., i, 97.

coffee, 1908, A., i, 186, 345; 1910, A., ii, 440; 1911, A., i, 221.

distribution of chlorogenic acid in nature, 1909, A., i, 588.

igasuric acid, 1909, A., i, 588.

identity of helianthic acid and chlorogenic acid, 1909, A., i, 935.

dioscorine, 1911, A., i, 222.

constitution of dioscorine, 1911, A., i, 561.

the glucosides in the seeds of Hevea brasiliensis, Müll. Arg., 1912, A., ii, 864.

Gortner, Catherine V., and Ross Aiken Gortner, stereomeric azobenzenes, 1910, A., i, 790.

Gortner, Ross Aiken, some effects of sunlight on colourless glass, 1908, A., ii. 183.

a contribution to the study of the oxydases, 1909, P., 306; 1910, T., 110.

induction by ferrous salts of interaction of chromic and hydriodic acids, 1909, A., ii, 30.

effect of alkali on melanin, 1910, A.,

i, 760.

origin of the brown pigment in the integument of the larva of *Tenebrio molitor*, 1910, A., ii, 632.

Gortner, Ross Aiken, decomposition of alloxan, 1911, A., i, 325.

a new decomposition product of keratin which gives Millon's reaction, 1911, A., i, 697.

melanin. II. The pigmentation of the adult periodical cicada (*Tibicen* septendecim), 1911, A., ii, 908.

melanin. III. The inhibitory action of certain phenolic substances on tyrosinase; a suggestion as to the cause of dominant and recessive whites, 1911, A., ii, 908. melanin, 1912, A., i, 290.

Gortner, Ross Aiken. See also Frederick Jacob Alway, Marston Taylor Bogert, Catherine V. Gortner, and William Robert Lang.

Gosio, Bartolomeo, decomposition of tellurium salts by the action of micro-organisms, 1904, A., ii, 503

decomposition of selenium salts by means of micro-organisms, 1904, A., ii, 580.

possibility of accumulating arsenic in the fruits of certain plants, 1906, A., ii, 624.

fermentative production of coumarin during development of certain Hyphomycetes, 1906, A., ii, 699.

Goske, Adolf, the turmeric reaction for boric acid, 1905, A., ii, 764.

simplified apparatus for the estimation of the Reichert-Meissl and Polenske numbers [of fats], 1912, A., ii, 1107.

Goslings, N., hydrogen sulphide microbes in mineral waters, 1905, A., ii, 108.

Goslings, N. See also Alfred Werner. Gossner, Balthasar, dimorphism of telluric acid, 1904, A., ii, 26.

two new double halogen salts, 1904, A., ii, 36.

isomorphism of double fluorides and oxyfluorides of bivalent metals,

1907, A., ii, 16. specific gravities in isomorphous series, 1907, A., ii, 532.

isomorphism, 1908, A., ii, 366.

Gossner, Balthasar. See also Alexander Gutbier.

Gostling, (Miss) Mildred, the action of acids on cellulose, 1903, T., 190.

Gotch, Francis, photo-electric changes in the frog's eye, 1903, A., ii, 497.

Goto, Motonosuke, protamines, 1903, A., i, 303.

extensibility of muscle, 1904, A., ii, 499.

Gottfried, Arthur, the manganese content of honeys, 1911, A., ii, 824.

Gotthelf, August Henry, the Gutzeit mercuric chloride test for arsenic, 1903, A., ii, 331.

Gottlieb, B. N., decomposition of barium nitrate by heat, 1904, A., ii, 403. estimation of sulphur in roasted pyrites, 1905, A., ii, 552.

Gottlieb, Em., fresh dammar resin from Central Borneo, 1912, A., i, 38.

recent fossil dammar resin from Central Borneo, 1912, A., i, 39.

Gottlieb, Rudolf, estimation of morphine, 1910, A., ii, 558.

Gottlieb, Rudolf, and Richard Stangassinger, the behaviour of creatine in autolysis, 1907, A., ii, 637.

formation and destruction of creatine in perfused organs, 1908, A., ii, 515.

ottlieh

Gottlieb, Rudolf, and O. Steppuhn, estimation of morphine, 1911, A., ii, 163.

Gottlieb, Rudolf. See also Julius Wilhelm Brühl.

Gottlob, Kurt Otto, action of nitrous acid on caoutchoucs, 1908, A., i, 95.

ozonides from African caoutchouc, 1908, A., i, 436.

the nitrosite of caoutchouc and its application in analysis, 1912, A., ii, 301.

Gottlob, Kurt Otto. See also Carl Dietrich Harries.

Gottrau, Henri de. See Friedrich Kehrmann.

Gottschalk, Victor Hugo, and H. A. Roesler, action of soap on calcium and magnesium solutions, 1904, A., ii, 785.

Gottschalk, Willy, use of ammonium persulphate in the separation of manganese [from copper] in acid solutions, 1908, A., ii, 433.

Gottschalk, Willy. See also Paul Jannasch.

Goubau, R., action of ethyl alcohol on arylsulphonyl chlorides, 1911, A., i, 433.

Gouère, rapid estimation of potassium dichromate in milks, 1908, A., ii, 325.

Goujon. See Rouillard.

Gould, L. K., and Anton Julius Carlson, relation of the pancreas to the serum and lymph diastases, 1912, A., ii, 61.

Goulding, Ernest, the constituents of the volatile oil of the bark of Cinnamonum pedatinervium of Fiji, 1903, T., 1093; P., 201. Goulding, Ernest, and Russell George Pelly, a new isomeride of vanillin occurring in the root of a species of Chlorocodon; preliminary note, 1908, P., 62.

the volatile oil of the leaves of Ocimum viride; preliminary note, 1908, P.,

note on p-methoxysalicylaldehyde and its occurrence in the root of a species of Chlorocodon, 1911, P., 235.

Goulding, Ernest. See also Wyndham Rowland Dunstan.

Goupil, Emile Paul. See Albert Charrin

and G. Moussu. Goupil, R., Amylomyces rouxii, 1912,

A., ii, 193.

Gourdon, Ernest, volcanic rocks from Graham's Land, Antarctic, 1906, A., ii, 621.

Gouré de Villemontée. See Villemontée. Gourmand. See Louis Bouveault.

Goutal, E., analysis of solid fuels, 1904, A., ii, 686.

determination of the calorific power of gases and volatile liquids, 1907, A., ii, 129.

gases disengaged by the action of copper salts on steel, 1909, A., ii,

carbon monoxide in steels, 1910, A., ii, 129.

estimation of carbon monoxide in air, 1910, A., ii, 157.

Goutal, E. See also P. Mahler.

Gouttefangeas, U., electric conductivity of saline flames, 1909, A., ii, 784.

Gouy, Léon Georges, the electro-capillary function, 1906, A., ii, 652, 725.

electro-capillary measurements by the method of large drops, 1908, A., ii, 654.

Gowing-Scopes, L., estimation of tartaric acid in the presence of malic and succinic acids, 1908, A., ii, 905.

the uses of trichloroethylene in analytical chemistry, 1910, A., ii, 647.

Goworuchin-Georgiew, O. See Paul N. Raikow.

Goy, Samuel, acidimetric titration of mercuric cyanide, 1907, A., ii, 911.

Goy, Samuel. See also Erwin Rupp and Albert Stutzer.

Goyaud, pectic fermentation, 1903, A., i,

Graaff, (Mrs.) Cornelia J. Weevers de. See Weevers de Graaff.

Graaff, Willem Cornelis de, formation of lactosazone, 1905, A., ii, 559.

diphenylhydrazine as a reagent for lactose, 1905, A., ii, 866.

Graaff, Willem Cornelis de, estimation of acetone in urine, 1907, A., ii,

the production of indole by Bacillus coli communis, 1909, A., ii, 335.

Graaff, Willem Cornelis de. See also E. Gorter.

Graber, Howard T., assay of digestive ferments, 1912, A., ii, 706.

Grabowski, Anton von, zinc compound

of dextrose, 1903, A., i, 606. Grabowski, J., and Léon Marchlewski, hæmopyrrole, 1912, A., i, 297.

the blood pigment. X., 1912, A., i, 1015.

Graebe, Carl, constitution of ellagic acid, 1903, A., i, 262.

methylgallic acids [gallic acid methyl

ethers], 1903, A., i, 346.

formation of phenanthrene from fluorene, 1904, A., i, 988.

conversion of nitronaphthalenes into nitroso-derivatives of naphthol, 1905, A., i, 54.

derivatives of chrysene, 1905, A., i,

alizarin dimethyl ether, 1905, A., i,

esterification by means of methyl sulphate, 1905, A., i, 678.

formation of aromatic methoxy-acids and of anisole, 1905, A., i, 699. 1

naphthoylbenzoic acids, 1905, A., i, 704.

methylation of hydroxyanthraquinones, 1906, A., i, 863.

the development of organic chemistry in the last forty years, 1908, A., i, 1.

Graebe, Carl, and Heinrich Bernhard, methyl ethers of 2- and 1-hydroxyanthraquinones, anthrapurpurin, and purpuroxanthin, 1906, A., i, 865.

Graebe, Carl, Narcisse Briones, Michel Guinsbourg, Paul Haas, and Conrad Perutz, constitution of derivatives of acenaphthene and of naphthalic acid, 1903, A., i, 408.

Graebe, Carl, and Robert Gnehm, jun., chrysodiphenic acid [2-phenylnaphthalene-1:2'-dicarboxylic acid], 1905, A., i, 60.

Graebe, Carl, and Hans Hess, pyrogallol 1:3-dimethyl ether and 2:6-dimethoxybenzoquinone, 1905, A., i, 698.

ebe, Carl, and Hermann Kraft, oxidation by fusion, 1906, A., i,

behaviour of sulphonic acids on oxidation by fusion, 1906, A., i, 643.

433

Graebe, Carl, and Ernst Martz, methylgallic acids and synthesis of syringic

acid, 1903, A., i, 262.

synthesis of sinapic acid, 1903, A., i, 492. methyl ethers of quinolcarboxylic, protocatechnic, and gallic acids, 1905, A., i, 702.

Graebe, Carl, and Adam Oser, 5:4- and 8:4-nitronitroso-a-naphthols, 1905, A.,

i, 54.

Graebe, Carl, and Walter Peter, tetrachloro- and dichloro-naphthoylbenzoic

acids, 1905, A., i, 704.

Graebe, Carl, and Moritz Suter, transformation of trimethylgallic acid and trimethylpyrogallolcarboxylic into derivatives of pyrogallol trimethyl ether, antiarol, and hexamethoxydiphenyl, 1905, A., i, 703.

Graebe, Carl, William Thévenaz, and Kneeland, condensation of phthalic anhydride with halogen derivatives of benzene, 1903, A., i, 345.

Graebe, Carl, and Carlos Thode, ethers of alizarin, flavopurpurin, hydroxyanthrarufin, and hydroxychrysazin, 1906, A., i, 863.

Graefe, Edmund, estimation of sulphur in oils, bitumens, and coals, 1904,

A., ii, 514.

the iodine value of mineral oils, 1906, A., ii, 56.

some uses of carbon tetrachloride in the laboratory, 1906, A., ii, 201.

mineral oils from potash-salt deposits, 1911, A., ii, 119.

Gräfe, W. See Heinrich Ley.

Gräfenberg, Leopold, ozone, 1904, A., ii, 24.

accumulators of material other than lead, 1906, A., ii, 3.

Gräfenberg, Leopold. See also Ralph Gibbs van Name.

Grälert, Karl Paul. See Paul Hoering.

Graf, Hugo. See Otto Ruff.

Graf, L., caffearine, an alkaloid from coffee, 1904, A., i 915.

Graf, Wilhelm. See Arthur Hantzsch. Grafe, Eduard, protein-sparing action of ammonium salts in the diet, 1912, A., ii, 659.

the action of ammonia and ammonia derivatives on oxidation processes in

cells, 1912, A., ii, 852. Grafe, Eduard, and V. Schläpfer, nitrogen retention and nitrogen equilibrium on feeding with ammonium salts, 1912, A., ii, 363.

Grafe, Eduard, and Charles George Lewis Wolf, pathology and treatment severe diabetes, 1912, A., ii, 855.

Grafe, Eduard. See also Hermann Freund.

Grafe. Erich, estimation of ammonia in animal tissues, 1906, A., ii, 709.

heat development by the fermentative hydrolysis of proteins and of gelatin, 1907, A., ii, 796.

a respiration apparatus; metabolism in protracted inanition, 1910, A.,

ii, 422.

technique of carbon dioxide estimation by means of the Berthelot bomb, 1910, A., ii, 460.

Grafe, Erich, and D. Graham, the adaptation capacity of the animal organism to over-abundant nutriment, 1911, A., ii, 811.

Grafe, Viktor, lignin, 1905, A., i, 22. the enzymes of gum-acacia and certain other gums, 1910, A., i, 148.

the biochemical aspect of carbon dioxide assimilation in green plants, 1911, A., ii, 521.

the behaviour of green plants towards gaseous formaldehyde, 1911, A., ii, 818.

Viktor, and Karl Linsbauer, Grafe, mutual effect of Nicotiana tabacum and N. affinis in grafting, 1907, A., ii. 45.

Grafe, Viktor, and Leopold (Ritter) von Portheim, the function of calcium in plants, 1908, A., ii, 884.

the action of gaseous formaldehyde on green plants, 1910, A., ii, 335.

Grafe, Viktor, and Emmy Vieser, the behaviour of green plants towards gaseous formaldehyde, 1909, A., ii, 922.

Grafe, Viktor, and Valentin Vouk, the inulin metabolism of Cichorium intybus (L.) (chicory). I. The seedling metabolism, 1912, A., ii, 977.

Graff, Joachim. See Richard Anschütz and Wilhelm Schneidewind.

Graff, Walter. See August Michaelis. Graffenried, A. von, and Stanislaus von Kostanecki, the coumarone group, 1910, A., i, 630.

Grafmann, A., and Stanislaus von Kostanecki, syntheses in the brazan

group, 1909, A., i, 250.

Graftiau, J., rapid estimation of phosphoric acid by weighing as ammouium phosphomolybdate, 1907, A., ii, 196.

manurial experiments with sugar beet, 1911, A., ii, 648.

Graham, Charles, obituary notice of, 1910, T., 677.

Graham, D. See Erich Grafe.

Graham, D. A. L. See G. G. Nasmith.
Graham, Edward. See Harold Baily
Dixon.

Graham, J. C., diffusion of salts in solution, 1905, A., ii, 147; 1907, A.,

ii, 668.

Graham, Joseph Ivon, absorption spectra of sulphur vapour at different temperatures and pressures, and their relation to the molecular complexity of this element, 1910, A., ii, 1015.

the optical activity of salts and derivatives of d-camphor-β-sulphonic acid, 1912, T., 746; P.,

108.

- Graham, Minnie A., a study of the change from violet to green in solutions of chromium sulphate, 1912, A., ii, 944.
- Graham, Minnie A. See also David Wilbur Horn.
- Graham, Richard P. D., the properties of the crystals of trans-bromocamphopyric acid and of bromocamphopyric anhydride, 1905, T., 1525.

two pseudomorphs from Canada, 1906,

A., ii, 682.

dawsonite, a sodium-aluminium carbonate, 1910, A., ii, 136.

Graham-Smith, George Stuart, microorganisms in the air of the House of Commons, 1904, A., ii, 54.

action of diphtheria and diphtherialike bacilli, 1906, A., ii, 693.

Graham-Smith, George Stuart, and F. Sanger, the "biological" test for blood, 1908, A., ii, 520.

Gramenitzki, M. J., influence of different temperatures on ferments and on the regeneration of fermentative properties,

1911, A., i, 98.

Grammling, Franz. See Julius Sand.
Gramont, (Comte) Arnaud de, disappearance of the spectral lines of silicon, exhibited by certain stars under the influence of the oscillatory spark discharge, 1904, A., ii, 641.

ultimate rays or rays of great persistence of the metals in the dissociation spectra, 1907, A., ii, 517.

spectral photography of minerals in different regions of the spectrum; galena and argentite, 1907, A., ii, 788.

apparatus for the production of spark spectra of solutions, 1908, A., ii, 3.

the ultimate rays of the metalloids, tellurium, phosphorus, arsenic, antimony, carbon, silicon, and boron, 1908, A., ii, 645. Gramont, (Comte) Arnaud de, quantitative indications furnished by dissociation spectra: silver, 1908, A., ii, 787.

distribution of the ultimate rays in the spectrum of different regions of the sun, 1910, A., ii, 85.

position of ultimate rays in special

series, 1910, A., ii, 811.

ultimate rays and the great sensitiveness of chromium, manganese, iron, nickel, and cobalt, 1912, A., ii, 875.

Gramont, (Comte) Arnaud de, and Drecq, condition under which the band spectrum attributed to cyanogen may

appear, 1910, A., ii, 671.

Gramont, (Comte) Arnaud de, and Charles de Watteville, ultra-violet spectrum of silicon, 1908, A., ii, 909. ultra-violet band spectrum of phos-

phorus, 1909, A., ii, 713.

Gramont, (Comte) Arnaud de. See also Paul Émile Lecoq de Boisbaudran. Grand, Louis. See Louis Pelet-Jolivet.

Grandeau, Louis, molasses food and horse feeding, 1903, A., ii, 569. nitric acid and agriculture, 1909, A., ii, 430.

Grandeau, Louis, and Alekan, feeding horses with peat molasses, 1903, A., ii,

Granderye, Léon Maurice. See Alfred

Grandjean, Francis, solution of heavy vapours in zeolites, 1910, A., ii, 311. secondary felspar in non-metamor-

phosed sedimentary rocks, 1910, A., ii, 419.

Grandjean, Francis. See also Georges Friedel.

Grandmougin, Eugène, condensation of gallocyanin dyes with aminosulphonic acids, 1906, A., i, 596.

decomposition of azo-compounds by sodium hyposulphite, 1906, A., i,

716.

sodium hyposulphite as a reducing agent, 1906, A., i, 967; 1907, A., i, 850.

action of diazo-compounds on αhydroxynaphthoic acids, 1906, A., i, 997.

behaviour of certain artificial dyes with liquid sulphur dioxide, 1907, A., i, 101.

reduction of nitroazo-compounds with sodium hyposulphite, 1907, A., i,

hyposulphites; action of sodium hyposulphite on diazo-salts, 1907, A., i, 263, 362.

Grandmougin, Eugène, formation of hyposulphites, 1907, A., ii, 164.

new colour reaction for lignocelluloses. 1907, A., ii, 588.

cellulose and its derivatives, 1908, A.,

reaction between diazo-compounds and azo-dyes, 1908, A., i, 483.

leucoalizarin(1:2-dihydroxyanthranol),

1908, A., i, 786. condensation of quinizarin with aromatic amines, 1908, A., i, 808.

action of primary amines on indigotin, 1909. A., i, 969; 1910, A., i, 438.

indigotin. III. 5:7:5':7'-Tetrabromo-

indigotin, 1910, A., i, 74. indigotin. IV. Brominated indigotins, 1910, A., i, 339.

salicylic acid azo-dyes, 1912, A., i, 145.

Eugène, and Grandmougin, Ernst Bodmer, condensation of gallocyanin dyes with amino-compounds, 1907, A., i, 355; 1908, A., i, 572.

pruneanilide, 1908, A., i, 289.

Grandmougin, Eugène, and Ed. Dessoulavy, indigotin. I. Action of primary arylamines on indigotin, 1909, A., i, 968. indigotin. II. Iudigotindiarylimides,

1910, A., i, 73.

Grandmougin, Eugène, and Hans Freimann, phenol-2:4:6-trisazobenzene, 1907, A., i, 664.

action of diazobenzene chloride on phydroxybenzoic acid, 1907, A., i,

azo-derivatives of phenol and of the phenolearboxylic acids, 1908, A., i, 1023.

Grandmougin, Eugène, and Julien R. Guisan, reduction of o-nitroazosalicylic acids by means of sodium hyposulphite, 1907, A., i, 1092.

azo-compounds of salicylic acid, 1908, A., i, 926.

Grandmougin, Eugène, Julien R. Guisan, and Hans Freimann, bisazoderivatives of salicylic acid, 1907, A., i, 987.

Grandmougin, Eugène, and Em. Havas. the volumetric estimation of azo-dyes by means of hyposulphite, 1912, A., ii, 1220.

Grandmougin, Eugène, and Arnold Lang, flaveosines, 1909,

amino-derivatives of phenylauramines and of rheonine, 1909, A., 974.

Grandmougin, Eugène, and Hans Leemann, hexanitroazobenzene, 1907. A., i. 163.

Grandmougin, Eugène. and Emil Walder, methylene-green, 1906, A., i,

Grandmougin, Eugène. See also Hans Leemann and Emilio Noelting.

Grandry, M. See Lucien Louis de Koninck.

Granell, conr., tungsten minerals from Spain, 1912, A., ii, 566.

Granger, Albert [Alexandre], action of arsenic on copper, 1903, A., ii, 547.

a cadmium arsenide, 1904, A., ii. 258. properties of tungsten trioxide as a ceramic colouring matter, 1905, A., ii, 325.

use of potassium permanganate to eliminate sodium thiosulphate in photography, 1907, A., ii, 542.

Granger, Albert, and August Benjamin de Schulten, crystallised copper iodates, 1904, A., ii, 661.

Granström, E., the fermentative change of glyoxylic acid in organs, 1908, A., i, 235.

detection of glyoxylic acid and its occurrence in human urine, 1908, A., ii, 122.

the influence of acids on the calcium metabolism of herbivora, 1909, A., ii, 161.

Grant, George E., and Arthur S. Elsenbast, rapid testing of dyes and pigments, 1912, A., ii, 1219.

Grant, Kerr. See Bertram Dillon Steele. Grasser, Georg, tannin solutions, 1911, A., ii, 1040.

chemical investigation of the substance of the birch, 1912, A., ii, 593.

Grasser, Georg, and Karl Purkert, preparation of aqueous soluble compounds from the leaves of white birch trees (Betula alba), 1910, A., ii, 440.

Grassi, Ugo, diffusion of one electrolyte in presence of another with a common

ion, 1905, A., ii, 8.

increase of the conductivity of water by radium emanations, 1905, A., ii, 793.

conductivity of de-aerated water in presence of radium emanations, 1907, A., ii, 217.

theory of the tension of solutions at their decomposition values, 1907, A., ii, 425.

formation of oximes, 1908, A., i, 800. gas electrodes. I. Nitric oxide, 1908, A., ii, 801.

Grassi, Ugo, formation of hydrazones, 1910, A., i, 890.

[lecture] experiments in physical

chemistry, 1910, A., ii, 196. 38i, Ugo. See also Jacobus Henricus Grassi, Ugo. van't Hoff.

Grassi-Cristaldi, Giuseppe, hydrogenation by catalysis of hexamethylenetetramine, 1907, A., i, 114.

Graton, Louis Caryl, and Waldemar Theodore Schaller, purpurite, a new mineral, 1905, A., ii, 724.

Grau, August, and Franz Russ, behaviour of the electric arc in various gases,

1907, A., ii, 601. validity of the law of mass action for the combustion of nitrogen in the high tension flame, 1907, A., ii, 753.

See Ludwig Wolff. Grau, G. K.

Graumann, Carl Artur, action of iron oxides on zinc sulphide, 1907, A., ii,

Graumann, Carl Artur. See also F. O. Doeltz.

Graux, Lucien, direct proportionality between the freezing point of a mineral water of the acid carbonate class and the composition of the water expressed in terms of the anhydrous salts and normal carbonates, 1906, A., ii, 148.

Graux, Lucien. See also Louis C. Mail-

lard.

Grave, Ernst, passivity of metals, 1911,

A., ii, 896.

Gravellat, Henri. See Jean Gautrelet. Gray, Andrew, Heusler's magnetic alloy of manganese, aluminium, and copper, 1906, A., ii, 266.

Gray, Archibald. See Edmund James Mills.

Gray, Arthur W., production of ozone by the silent electric discharge in Siemens' ozone apparatus, 1904, A., ii. 25.

Gray, C. W. See Harmon Northrop

Morse.

Gray, Francis William, direct proofs of the presence of the hydroxyl group in derivatives of anhydroacetonebenzil, 1909, T., 2131; P., 218.

isomerides of anhydroacetonebenzil and its derivatives, 1909, T., 2138; P.,

218.

Gray, George, retrogression of soluble phosphates in mixed manures, 1905, A., ii, 855.

dissolved matter contained in rainwater collected at Lincoln, New Zealand, 1911, A., ii, 327.

Gray, James. See James Moir.

Gray, J. A., liberation of helium from radioactive minerals by grinding, 1909, A., ii, 570.

ultimate product of the uranium disintegration series, 1909, A., ii, 956. secondary y-rays produced by B-rays. 1911, A., ii, 355.

Gray, J. A., and W. Wilson, the heterogeneity of B-rays from a thick layer of radium-E, 1910, A., ii, 1022.

Gray, James Gordon, magnetic properties of a graded series of nickel-manganese

alloys, 1912, A., ii, 733.

Gray, James Gordon, and Alexander David Ross, production of permanent magnets from specimens of nearly pure copper, 1909, A., ii,

influence of oxide formation and thermal treatment on the magnetism of copper, 1912, A., ii, 530.

Grav, Robert Cochran, See Alexander

David Ross.

Gray, Robert Whytlaw. See Robert Whytlaw-Gray.

Gray, Thomas, high temperature measurements, 1905, A., ii, 141.

an improved form of the William Thomson calorimeter, 1906, A., ii,

Gray, Thomas, and Joseph G. Robertson. a comparison of different types of calorimeter, 1904, A., ii, 637.

Gray, Thomas. See also George Gerald Henderson.

Gray, William Herbert. See Kennedy Joseph Prévité Orton.

Grayson, Sydney A., case-hardening, 1910, A., ii, 1070.

Grazia, Francesco de, a new hæmatin, 1909, A., i, 342.

Grazia, Sante de, effect of commercial sodium nitrate on rye, 1908, A., ii, 420.

nitrification of calcium cyanamide in various types of soil, 1909, A., ii, 83.

the impurities of Chili saltpetre; the possibility of using a less-refined saltpetre, 1909, A., ii, 88.

influence of soil moisture on the action of calcium cyanamide, 1909, A., ii.

behaviour of cereals towards calcium cyanamide, 1909, A., ii, 1049.

the co-operation of micro-organisms in the utilisation of the insoluble phosphates of the soil (II) by higher plants, 1910, A., ii, 436.

Grazia, Sante de, and S. Caldieri, influence of some manures on the composition of rye grain, 1907, A., ii, 387.

Grazia, Sante de, and G. Camiola, cooperation of micro-organisms in the utilisation of the potassium of leucite by plants, 1907, A., ii, 641; 1908, A., ii, 415.

Grazia, Sante de, and A. Cerza, influence of micro-organisms on the utilisation of the insoluble phosphates by higher

plants, 1908, A., ii, 216.

Grazia, Sante de. See also Gaspare Ampola.

Graziani, Albert, prophylaxis in malaria; action of small continuous doses of. quinine on the development of the animal organism and its application in infectious disease, 1910, A., ii, 982.

Graziani, Ferdinando, influence of the halogens on phototropy in hydrazones,

1910, A., i, 777.

Graziani, Ferdinando. See also Maurizio Padoa.

Greathouse, Lucien H. See Richard C.

Tolman. Greaves, Joseph E., effects of soluble salts on insoluble phosphates, 1910, A.,

ii, 444. estimation of gliadin, 1911, A., ii, 674.

Greaves, Joseph E. See also Thorburn Brailsford Robertson and Robert Stewart.

Greaves, Richard Henry, estimation of cuprous oxide in copper and its alloys, 1909, A., ii, 1054.

Greaves, Richard Henry. See also Edgar Philip Perman.

Greaves, W. F., analysis of hyposulphites and their compounds with formaldehyde, 1908, A., ii, 741.

Greb, W. See Hermann Fühner.

Grebe, Friedrich. See Bernhard Schöndorff.

Grebe, Leonhard, absorption of the vapours of benzene and some of its derivatives in the ultra-violet, 1906, A., ii, 410.

the ultra-violet absorption of benzene,

1911, A., ii, 83.

Grebe, Wilhelm, estimation of glycogen by inversion with acids, 1908, A., ii, 329.

Grebentschikoff, I. V. See Nicolai A. Pushin.

Green, Alan Baldrey, action of radium on micro organisms, 1904, A., ii, 503.

Green, Arthur George, ionic phenomena exhibited by colouring matters, 1903, A., i, 34.

the colouring matters of the stilbene group. I., 1904, T., 1424; P., 184. constitution of cellulose. II., 1905, A., i, 22

Green, Arthur George, the relation of colour and fluorescence to constitution, 1907, P., 12.

constitution of the salts of the phthal-

eins and the cause of colour in the triphenylmethane series, 1908, P., 206; discussion, P., 206.

chemical technology of aniline-black,

1909, A., i, 612.

Green, Arthur George, and James Baddiley, the colouring matters of the stilbene group. Part V. The action of caustic alkalis on derivatives of p-nitrotoluene, 1908, T., 1721; P., 201.

Green, Arthur George, and Ernest Arthur Bearder, the alkaline condensations of nitrohydrazo-compounds. Part I.,

1911, T., 1960; P., 228.

Green, Arthur George, and Percy Field Crosland, the colouring matters of the stilbene group. Part III., 1906, T., 1602; P., 256.

Green, Arthur George, Arthur Hugh Davies, and Ronald Smith Horsfall, the colouring matters of the stilbene group. Part IV. The action of caustic alkalis on p-nitrotoluene and its derivatives, 1907, T., 2076; P., 289.

Green, Arthur George, and Percy Edgar King, constitution of the phenolphthalein and quinolphthalein salts, 1906, A., i, 670; 1907, A., i, 933.

the constitution of pheno!- and quinolphthalein salts: a contribution to the quinonoid theory of colour, 1907, P., 228; discussion, P., 229. quinonoid ester salts of fluoran, 1908,

A., i, 1003.

Green, Arthur George, Fred Marsden, and Fred Scholefield, the colouring matters of the stilbene group. 1904, T., 1432; P., 185.

Green, Arthur George, and Arthur George Perkin, polythiosulphonic acids of p-diamines, 1903, T., 1201; P., 206.

the constitution of phenolphthalein, 1904, T., 398; P., 50.

note on the constitution of cellulose, 1906, T., 811; P., 136.

Green, Arthur George, and Rajendra Nath Sen, azomethineazo-dyes, 1910, T., 2242; P., 243; discussion, P., 244.

azo-dyestuffs of the triphenylmethane

group, 1912, T., 1113; P., 137. Green, Arthur George, and Frederick Maurice Rowe, the alkaline condensaof nitrohydrazo-compounds. Part II., 1912, T., 2003; P., 233.

Green, Arthur George, and Frederick Maurice Rowe, the alkaline condensations of nitrohydrazo-com-Part III. Influence of pounds. ortho-groups on their formation and condensation, 1912, T., 2443; P., 251.

the existence of quinonoid salts of onitroamines and their conversion into oxadiazole oxides, 1912, T.,

2452; P., 252.

Green, Arthur George, and Salomon Wolff, aniline black and its intermediate products, 1911, A., i, 900. aniline-black and allied compounds,

1912, P., 250.

Green, Arthur George, and Arthur Edmund Woodhead, aniline-black and allied compounds. Parts I. and II., 1910, T., 2388; P., 223; 1912, T., 1117; P., 136.

action of amines on triphenylcarbinol and tritolylearbinol, 1911, A., i, 481.

Green, Clarence James. See Percy Faraday Frankland.

Green, Harry H., estimation of potassium in urine, 1911, A., ii, 1135.

Green, John Lighterwood, experimental nephritis, 1909, A., ii, 253.

Green, (Miss) Leila, and David Orme Masson, the dynamics of the decomposition of persulphuric acid and its salts in aqueous solution, 1910, T., 2083; P., 231.

Green, (Miss) Leila, and (Miss) Brenda Sutherland, the decomposition of diethylenesulphidemethylsulphine hydroxide in aqueous solution, 1911, T.,

1174; P., 140.

Green, William F., effect of ferric salts on the rate of oxidation of ferrous salts and on the catalytic action of the latter, 1908, A., ii, 824.

the melting point of hydrated sodium acetate; solubility curves, 1909,

A., i, 82.

Green, William Heber, studies on the viscosity and conductivity of some aqueous solutions. Part I. Solutions of sucrose, hydrogen, chloride, and lithium chloride, 1908, T., 2023; P., 187.

studies on the viscosity and conductivity of some aqueous solutions. Part II. Mixtures of solutions of sucrose and lithium chloride: a contribution towards the elucidation of the connexion between ionic mobility and the fluidity of the solution, 1908, T., 2049; P., 187.

laboratory apparatus, 1908, A., ii,

826.

Green, W. V., 1-chloro-2:4:6-tri-iodo-benzene, 1907, A., i, 117. Greene, Charles Wilson, a new form of

extraction apparatus, 1910, A., ii, 747. absorption of fat by the stomach in

the salmon, 1912, A., ii, 272, 659. the absorption of fat in the salmon's muscles, and its resorption during the migration fast, 1912, A., ii. 274.

Greene, Charles Wilson, and William F. Skaer, absorption of fat by the mammalian stomach, 1912, A., ii, 273.

Greenlee, Arden D., osmotic activity in the egg of the common fowl, 1912, A., ii, 463.

Greenlee, Arden D. See also (Miss)

Mary Engle Pennington.

Greenwald, Isidor, effect of parathyroidectomy on metabolism, 1911, A., ii, 507.

Greenwood, Harold Cecil, the reduction of refractory oxides by cafbon, 1908,

T., 1483; P., 188. the production of ferro-alloys, 1908, T., 1496; P., 189.

an approximate determination of the boiling point of metals, 1909, A., ii,

influence of pressure on the boiling points of metals, 1910, A., ii, 390.

vapour-pressure curves and heat of evaporation of some volatile metals of high boiling point, 1911, A., ii, 468.

boiling points of metals, 1912, A., ii, 534.

Greenwood, Marion. See Leonard Erskine Hill.

Greer, J. R., and Frank C. Becht, concentration of anti-substances in the body-fluids of normal and immune animals, 1910, A., ii, 141.

Greer, J. R. See also Anton Julius

Carlson.

Gregersen, J. P., alkalimetric estimation of phosphoric acid by Neumann's method, 1908, A., ii, 64.

phosphorus metabolism, 1911, A., ii, 304.

Grégoire, Ach., course of absorption of phosphoric acid in sugar beet, 1903, A., ii, 749.

automatic washing apparatus, 1910, A., ii, 601.

action of some hydrolysable salts on the higher plants, 1910, A., ii, 644. estimation of nitrogen as ammonia, 1910, A., ii, 651.

action of some hydrolysable salts and of some colloids on the higher plants, 1911, A., ii, 422.

Grégoire, Ach., and Em. Carpiaux, apparatus for the estimation of cellulose, 1910, A., ii, 661.

estimation of oxalic acid in vegetable substances, 1912, A., ii, 1217.

Grégoire, Ach., and James Hendrick, manurial value of dried superphosphate, 1904, A., ii, 769.

phosphatic slags, 1904, A., ii, 769. contamination of water by the combustion of turf, 1912, A., ii, 803.

Grégoire, Ach., James Hendrick, and Em. Carpiaux, action of manganese on potatoes and sugar beet, 1908, A., ii, 529.

Grégoire, Ach., James Hendrick, Em. Carpiaux, and E. Germain, acidity of soils, 1912, A., ii, 1088.

Gregoire de Bollemont, E. See Jules Minguin and G. Reboul.

Gregor, Adalbert, influence of veratrine

and glycerol on muscular contraction, 1904, A., ii, 273. Gregor, Georg, estimation of dextrose in

urine with the Weidenhaff's fermentation saccharometer, 1909, A., ii, 102.

Gregory, Arnold William, quick method for the valuation of fluorspar, 1905,

A., ii, 856.

a colorimetric method for the determination of small percentages of iron in copper alloys, 1907, P., 306; 1908, T., 93.

a new test for silver, 1908, P., 125. a colorimetric method for the estima-

tion of small quantities of vanadium, 1909, P., 232.

Gregory, Arnold William, and James McCallum, two volumetric methods for the determination of chromium, 1907, T., 1846; P., 237. Gregory, Arnold William.

John McFarlane.

Gregory, Joshua C. See Frederic William Richardson. Gregory, John Walter, the fireclay [and

sideroplesite] of Glenboig, Lanarkshire, 1910, A., ii, 722.

Gregory, Thomas William Diggle, and William Henry Perkin, jun., hexamethyleneoctacarboxylic acid and the cis- and trans-modifications of hexamethylenetetracarboxylic acid (hexahydropyromellitic acid), 1903, T., 780; P., 163.

Gréhant, Nestor, analysis of nine specimens of air collected from the galleries of a coal mine, 1903, A.,

ii, 70.

toxicity of ethyl alcohol, 1903, A., ii, 317.

Gréhant, Nestor, [amount] of urea in the tissues and blood of vertebrate animals, 1904, A., ii, 60.

behaviour of an animal respiring mixtures of air and 5 to 10 per cent. of carbon dioxide, 1906, A.,

improved eudiometer; its application to measuring fire-damp: detection and estimation of methane and carbon monoxide, 1907, A., ii, 49.

new method for the detection and rapid estimation of methane, 1907,

A., ii, 990.

exact analysis of marsh gas; dissociation of several hydrocarbons effected in the eudiometer for measuring fire-damp, 1908, A., i, 493.

Greifenhagen, H. See Reinhold von Walther.

Greifenhagen, Walter, Josef König, and A. Scholl, the estimation of starch. 1911, A., ii, 1037.

estimation of gelatin, 1911, A., ii,

947.

the estimation of carbohydrates by oxidation with permanganate in alkaline solution, 1911, A., ii, 1037. Greiffenberg, A. See Richard Anschütz.

Greimer, Karl. See Edgar Wedekind. Greinacher, Heinrich, decay of the radioactivity of radiotellurium, 1905, A., ii, 623.

fluorescence of glass, mica, and quartz, caused by radiotellurium, 1906, A.,

ii, 410.

some radioactive problems, 1907, A., ii, 324.

thermal determinations of the radioactivity of ordinary substances, 1907, A., ii, 836.

distribution of the radiation of radioactive substances, 1908, A., ii, 551;

1909, A., ii, 286.

direct evidence of the charge of the a-rays, 1909, A., ii, 457.

table of radioactive elements, 1910, A., ii, 569.

a new radium perpetuum mobile, 1911, A., ii, 684.

estimation of radium emanation in spring waters, 1912, A., ii, 621.

Greinacher, Heinrich, and M. Kernbaum, gaseous product of transformation of polonium, 1907, A., ii, 422.

Greinacher, Heinrich. See also Willy Marckwald.

Greiner & Friedrichs, new automatic pipettes, 1905, A., ii, 349. Greiner, Alfred. See William Küster.

Greisenegger, Ignaz K., the retention of superphosphate in soils, 1910, A., ii, 537.

Greisenegger, Ignaz K. See also Her-

mann Kaserer.

Grélot, P., masking of iodine in presence of saccharine matters, 1906, A., ii, 709.

disadvantages of the use of potassium dichromate for the preservation of samples of milk for analysis, 1907, A., ii, 513.

Grenet, Louis, transformations of iron and steel, 1909, A., ii, 741.

cementation of silicon steels, 1910,

A., ii, 508. the tempering of bronzes, 1911, A., ii, 42.

Grenet, Louis. See also Georges Charpy. Greshoff, Maurits, compounds of alkaloids with hydroferrocyanic, hydroferricyanic, thiocyanic, and nitroprussic acids, 1903, A., i, 848.

amount of hydrogen cyanide in the seeds of Gynocardia odorata, 1905,

A., ii, 276.

distribution of hydrogen cyanide in the vegetable kingdom, 1907, A., ii, 121, 983.

estimation of ecgonine in Java coca,

1907, A., ii, 914.

evaluation of Java coca, 1908, A., ii, 441, 997.

transitory presence of hydrogen cyanide in ferns, 1908, A., ii, 725. Greshoff, Maurits, and Johannes Sack, Getha-Adjak, 1903, A., i, 507.

propolis, 1903, A., i, 602.

Gresley, Werner P. See Friedrich
Kehrmann.

Gressel, Emil. See Emil Abderhalden. Grete, A., estimation of phosphoric acid in acid solution by means of alkaline molybdate solution and gelatin, 1909, A., ii, 936.

Grethe, Th. See Arthur Kötz.

Grether, Ernst. See Fritz Fichter and Fritz Ullmann.

Greulich, R. See Ludwig Wolff. Greve, G. See Hartwig Franzen.

Greven, Karl, commencement and duration of the excretion of arsenic in urine after the use of Ehrlich-Hata's preparation, dihydroxydiaminearsenobenzene, 1911, A., ii, 511.

Grewe, Adolf. See Eberhard Rimbach. Grezes, G., the invertase of Aspergillus niger; the influence of carbonaceous food on the secretion of enzymes, 1912, A., ii, 976.

Grgin, Duśan J., a new indolenine base,

1906, A., i, 884.

Grieb, C., liberation of electrically charged particles from an incandescent platinum wire during the catalysis of mixtures of oxygen with hydrogen and with carbon monoxide, 1912, A., ii, 413.

Grieb, Christopher Maurice Walter. See William Howieson Gibson.

Griebel, Constant, chemical composition of cranberries, whortleberries, etc., 1910, A., ii, 440.

composition of the pulp of Cassia fistula, 1911, A., ii, 425.

Grieft, de. See Antoine Guntz.

Griesbach, Walter, acetoacetic acid formation in the liver of a diabetic dog. II., 1910, A., ii, 789.

Griese, Richard, [a double salt from 8-hydroxy-7-iodoquinoline-5-sulph-

onic acid], 1908, A., i, 454.

Griffet. See Taurel.

Griffin, Charles E. See Edward DeMille Campbell.

Griffin, Roger Castle. See Gregory Paul Baxter.

Baxter. Griffith, George, obituary notice of, 1903,

T., 650. Griffiths, Arthur Bower, pigments of geranium and other plants, 1904,

A., i, 179.
change of electrical resistance of
selenium under the influence
of certain substances, 1904, A.,
ii. 8.

volcanic ash from Mont Pelée, Martinique, 1904, A., ii, 135.

composition of certain invertebrate pigments, 1905, A., i, 293. chemistry of invertebrate muscle, 1905,

A., ii, 335.

Griffiths, Ch. See Léon Guillet.

Griffiths, Edward, pucherite from West Australia, 1910, A., ii, 47.

chemical examination of the oil from the seeds of *Bursaria spinosa* (blackthorn), 1910, A., ii, 800.

Griffon, Ed., transpiration in green leaves when the upper or under surfaces are exposed to light, 1904, A., ii, 70.

chlorophyllous assimilation in young shoots of plants; application to the

vine, 1905, A., ii, 475.

Griggi, Gioachino, new method for the volumetric estimation of copper, and its application to the testing of copper sulphate and commercial copper sulphide, 1904, A., ii, 780.

Grignard, Victor, action of mixed organo-magnesium compounds on ketonic esters, 1903, A., i, 31, 141.

See Alfred

Grignard, Victor, action of carbonyl chloride on mixed organo-magnesium compounds, 1903, A., i, 455.

action of ethyl oxalyl chloride on organo-magnesium pounds, 1903, A., i, 549.

mode of fission of mixed organomagnesium compounds; action of ethylene oxide, 1903, A., i, 552.

preparation of methyl diethylacetoacetate, 1903, A., i, 791.

B-phenylethyl alcohol, 1903, A., i, 819.

a new method of synthesising tertiary alcohols with organo-magnesium compounds, 1904, A., i, 213.

action of magnesium and organomagnesium compounds of bromophenetole, 1904, A., i, 494.

synthesis of monohydric and polyhydric alcohols, 1905, A., i, 593. constitution of organo-magnesium com-

pounds, 1907, A., i, 398.

modified form of Saint-Claire Deville's apparatus for continuous production of gases, 1908, A., ii, 827.

application of magnesium in organic chemistry, 1910, A., i, 466.

scission of phenolic ethers by organomagnesium compounds, 1910, A., i, 669.

two new methods for synthesising nitriles, 1911, A., i, 292.

system of nomenclature for "bridged

rings," 1912, A., i, 177. Grignard, Victor, and E. Bellet. synthesis of nitriles in the cyclic series, 1912, A., i, 622.

Grignard, Victor, and Charles Courtot, new derivatives of indene, 1911, A.,

i, 193; 1912, A., i, 250. magnesium derivative of fluorene,

1911, A., i, 538. Grignard, Victor, and Jean Reif, preparation of aldol and crotonaldehyde, 1907, A., i, 287.

Grignard, Victor, and G. Vignon. dimagnesium derivative of ac-dibromo-

pentane, 1907, A., i, 689.

Grignard, Victor, and L. Zorn, action of thionyl chloride on organo-magnesium compounds, 1910, A., i, 532.

Victor. See also Philippe Grignard, Barbier.

Grigoréeff, A. A. See Vetchesláv E. Tistshenko.

Grigoréeff, Alexei V., destruction of organic matters in toxicological investigations, 1905, A., ii, 354.

Grigoréeff, G. N. See Vetcheslav E. Tistshenko.

Werner.

Grigorieff, O. See T. Gromoff.

Grigorieff, (Frl.) Marie.

Grigorowitsch, Pavel, action of mercury diethyl on mercury fulminate; decomposition of the mixture by hydrochloric acid; new complex, $5 \mathrm{HgCl}_2$, $2 \mathrm{NH}_2 \cdot \mathrm{OH}$, HCl , $2 \mathrm{NH}_4 \cdot \mathrm{Cl}$, $2 \mathrm{Me}_2 \cdot \mathrm{CO}$, 1908, A., i, 251.

Grimal, Emilien, the essence of the wood of Atlas cedar, 1903, A., i, 46. cadinene dihydrochloride and dihydrobromide and a d-cadinene, 1903, A.,

i. 185.

essential oil of Artemisia Herba alba of Algeria, 1904, A., i, 605.

essential oil of the wood of Thuya articulata of Algeria, 1905, A., i, 148. presence of \$B-phenylethyl alcohol in the essence of pine-needles of Aleppo, Algeria, 1907, A., i, 329.

Grimaldi, Carlo, terpenes of rosin spirit,

1909, A., i, 943.

occurrence of camphene in rosin spirit, 1910, A., i, 273.

qualitative reactions of oil of turpentine, pine wood oil, and essence of

turpentine, 1911, A., ii, 231. Grimaldi, Carlo, and L. Prussia, oil of colocynth seeds, 1909, A., ii, 426.

Grimaldi, Siro, estimation of hydroxylamine in oximes and of phenylhydrazine in hydrazones osazones, 1903, A., ii, 342.

estimation of the total acidity in protein substances, 1904, A., ii, 788.

Grimbert, Léon [Louis], detection of small quantities of maltose in the presence of glucose, 1903, A., ii, 338.

detection of urobilin in urine, 1904, A., ii, 460.

urinary indoxyl, 1905, A., ii, 48.

detection of bile pigments in urine, 1906, A., ii, 134.

presence of chlorate in sodium nitrate, 1906, A., ii, 282.

Schlagdenhauffen's reaction [detection of magnesium], 1906, A., ii, 307. a thermosoluble protein said to be that

of Bence-Jones, 1908, A., ii, 212.

separation of urobilin from chromogen, 1911, A., i, 395.

Grimbert, Léon, and Bagros, mechanism denitrification among indirect denitrifying bacteria, 1909, A., ii, 693.

Grimbert, Léon, and R. Bernier, Cammidge's reaction, 1910, A., ii, 163.

Grimbert, Léon, and V. Coulaud, presence of dextrose in the cephalorachid liquid, 1903, A., ii, 385.

Grimbert, Léon, and Émile Dufau, means for distinguishing true albumin in urines from mucinoid substances, 1906, A., ii, 912.

Grimbert, Léon, and J. Morel, determination of urinary acidity, 1912, A.,

ii. 395.

Grimbert, Léon, and E. Turpaud, presence of glycuronic derivatives in beef bouillon, 1910, A., ii, 979.

Grimlund, Edwin, the action of Twitchell's reagent, 1912, A., ii, 816.

Grimm, C. See W. Schloesser.

Grimm, Hans. See Alfred Heiduschka. Grimm, Max, the chief phases of the lactic acid fermentation and their practical significance, 1912, A., ii, 191.

Grimme, Clemens, the fat of Picramnia lindeniana, 1912, A., ii, 675.

Grimme, Clemens. See also Ludwig

Knorr.

Grimmer. Walther, protein digestion, 1907, A., ii, 107, 368.

a colour reaction with mixtures, of carbohydrates and proteins, 1907, A., ii, 658.

the enzymes of the mammary gland, 1910, A., ii, 325.

the peroxydase of milk, 1911, A., i,

Grimmer, Walther, and Arthur Scheunert, the digestion of cellulose in domesticated animals. IV. Simon and Lohrisch's method for the estima-

tion of cellulose, 1910, A., ii, 554. Grimmer, Walther. See also Arthur

Scheunert.

Grimsehl, [Carl] Ernst [Heinrich], new apparatus for the determination of vapour density, 1905, A., ii, 442.

two manometers of great sensitiveness for small pressures and a gas balance,

1905, A., ii, 809.

Grinakovsky, K., linear velocity of crystallisation in capillary tubes,

1912, A., ii, 911.

formation of combined striations and combined faces, and destruction of crystals of chrome alum on solution, 1912, A., ii, 946.

Grindley, Harry Sands, the nitrogenous constituents of flesh, 1904, A., ii,

829.

Grindley, Harry Sands, and A. D. Emmett, chemistry of flesh.

1905, A., ii, 542.

Grindley, Harry Sands, and E. L. Ross, estimation of inorganic and organic phosphorus in meats, 1911, A., ii, 332.

Grindley, Harry Sands, and Herbert S. Woods, creatinine and creatine in meats and their products, 1907, A., ii, 187.

Grindley, Harry Sands. See also A. D. Emmett, F. W. Gill, Philip Bouvier Hawk, and Perry Fox Trowbridge.

Grineff, W. See Leonor Michaelis.

Griner, G., and Georges Urbain, Bayer's bauxium, 1908, A., ii, 108.

Gripenberg, William Sebastian, photosensitive antimonite [stibnite] cells,

1911, A., ii, 1045.

Grishkewitsch-Trochimowsky, E., synthesis and properties of B-hydroxy. β-m-tolyl-a-ethylpropionic 1908, A., i, 799.

action of magnesium on a mixture of p-tolyl methyl ketone and allyl

iodide, 1909, A., i, 151.

compounds of hexamethylenetetramine with multivalent alcohols, A., i, 108.

tertiary alcohols of the tolylallyl series.

1910, A., i, 108. oxidation of tertiary alcohols of the tolylallyl series, 1911, A., i, 290.

condensation of crotonaldehyde with ammonia and ethyl acetoacetate, 1911, A., i, 320.

action of magnesium thienyl iodide on allyl bromide, 1911, A., i, 481.

new method of preparation of, and certain derivatives of, thiophen-2aldehyde, 1911, A., i, 481.

5-methylthiophen-2-aldehyde,

A., i, 806.

Grishkewitsch-Trochimowsky, E., and Ippolyt Matschurevitsch, transformations of thiophen-2-aldehyde, 1912, A., i, 641.

Grishkewitsch-Trochimowsky, E. See also J. N. Reformatsky.

Grob, Armin, some unsymmetrical analogues of indigotin, 1908, A., i, 1011. Grob, Armin. See also Alfred Werner.

Grober, Julius A., the action of certain antiseptics on pepsin, 1904, A., ii, 673. Grode, Julius, the action of protracted

cocaine administration in animals, 1912, A., ii, 280.

Groebel, Paul, dibenzylideneacetone dibromide, 1903, A., i, 497.

Groebel, Paul. See also Daniel Vorländer.

Gröber, A., the influence of light on the formation of carboxymethæmoglobin, 1908, A., i, 486. veronal, 1911, A., ii, 316.

Gröer, Franz von, the gelatinase of Bacillus prodigiosus, 1912, A., ii, 283.

Gröger, Max, aluminium chromate, 1903, A., ii, 22.

cupric chromate, 1903, A., ii, 647.

zinc and cadmium chromates, 1904, A., ii, 659.

manganese chromates, 1905, A., ii, 392. estimation of manganese in the presence of chromium, 1905, A., ii, 766. cobalt chromates, 1906, A., ii, 451.

nickel chromates, 1907, A., ii, 94.

normal double chromates of potassium, 1907, A., ii, 624.

double chromates of ammonium, 1908, A., ii, 690.

readily soluble polychromates of the heavy metals, 1910, A., ii, 299. zinc chromates, 1911, A., ii, 283.

chromates from basic chromates, 1912, A., ii, 770.

Grönvall, Helga, the reducing substances in the urine of women during the lying-in period, 1912, A., ii, 582.

Gröppel, Karl, the separation of silicon from silicates and the possibility of obtaining aluminium from aluminium silicates, 1910, A., ii, 289.

Gróh, J., existence of liquid racemates, 1912, A., i, 411.

Groh, Reinhart. See Emil Fischer. Grohmann, A. See Ernst Weinland.

Grohmann, Oskar, oxidation of 3- and 7-methyluric acids in the presence of ammonia, 1911, A., i, 691.

Grohmann, Oskar, and Arjen Brouwer, mercury double salts of tetrahydronaphthylamines, 1909, A., i, 221.

Grolée, André. See Hans Theodor Bucherer.

Grombach, Adolf. See Gustav Fingerling and Hugo Kauffmann.

Gromoff, T., influence of high sugar concentration on the work of endotryptase in dead yeast cells, 1906, A., ii, 569.

Gromoff, T., and O. Grigorieff, the activity of zymase and of endotryptase in dead yeast cells under varying conditions, 1904, A., i, 960.

Gronover, A. See Alfred Partheil and Theodor Rumpf.

Gros, Oskar, hæmolysis, 1910, A., ii, 51. narcotics and local anæsthetics, 1910, A., ii, 529, 793.

hæmolysis. II. Hæmolysis by sodium carbonate, 1910, A., ii, 1082.

hæmolysis by ammonia, sodium hydroxide, and sodium carbonate, 1911, A., ii, 50.

narcotics and local anæsthetics. III.

The stability of the bases of local anæsthetics in solution, 1912, A., ii, 280.

Gros, Oskar, narcotics and local anæsthetics. IV. The action of novocaine salts, 1912, A., ii, 280.

Gros, Oskar, and C. Hartung, narcotics and local anæsthetics, 1911, A., ii,

136.

Gros, Oskar, and James M. O'Connor, colloidal metals in relation to their physico-chemical properties and their pharmacological action, 1911, A., ii, 418.

Groschuff, Erich, solubility of normal and acid formates of the alkalis, 1903, A., i, 600.

solubility of salts. XII. Ammonium hydrogen formate, 1904, A., i, 134.

acid nitrates, 1904, A., ii, 400, 559. iodic acid, 1906, A., ii, 16.

behaviour of the potassium chromates at high temperatures, 1908, A., ii, 501.

anhydrous molybdates. I., 1908,

A., ii, 501.

solubility of water in benzene, petroleum, and paraffin oil, 1911, A., ii, 595.

stability of emulsions of water in hydrocarbon oils, 1912, A., ii, 144. Groschuff, Erich. See also Franz

Mylius.

Grose, M. R. See William Homer Warren.

Grosfillex, E. See Etienne Barral. Groshans, John Antony, zero of the centigrade thermometer on the absolute scale, 1903, A., ii, 264.

Grosjean, A. See Henri Gillot. Grosman, L. See H. Cormimboeuf.

Gross, Abraham, purification and estimation of iodine, 1903, A., ii, 751.

Gross, Abraham. See also Henry Clapp Sherman.

Gross, Christian. See Fritz Ullmann. Gross, Emanuel, action of the salts of Ringer's solution on the isolated mammalian heart, 1904, A., ii, 55.

influence of artificial manures on the behaviour of water in soil, 1904, A., ii, 438.

Gross, Hans. See Otto Fischer.

Gross, Oscar, a simple method of estimating the activity of trypsin, 1908, A., i, 234.

the relationship of nitrogen and sulphur in metabolism, 1911, A., ii, 810.

Gross, Oscar, and Eduard Allard, the pathogenesis of ochronosis, 1908, A., ii, 1058.

Gross, [Carl Friedrich] Theodor, decomposition of silicon, 1905, A., ii, 816.

Gross. [Carl Friedrich] Theodor, chemical decomposition of platinum by means of an alternating current, 1908, A., ii, 199.

See Otto Neubauer. Gross, Walter. Grosse, Alfred. See Karl Löffler.

See Otto Wallach and Grosse, Erich. Alfred Wohl.

Grossenbacher, Hans. See Leon Asher. Grosser, Paul, indole and scatole in the organism, 1905, A., ii, 470.

behaviour of quinine in the body,

1908, A., ii, 213.

[estimation of quinine and its excretion in urine], 1909, A., ii, 948. investigations of protein metabolism

in children, 1910, A., ii, 424. Grosser, Paul, and Joseph Husler, the presence of glycerophosphatase in

animal organs, 1912, A., ii, 367. Grosser, Paul. See also Carl Neuberg. Grossmann, gases occluded in the lavas of the last eruptions of Mounts St. Pelée and Vesuvius, 1909, A., ii, 490.

Grossmann, Albert. See Reinhold von

Walther.

Grossmann, H. See Josef König. Grossmann, Hans. See Martin Onslow

Grossmann, Hermann, action of cadmium hydroxide on ammonium salts, 1903, A., ii, 146.

double salts of the alkali group, 1903,

A., ii, 476, 596.

copper thiocyanocyanides, 1904, A., i,

halogen thiocyanates; relationships between the rhodanic, halogen, and cyanogen ions, 1904, A., i, 147.

compounds of metallic thiocyanates with organic bases, 1904, A., i,

compounds of pyridine with nitrates of bivalent metals, 1904, A., i,

[influence of temperature on the specific rotatory power of strongly optically active compounds], 1904, A., ii, 377.

double salts of rubidium and bivalent

mercury, 1904, A., ii, 406. action of inorganic compounds on optically active polyhydric alcohols and acids, 1905, A., i, 415.

action of lead and bismuth salts on the rotatory powers of sugars, polyhydric alcohols, and hydroxy-acids. II., 1905, A., i, 861.

formation of complex compounds with mercury thiocyanate, 1905, A., ii,

249.

Grossmann; Hermann, evaluation of sodium peroxide, 1905, A., ii. 284.

separation of thorium from the cerite earths by means of normal sodium sulphite, 1905, A., ii, 326.

action of alkaline uranyl salts on

the rotatory power of sugars and other optically active hydroxyl compounds, 1906, A., ii, 61.

some reactions of tervalent titanium,

1906, A., ii, 806.

rotatory power of coloured solutions. I. Action of alkaline copper solutions on the rotation of sugars, higher alcohols, and hydroxy-acids, 1906, A., ii, 823. influence of lead salts on the polari-

metric investigation of urine and organic secretions, 1906, A., ii, 905.

increase and reversal of rotation. Salts of the type of potassium antimonyl tartrate, 1907, A., ii, 148.

action of potassium ferri- and ferrocyanide on ammoniacal solutions of certain metallic salts, 1907, A., ii, 303.

complex formation in molybdic acid solutions, 1907, A., ii, 556.

thiocarbamide, 1908, A., i, 10.

hydrolysis of aqueous solutions of ammonium thiocyanate in presence of metallic hydroxides, 1908, A., i, 512.

formation of compounds in solutions of tartaric acid and sodium molybdate, 1908, A., i, 854.

detection of nickel in ores and nickelsteel, 1908, A., ii, 434.

volumetric estimation of nickel with potassium cyanide, 1909, A., ii, 97. molybdates of nickel and cobalt, 1909,

A., ii, 186. application of alkaline phosphate solutions in analysis, 1909, A., ii, 438. anomalous rotation dispersion, 1909,

A., ii, 713. Sanchez's process for the separation of nickel and cobalt, 1909, A., ii, 941. tation dispersion. I. Influence of

rotation dispersion. the solvent on the rotation of ethyl tartrate and of menthol, 1910, A., ii,

Grossmann. Hermann, and Arthur Aufrecht, volumetric estimation of formaldehyde and of formic acid with potassium permanganate in acid solution, 1906, A., ii, 634.

Grossmann, Hermann, and F. L. Bloch, rotatory dispersion and mutarotation of the carbohydrates in water, pyridine, and formic acid, 1912, A., ii, 218.

Grossmann, Hermann, and Peter von der Forst, double cyanides of mercury, 1904, A., i, 983.

copper double cyanides, 1905, A., i, 179.

Grossmann, Hermann, and Heilborn, simultaneous qualitative test for nickel and cobalt, 1908, A., ii, 635.

Grossmann, Hermann, and Hölter, estimation of thiocyanates with permanganate, 1909, A., ii,

volumetric estimation of zinc and cyanogen, 1910, A., ii, 349.

Grossmann, Hermann, and Fritz Hünseler, compounds of metallic thiocyanates with organic bases, 1906, A., i, 7.

Grossmann, Hermann, and Gustav Jäger, some compounds of organic salts of bivalent metals with ammonia, pyridine, and phenylhydrazine, 1911, A., i, 944.

Hermann, and Grossmann, Hans Krämer, action of organic acids on the conductivity of yellow molybdic acid, 1903, A., i, 549.

complex compounds of molybdic acid and of tungstic acid with organic

acids, 1904, A., i, 850.

Grossmann, Hermann, and Bernhard Landau, rotation dispersion. II., 1910, A., ii, 1017.

measurement of the rotation dispersion of optically active compounds by means of the Nernst light, 1910, A., ii, 1018.

Grossmann, Hermann, and Albert Loeb. rotatory power of coloured solutions. III. Rotation dispersion of certain coloured complex tartrates, 1910, A., ii, 372.

Grossmann, Hermann, and Heinz Pötter, influence of temperature on the specific rotatory power of strongly optically active compounds, 1904, A., ii, 153; 1906, A., ii, 211. increase and reversal of rotation. Complex molybdyl and tungstyl

malates, 1906, A., i, 799. Grossmann, Hermann, and Franz Rothgiesser, change of rotation of sucrose in presence of alkaline uranyl salt

solutions, 1910, A., i, 223. Grossmann, Hermann, and Bernhard Schück, action of ethylenediamine on cobalt and platinum compounds, 1906, A., i, 485.

compounds of metallic thiocyanates with organic bases, 1906, A., i, 629. Grossmann, Hermann, and Bernhard Schück, ethylenediammonium double salts, 1906, A., i, 630.

additive compounds of dicyanodiamide and inorganic salts, 1906, A., i. 938. new delicate test for nickel; nickeldi-

cyanodiamidine, 1906, A., ii, 903. estimation of guanidine carbonate and

its application in analysis, 1907, A., ii, 142. estimation of nickel and its separation

from cobalt or zinc, 1907, A., ii, 582. estimation of nickel as nickeldicyanodiamide and its separation from iron and aluminium, 1907, A., ii, 819.

Brunck's dimethylglyoxime process for the estimation of nickel, 1908,

A., ii, 71.

detection of nickel, 1908, A., ii, 230. ammonium molybdate as a reagent for nickel, 1908, A., ii, 899.

dicyanodiamidine compounds, 1910.

A., i, 231.

estimation of nickel in nickel steel,

1910, A., ii, 658.

Grossmann, Hermann, and Leo Wieneke, influence of temperature and concentration on the specific rotation of optically active substances, 1906, A., ii. 209.

Grossmann, Hermann. See also Nikodem Caro and Georg Lunge.

Grossmann, Jacob, preparation of alkali nitrites, 1905, A., ii, 819.

Grossmann, Joseph, peptic digestion products of plasteins, 1905, A., ii, 99. the relationship of the peptic digestion products of plasteins to liver. muscles, and other organs.

1905, A., ii, 838. Grossmann's Cyanide Patents Syndicate, preparation of cyanides from ferrocyanides, 1904, A., i, 562, 860;

1905, A., i, 123.

Grosspietsch, O., mangesite deposits of Eichberg on the Semmering Pass: eichbergite, a new sulphantimonite, 1911, A., ii, 807.

Grote, F. See Wilhelm Falta.

Grote, Gustav. See Alfred Coehn. Grout, Frank F., plasticity of clays, 1905, A., ii, 713.

Grove, W. E., and Arthur Solomon Loevenhart, the supposed hydrolytic action of platinum-black, 1909, A., ii,

Grove, W. E. See also Arthur Solomon Loevenhart.

Groves, Charles Edward, cobaltamine compounds; preliminary note, 1907, P., 301.

Groves, Clarence Richard, and Thomas Turner, the behaviour of alloys when heated in a vacuum, 1912, T., 585; P., 62; discussion, P., 63.

Grube, Franz. See Rudolf Pummerer

and Arnold Reissert.

Grube, G., the oxygen electrode; electromotive behaviour of the oxides of platinum, 1910, A., ii, 926.

passivity, 1912, A., ii, 424.

Grube, Georg, alloys of magnesium and lead, 1905, A., ii, 320.

magnesium aluminium alloys, 1905, A., ii, 523.

alloys of magnesium with tin and thallium, 1905, A., ii, 636.

alloys of magnesium with cadmium, zinc, bismuth, and antimony, 1906,

A., ii, 355.

Grube, Karl, formation of glycogen in the liver, 1903, A., ii, 440; 1907, A., ii, 565.

glycogen, 1905, A., ii, 334.

the smallest molecule from which the liver can make glycogen, 1908, A., ii, 307.

can the liver form glycogen from optically active amino-acids? 1908, A.,

formation of glycogen from formaldehyde in the liver, 1909, A., ii, 328.

the rôle of the small intestine in the formation of glycogen from dextrose, 1909, A., ii, 415.

action of phloridzin on the liver, 1909,

A., ii, 501.

[estimation of glycogen], 1910, A., ii,

the influence of ether narcosis on body temperature and carbohydrate metabolism, 1911, A., ii, 303.

formation of glycogen from formalde-

hyde, 1911, A., ii, 410.

action of phloridzin, 1911, A., ii, 420. Grube, Karl, and Karl Reifferscheid, pregnancy toxemia, 1912, A., ii, 470. Grubenmann, Ulrich, glaucophane-rocks

from Switzerland, 1909, A., ii, 248. Grübler, M., phenolphthalein in urine,

1907, A., ii, 316.

action of free alkalis on morphine and adrenaline; a contribution to sterilisation, 1908, A., i, 204.

Grün, Adolf, synthesis of fats, 1905, A., i, 562.

ricinoleic acid, 1907, A., i, 111. some transformations of ricinoleic acid, 1909, A., i, 875.

syntheses of symmetrical monoglycerides, 1910, A., i, 356.

Grün, Adolf, and F. Bockisch, complex compounds of multivalent alcohols; a class of cyclic complex metallic salts, 1908, A., i, 934.

Grün, Adolf, and E. Boedecker, complex compounds of glycols, 1910, A.,

Grün, Adolf, and Octavian Corelli, hydrolysis of fats by sulphuric acid, 1912, A., i, 409.

Grün, Adolf, and J. Husmann, glycerolates of the alkaline-earth metals, 1910,

A., i, 352.

Grün, Adolf, and Fritz Kade, preparation of glycol and glycolhydrin esters of phosphoric acid glycerides, 1912, A., i, 156.

Grün, Adolf, and P. Schacht, synthesis of fats. I. Symmetrical glycerides, 1907, A., i, 462.

Grün, Adolf, and A. von Skopnik, synthesis of the triple mixed glycerides,

1909, A., i, 874.

Grün, Adolf, and E. Theimer, synthesis of fats. II. Unsymmetrical glycerides and their decomposition, 1907, A., i, 464.

Grün, Adolf, and H. Wetterkamp, decomposition of ricinoleic sulphuric acid with dilute acids. 1909. A..

Grün, Adolf, and Maximilian Woldenberg, essential constituent of Turkeyred oil and its derivatives, 1909, A., i, 284.

Grün, Adolf. See also Alfred Werner. Grünau. Landshoff, & Meyer. See Chemische Fabrik, Grünau, Landshoff, & Meyer.

Grünauer, Siegfried, preparation and electrolysis of pure molten zinc chlor-

ide, 1904, A., ii, 562.

Grünbaum, Albert Sidney Frankau, formation of cyanomethæmoglobin by

coal-gas, 1907, A., ii, 793.

Grünbaum, Albert Sidney Frankau, and Helen G. Grünbaum, some changes in normal tissues produced by radium, 1911, A., ii, 132.

Grünbaum, David. See August Gurber. Grünbaum, Herbert. See Arthur Rosen-

heim.

Grünbaum, Helen G. See Albert Sidney Frankau Grünbaum.

Grünbaum, Otto [Fritz Frankau], estimation of bile salts in urine, 1904, A., ii, 103.

estimation of bile salts, 1904, A., ii,

Grüne, H., phosphorescent zinc sulphide, 1904, A., ii, 732.

Grüneberg, Hans. See Alfred Stock.

Grüneisen, Eduard, thermal expansion and specific heat of metals, 1908, A., ii, 563.

relationship between compressibilities, thermal expansions, atomic volumes, and atomic heats of the metals, 1908, A., ii, 563.

thermal expansion of metals, 1910,

A., ii, 824.

influence of temperature and pressure on the coefficient of expansion and the specific heat of metals, 1910, A., ii, 824.

the influence of temperature on the compressibility of metals, 1911, A.,

ii, 188.

relationships between atomic heat, coefficient of expansion, and compressibility of solid elements, 1911, A., ii, 851.

sublimation, vaporisation, and liquefaction of monatomic elements, 1912,

A., ii, 534.

theory of the solid state of monatomic elements, 1912, A., ii, 1048.

Grüneisen, Eduard. See also Friedrich Kohlrausch.

Gruener, Hippolyte Washington, vapour pressure of sulphur at low temperatures, 1907, A., ii, 860.

silver nitrate formed by the action of nitric acid on silver sulphide, 1910,

A., ii, 953.

Gruenert, O. See Karl Fischer. Grünewald, W. See Alexander Gut-

Dier.

Grünhut, Leo, behaviour of borax towards carbon dioxide, 1904, A., ii, 615. sulphurous acid in its biochemical relationship, 1908, A., ii, 721.

Grünhut, Leo. See also Wilhelm Fre-

senius and Ernst Hintz.

Grünspan, Th., influence of quinine on phagocytosis, 1909, A., ii, 160.
Grünstein, N. See Paul Askenasy.

Grünthal, Erich. See Gustav Heller. Grünupp, H. See Wilhelm steinkopf.

Grünwald, Hermann Friedrich, the importance of chlorides in the life processes of the organism, 1909, A., ii, 162.

action of picrotoxin on the autonomic nervous system, 1909, A., ii, 599.

the relationship of kidney function and the glycogen of the liver, 1911, A., ii, 130.

Grüss, Johannes, proof, by means of the chromogram method, that hydrogenase takes an active part in alcoholic fermentation, 1908, A., i, 491.

Grüss, Johannes, hydrogenase or reductase? 1909, A., i, 75.

Grüter, R., volumetric estimation of mercury in galenical preparations, 1910, A., ii, 655,

Grüters, Fritz, final products of the hydrolysis of starch by oxalic acid, with special reference to Dierssen's (Lintner's) "isomaltose," 1904, A., i, 852.

Grüters, Max. See Friedrich Wilhelm Küster and Theodor Zincke.

Grüttner, Gerhard. See Siegfried Hilpert.

Grützner, Paul [Friedrich Ferdinand] ron, gastric digestion, 1905, A., ii,

Grützner, Paul von, and Hans Breyer, action of monatomic alcohols on simple organs, 1905, A., ii, 105.

Grützner, Paul von, and Wilhelm Waldschmidt, the laws of enzyme action,

1911, A., i, 697.

Grützner, Rudolf. See Wilhelm Wislicenus.

Gruhl, Woldemar. See Otto Dimroth. Grumbach, Albert, contact electrifica-

tion, 1910, A., ii, 93; 1912, A., ii, 12. researches on very small quantities of matter by the direct electrometric method, 1912, A., ii, 389.

Grumell, Ernest S., comparison of reaction velocity and the fluidity of the

medium, 1911, A., ii, 197.

Grund, Georg, analytical investigations on nitrogen and phosphorus metabolism and their relationships, 1910, A., ii, 624.

chemical pathology of muscle, 1912,

A., ii, 463.

Grund, Rudolf, gravimetric estimation of zinc according to Schneider, 1911, A., ii, 659.

Gruner, Oskar C., electrolytes in pathological effusions, 1907, A., ii, 900.

Gruner, Paul, decay of radium -A, -B, and -C, 1907, A., ii, 149.

theory of the radioactive disintegration of matter, 1907, A., ii, 149. Grunert, Herbert. See Karl Löffler.

Grunewald, Ernst. See Roland Scholl.
Grunmach, [Ludwig] Leo, new determinations of the surface tension of liquids, based on the capillary wave

method, 1903, A., ii, 132. determination of the surface tension and molecular weight of liquid

nitrous oxide, 1904, A., ii, 704. experimental determination of the surface tension of liquid oxygen and of liquid nitrogen, 1906, A., ii, 655.

Grunmach, [Ludwig] Leo, measurement of the surface tension and other physical constants of acetic acidwater mixtures, 1909, A., ii, 215.

experimental determination of the surface tension of alcohol-water mixtures by the method of capillary

waves, 1912, A., ii, 903.

Grunmach, Leo, and Franz Weidert, influence of transverse magnetisation on the electric conductivity of metals, 1907, A., ii, 329.

Gruschke, Georg, refraction and dispertion of light in certain gases, 1911,

A., ii, 349.

Gruszkiewics, J., a new electrochemical synthesis of hydrogen cyanide, 1903, A., i, 327.

new gasvolumeter, 1904, A., ii, 287.

Gruszkiewicz, J. See also L. Kaess. Grutterink, (Miss) Alide, microchemical testing of some alkaloids, 1912, A., ii, 502.

Grutterink, (Miss) Alide, and (Mrs.) Cornelia J. Weevers de Graaff, crystalline urinary albumose. II., 1906, A., i. 326.

Gry, A., action of organo-magnesium haloids on ethylideneacetone, 1908, A., i, 307.

Gry, A. See also Alfred Guyot.

Gryns, G., Koeppe's hypothesis of the nature of the red blood corpuscles, 1905, A., ii, 729.

the permeability of blood-corpuscles in physiological conditions, especially to alkali and alkali-earth

metals, 1911, A., ii, 49, 740. Grzeschik, Theo., simplified apparatus for the estimation of carbon in iron,

1908, A., ii, 1071.

new laboratory apparatus, 1910, A.,

ii, 893.

development of heat by a mass separated from iron, containing graphite, silicon, and phosphorus, 1912, A., ii, 552.

Gschwendner, Bernhard. See Eduard Strauss.

Gschwind, Meinrad. See Fritz Ull-

Guareschi, Icilio, condensation of aldehydes with ethyl cyanoacetate. II., 1903, A., i, 736.

transformation of amides into the corresponding primary alcohols, 1904, A., i, 465.

transformation of β -aminoamides into B-ketoamides, 1904, A., i, 891.

new derivatives of 8-ketonic acids, 1906, A., i, 800.

Guareschi, Icilio, mono- and di-alkylcyanovinylacetic [mono- and dialkylcyano-Δβ-butenoic] acids. II., 1907, A., i, 1003.

evolution of combustible gases in elementary analysis, 1907, A., ii, 395.

new isomerides of coniine and other hydrogenated bases, 1908, A., i, 1008.

some new derivatives of evelohexanones, 1911, A., i, 792.

pseudo-solutions or apparent solutions according to Francesco Selmi, 1911, A., ii, 261.

international table of atomic weights,

1912, A., ii, 929.

sensitive reaction for bromine in presence of other halogens, 1912, A., ii, 989.

diffusion of bromine in nature and its detection in organic substances,

1912, A., ii, 989.

Guareschi, Icilio, Adalberto Pasquali, Galeazzo Piccinini, Giovanni Issoglio, and Enrico Quenda, synthesis of pyridine compounds from B-ketoesters and ethyl cyanoacetate in presence of ammonia or amines. II., 1905, A., i, 821.

Guasco, A., construction of a toximeter for carbon monoxide, 1912, A., ii,

995.

Gubser, Alois. See Alfred Werner.

Gudeman, Edward, artificial digestion experiments, 1906, A., i, 53.

Gudzent, F., physico-chemical researches on the behaviour of urates in solution, 1908, A., i, 704; 1909, A., i, 435.

physico-chemical and chemical investigations on the behaviour of uric

acid in solution, 1909, A., i, 434. physico-chemical behaviour of uric acid and its salts in the blood, 1910, A., ii, 140.

gout, 1910, A., ii, 146.

Guédras, Marcel [P. S.], chemical constitution of copals, 1903, A., i, 105. barytes from dep. Lozère, 1904, A., ii, 494.

esterification of glycerol, 1905, A., i, 404.

calcium carbide as an explosive in mining operations, 1905, A., ii, 87. estimation of arsenic in iron ores, 1908, A., ii, 984.

Gülich, C. Joseph, new absorption apparatus for gases, 1907, A., ii, 79.

Gümbel, Theodor, distribution of nitrogen in the protein molecule, 1904, A., i, 460.

Guende. (Mlle.) Rl. See Alexandre Desgrez.

Günsburg, S. See Josef Tambor.

See August Mich-Günther, Arwed. aelis.

Guenther, August Ernest, action of salts on skeletal and heart muscle, 1905, A., ii, 545.

See Johannes Thiele. Günther, Fritz. See Friedrich Kehr-Günther, M.

mann. Günther, Oskar. See Johannes Thiele. Günzel, E., alkaloids of calumba root,

1906, A., i, 976.

Günzler, Heinrich. See Hermann Finger. Gueorguieff, J. See Carlo Baezner. Guérault, P. See Pierre Mazé.

Gürber, August, and David Grünbaum, lævulose in amniotic fluid, 1904, A.,

ii, 500.

Gürber, August, and Benno Hallauer, protein excretion through the bile, 1904, A., ii, 274.

Guerbet, Marcel, general method of synthesising monohydric alcohols, 1903, A., i, 3.

condensation of ethyl alcohol with heptyl alcohol; formation of nnonyl alcohol, 1903, A., i, 61.

condensation of heptyl alcohol with propyl alcohol; formation of βmethylnonyl alcohol, 1903, A., i, 61. source of error when testing for iodine

in urines, 1903, A., ii, 511. transformation of the a-hydroxy-acids into aldehydes by boiling the aqueous solutions of their mercuric salts; application to the preparation of larabinose by means of mercuric glutaconate, 1908, A., i, 123.

action of alcohols on sodium benzyl-

oxide, 1908, A., i, 162.

three new primary alcohols resulting from the condensation of sodium benzyloxide with propyl, butyl, and isoamyl alcohols, 1908, A., i, 635.

direct transformation of borneol into campholic and isocampholic acids,

1908, A., i, 661.

l-campholic acid, 1909, A., i, 100. 1-campholic acid and its derivatives, 1909, A., i, 301.

action of potassium hydroxide on borneol, camphor, and isoborneol; racemic campholic acid, 1909, A., i, 310.

condensation of isopropyl alcohol with its sodium derivative; formation of methylisobutylcarbinol and of δζ-dimethylheptan-β-ol, 1909, A., i, 690.

Guerbet, Marcel, condensation products from camphor, 1910, A., i. 52.

condensation of sec.-butyl alcohol with its sodium derivative, 1910, A., i. 149.

constitution of the alcohols arising from the condensation of secondary alcohols with their sodium derivatives, 1910, A., i, 454.

action of potassium hydroxide on primary alcohols; preparation of the corresponding acids, 1912, A., i, 67.

action of potassium hydroxide on secondary alcohols; diagnosis of primary and secondary alcohols of high molecular weight, 1912, A., i, 154.

action of potassium hydroxide on tertiary alcohols: new method for the diagnosis of alcohols, 1912, A.,

condensation of the sodium derivatives of primary alcohols with secondary alcohols, 1912, A., i, 527.

Guerdjikoff, (Mlle.) V. See Paul Thiéband Muller.

Guérin, F. Gabriel, reactions of guaiacol, 1903, A., ii, 338.

tests for strychnine; Wenzell's re-

agent, 1903, A., ii, 618. derivatives of lauric acid, 1904, A., i,

a-hydroxylauric acid, 1904, A., i,

methyl undecyl ketone, 1904, A., i,

distinctive character of the salts of cobalt and nickel, 1904, A., ii, 294.

colour reactions for alcohols (excepting methyl and ethyl) and for compounds of alcoholic function or hydroxylic compounds, 1905, A., ii, 209.

estimation of uric acid, 1906, A., ii,

the presence of traces of zinc in commercial alcohol, and its detection, 1907, A., ii, 397.

estimation of "total" and "volatile" acids in coloured wines, 1907, A., ii, 512.

estimation of lactose in milk, 1908, A., ii, 329.

estimation of the acidity of wine, 1908, A., ii, 330.

Pettenkofer's reaction, 1908, A., ii, 783.

production of iodoform [from carbon dioxide], 1909, A., i, 126.

Guérin, F. Gabriel, formation of crystals of hæmin by means of alkali iodides or bromides, 1909, A., ii, 527.

purification of ether to be used as an anæsthetic, 1912, A., i, 744.

Guérin, F. Gabriel, and L. Gonet, Buignet's method for the estimation of hydrocyanic acid and the titration of cherry-laurel water; correction and modification, 1909, A., ii, 443.

Guérin, F. Gabriel. See also Edmond

Émile Blaise.

Guérithault, B., detection and estimation of small quantities of copper in plants, 1912, A., ii, 998.

Guérithault, B. See also Maurice Javil-

Guerrini, G., equilibrium between proteins and electrolytes, II. Precipitation of egg-albumin with sodium sul-

phate, 1906, A., i, 466. Guerry, E., and E. Toussaint, estimation of total phosphoric acid in basic slags and native phosphates by the "citro-mechanic method," 1910, A., ii, 73.

Guertler, William Einot, bismuth oxide,

1904, A., ii, 130.

evolution of oxygen from cupric metaborate, 1904, A., ii, 259.

crystallisation of glassy masses, 1904,

A., ii, 610.

limits of miscibility of boric anhydride and borates in the fused condition, 1904, A., ii, 614.

melting points of mixtures of the alkaline earths with boric anhy-

dride, 1904, A., ii, 654.

electrical conductivity of alloys. Relation between conductivity and constitution, 1907, A., ii, 65.

electrical conductivity of alloys. II. Relation between constitution and temperature coefficient of conductivity, 1907, A., ii, 524.

[crystallisation of inorganic compounds], 1907, A., ii, 876.

electrical conductivity of alloys and their temperature coefficients, 1908, A., ii, 557; 1910, A., ii, 570.

explanation of a contradiction connected with the constitution of alloys of tin and lead, 1909, A., ii, 319.

solid solutions of the elements, 1909, A., ii, 982.

constitution and heat contents of leadtin alloys, 1910, A., ii, 126.

is the iron-nickel meteorite stable or metastable ? 1910, A., ii, 833. the structure of galvanised iron, 1911,

A., ii, 898.

Guertler, William Einot, the tin-cadmium alloys, 1912, A., ii, 650.

conductivity measurements on alloys as a method of determining their constitution, 1912, A., ii, 1034.

Guertler, William Einot, and Gustav Tammann, alloys of cobalt and nickel, 1905, A., ii, 92.

alloys of nickel and of cobalt with iron, 1905, A., ii, 528.

compounds of iron with silicon, 1906,

A., ii, 32. silicides of nickel, 1906, A., ii.

alloys of copper and nickel, 1907, A., ii, 174.

Guest, E. D. See James Crosby Chap-

Guest, Herbert Hartley. See Baldwin Johnson and Thomas Burr Osborne.

Güttich, A. See Hans Reckleben. Guggenheim, Markus. See Emil Abderhalden and Fritz Fichter.

Guggiari, Pedro Bruno, metallic salt precipitates of dyes containing hydroxyl groups, 1912, A., i, 876.

Gugl, Franz. See Robert Kremann. Guglielmetti, José G., and Victor Coppetti, estimation of glycerol in wine,

1904, A., ii, 216.

Guglielmo, Giovanni, condition of equilibrium between a dilute solution and the pure solvent separated by a semi-permeable diaphragm or by the vapour of the solvent, 1910, A., ii, 107.

value of the components of the electromotive force of the voltaic

couple, 1911, A., ii, 179.
Guicciardini, N. See Fernando Ageno.
Guichard, Marcel, reduction of molybdic acid in solution by molybdenum, and the titration of the reduced solution by permanganate, 1907, A., ii, 32.

cuprous iodide, 1907, A., ii, 689.

action of iodine on some elements in vacuum, 1908, A., ii, 31.

new compound of uranium, the tetraiodide, 1908, A., ii, 45.

action of heat on iodic anhydride, 1909, A., ii, 136.

preparation of pure iodic anhydride, 1909, A., ii, 477.

mercury pump, 1909, A., ii, 654.

adsorption of iodine by solids, 1910, A., ii, 772.

gases disengaged from the walls of tubes of glass, porcelain, and silica, 1911, A., ii, 396.

Guichard, Marcel, influence of water vapour on measurements in a Mc-Leod gauge, 1911, A., ii, 582.

the extraction of gas from copper heated in a vacuum, 1911, A., ii,

803.

extraction of gases from copper by a chemical method and the estimation of oxygen, 1911, A., ii, 934.

formation and decomposition of anhydrous substances; case of iodic anhydride, 1912, A., ii, 152.

gases dissolved in solids, 1912, A., ii, 295.

union of iodine and oxygen, 1912, A., ii, 549.

Guichard, Marcel, and Pierre Roger Jourdain, the gases in aluminium, 1912, A., ii, 847.

1912, A., ii, 847.

Guichard, P., purification of potable water, 1903, A., ii, 17.

Guidi, G. B. See E. Baroni.

Guignard, Léon, compound which yields hydrogen cyanide in Sambucus nigra, 1905, A., ii, 604.

existence in red-currants of a compound yielding hydrogen cyanide, 1905,

A., ii, 752.

formation and quantitative variations of the cyanogenetic principle of Sambucus nigra, 1906, A., ii, 118. emulsin; general existence of the

emulsin; general existence of the ferment in orchids, 1906, A., ii, 119. cyanogenetic beans of *Phaseolus lu-*

natus, 1906, A., ii, 301.

new examples of Rosaceæ furnishing hydrogen cyanide, 1906, A., ii, 795. supposed toxicity of Hungarian hari-

cots, 1908, A., ii, 58.

transformation of cyanogenetic glucosides during germination, 1909, A., ii, 84.

influence of anæsthesia and of cold on the fission of certain glucosides in plants, 1909, A., ii, 823.

Guignard, Léon, and Jules Houdas, nature of the cyanogenetic glucoside of the elder, 1905, A., ii, 648.

Guigues, P., detection of quinine by J. J. André's reaction, 1904, A., ii, 792.

scammony resins, 1905, A., i, 803. quinine salts and ammonium salts,

1905, A., i, 811. rectification of officinal ethyl ether, 1906, A., i, 724.

quinine formates, 1906, A., i, 977. analysis of scammony resins, 1908, A., ii, 995.

detection of urobilin in urine, 1909, A., ii, 712. Guild, Edward J., solubility and melting point of morphine, 1907, A., i, 436.

Guild, Frank N., composition of molybdite from Arizona, 1907, A., ii, 629.

mineralogical notes [cuprodescloizite, etc.], 1911, A., ii, 902.

Guillaume, Charles Edouard, variations of the modulus of elasticity of nickel steels, 1903, A., ii, 272.

theory of nickel steels, 1903, A., ii,

548, 600.

anomalous expansion of nickel steels, 1911, A., ii, 185.

the specific heat of water according to Regnault's experiments, 1912, A., ii, 624.

Guillaume, Edouard, Bose's phenomenon and the laws of contact electrification,

1908, A., ii, 753.

Guillaumin, C., two new isomerides of thymol; 2-hydroxy-1-methyl-3-isopropylbenzene (o-thymol) and 4-hydroxy-1-methyl-3-isopropylbenzene (p-thymol), 1910, A., i, 375; 1911, A., ii, 318.

structural conditions determining anomalies in boiling points among o-substituted phenols, 1910, A., i,

475.

phenols of the type OH °C₈H₃Me °CMe:-CH₂ with ψ-allyl side-chains. I. ψ-Allyl-o-cresol. II. ψ-Allyl-mcresol. III. ψ-Allyl-p-cresol, 1910, A., i, 477.

phenylic transposition of ψ -allyl phenyl ethers derived from o- or p-cresol, 1910, A., i, 478.

Guillemard, H., ethyl isocyanide dibromide, 1904, A., i, 563.

action of aniline on ethylcarbylamine dibromide, 1905, A., i, 518.

conditions of stability of the carbylamines, 1907, A., i, 197.

alkylation of the metallic cyanides, 1907, A., i, 300.

some methods of estimating nitriles and carbylamines, 1907, A., ii, 141. tautomerism of the cyanogen com-

Guillemard, H., and Robert Moog, influence of high altitudes on general

pounds, 1908, A., i, 718.

fluence of high altitudes on general nutrition, 1906, A., ii, 101. method for measuring the loss of

method for measuring the loss of water by the organism through the lungs and skin; variation of this loss with altitude, 1909, A., ii, 679.

Guillemard, H., and P. Vranceano, toxicity of urinary alkaloids, 1905, A., ii, 470. Guillemin, A., osmosis, 1904, A., ii,

Guillemin, G., and B. Delachanal, gases occluded in a complex brass, containing manganese, which showed numerous flaws, 1909, A., ii, 144.

occluded gas in alloys of copper, 1911,

A., ii, 41.

Guilleminot, H., production of ozone by high tension and high frequency spirals, 1903, A., ii, 538.

radio-chroism of organic substances to α-, β-, and γ-rays of radium and to X-rays, 1910, A., ii, 250. Guillerd, A. See F. Dienert.

Guillet, Léon, influence of certain treatments on the micro-structure of nickel steels, 1903, A., ii, 297.

cementation of steels, 1903, A.,

483.

diagram showing the properties of nickel steels, 1903, A., ii, 650.

properties and constitution of manganese steels, 1903, A., ii, 730. constitution and properties of silicon

steels, 1904, A., ii, 128. constitution and properties of vanadium

steels, 1904, A., ii, 266, 664. cementation of carbon steels and of

special steels, 1904, A., ii, 619. properties and constitution of chromium

steels, 1904, A., ii, 739.

constitution and properties of tungsten steels, 1904, A., ii, 739.

properties and constitution of molybdenum steel, 1904, A., ii, 739.

tempering of bronzes, 1905, A., ii, 168. constitution and properties of aluminium steels, 1905, A., ii, 526.

constitution and properties of tin, titanium, and cobalt steels, 1905, A., ii, 527.

properties, analysis, and classification of ternary steels, 1905, A., ii, 590. alloys of copper and aluminium, 1905,

A., ii, 712. special brasses, 1906, A., ii, 357. constitution of copper alloys, 1907,

A., ii, 461. nickel-tin alloys, 1907, A., ii, 473.

constitution and properties of boron steels, 1907, A., ii, 551.

relations between the [equilibrium] diagram of binary alloys and their malleability, 1907, A., ii, 608. methods for the study of alloys, 1907,

A., ii, 778.

properties and constitution of the tantalum steels, 1907, A., ii, 784. special cast-irons, particularly those containing nickel, 1907, A., ii, 874. Guillet, Léon, constitution of cast-irons containing manganese, 1908, A., ii, 192.

recovery of hammered materials, 1911, A., ii, 97.

Guillet, Léon, and Ch. Griffiths. cementation of iron by carbon in a vacuum, 1909, A., ii, 738.

Guillot, L. See Marius Vizern.

Guilloz, Th., the electrolysis of solutions of hydrochloric acid, 1908, A., ii. 459.

Guinchant, Joseph, luminescence arsenious oxide. 1905. A.,

triboluminescence of arsenious oxide, 1905, A., ii, 366.

mercuric iodide; calorimetry cryoscopy, 1907, A., ii, 667.

silver nitrate; calorimetry at high temperature, 1907, A., ii, 737.

calorimetric and cryoscopic constants of mercuric bromide, 1909, A., ii,

thermal properties of silver nitrate, 1909, A., ii, 860.

Guinchant, Joseph, and Paul Chrétien, cryoscopic study of solutions in sulphide of antimony, 1904, A., ii,

allotropic forms of antimony sulphide; heats of formation, 1904, A., ii, 568,

Guinchant, Joseph. See also Paul Chrétien.

Guinabourg, Michel. See Carl Graebe. Guiraud. See Isidore Pouget.

Guisan, Julien R. See Eugène Grandmougin.

Gukassianz. Armenak. See Otto Diels.

Guleke, N., the cause of death in acute diseases of the pancreas, 1907, A., ii,

Gulewitsch, Wladimir von, interaction occurring between aluminium, mercuric chloride, and benzene, 1904, A., i, 565.

substances extracted from muscle. III. Methylguanidine, 1906, A., i,

extractives of muscle. VI. Identity of ignotine and carnosine, 1907, A., i, 264, 436.

muscle extract. VIII. Formation of histidine by the decomposition of carnosine, 1907, A., i, 337.

[carnosine], 1907, A., i, 870.

XII. Conextractives of muscles. stitution of carnosine, 1911, A., i, 815.

Gulewitsch, Wladimir von, and R. Krimberg, substances extracted from muscle. II. Carnitine, 1905, A., i, 726.

Gulewitsch, Wladimir von, and Th. Wasmus, action of ammonium cyanide on the saturated ketones, 1906, A., i, 409.

Gulick, Louise. See Martin Andre Rosanoff.

Gulland, George Lovell, and Alexander Goodall, pernicious anæmia, 1905, A., ii, 102.

leucæmia and chloroma, 1906, A., ii,

Gulland, George Lovell. See also Alexander Goodall.

Gullbring, Alf., the taurocholeic acid of ox bile, 1905, A., ii, 737.

Gulli, Salvatore, action of methylamine on citraconic anhydride, 1904, A., i, 231.

Gulliver, Gilbert H., the structure of ternary alloys, 1912, A., ii, 555.

Gumlich, Otto. See Theodor Curtius.

Gumpert, E., assimilation of nitrogen, phosphorus, calcium, and magnesium in man, 1905, A., ii, 840.

Gumperz, Alfred. See Ivan Koppel and

Richard Josef Meyer.

Gundermann, Karl, the pharmacological action of some halogen substitution products of iminazoles [glyoxalines], 1911, A., ii, 754.

Gundermann, Karl. See also Karl Bernhard Lehmann and Hermann Pauly.

Gundry, Philip George, mean potential at electrodes under the action of alternating currents, 1905, A., ii, 668.

Gunn, Alexander, and Edward Frank Harrison, a characteristic reaction of adrenaline, 1907, A., ii, 591.

Gunn, James Andrew, physiological actions of yohimbine: on the "flycatching reflex," 1908, A., ii, 412. pharmacological action of harmaline, 1910, A., ii, 638.

adrenaline-like actions of cobra venom,

1912, A., ii, 587.

the pharmacological action of harmine, 1912, A., ii, 857.

Gunn, James Andrew. See also John Tait. Gunther, C.G. See James Furman Kemp. Gunther, (Mile.) Hélène. See Henryk Golblum.

Gunts, Antoine [Nicolas], general process for the formation of metallic nitrides, 1903, A., ii, 79.

sub-salts of barium, 1903, A., ii, 369. heats of formation of barium compounds, 1903, A., ii, 410.

Guntz, Antoine [Nicolas], preparation of barium, 1905, A., ii, 87; 1906, A., ii, 87.

preparation of pure barium from its suboxide, 1906, A., ii, 669.

lithium subchloride, 1907, A., ii, 167. silver subfluoride, 1912, A., ii, 941.

Gunts, Antoine, and Henry Bassett, jun., heat of formation of the hydride and nitride of calcium, 1905, A., ii, 300.

sublimation of platinum below its melting point, 1906, A., ii, 93.

copper nitride, 1906, A., ii, 359. attempts to prepare sub-salts of calcium, 1906, A., ii, 540.

Guntz, Antoine, and Witold Broniewski, melting point of arsenic, 1907, A., ii,

electrical resistance of the alkali metals, gallium and tellurium, 1909, A., ii, 113.

Guntz, Antoine, and Galliot, preparation of crystalline strontium, 1910, A., ii, 1064.

Guntz, Antoine, and de Grieft, copper

amalgam, 1912, A., ii, 351.

Guntz, Antoine, and F. Martin, preparation of anhydrous nitrates of manganese, copper, nickel, and cobalt, 1909, A., ii, 1019.

preparation of anhydrous nitrates by double decomposition, 1910, A., ii,

497.

Guntz, Antoine, and R. C. Mentrel, action of some gases on barium ammonium, 1903, A., ii, 546.

bariumamide and barium nitride, 1903, A., ii, 546.

A., 11, 040,

Guntz, Antoine, and Jules Minguin, ultra-violet radiations, 1911, A., ii, 241.

Guntz, Antoine, and G. Roederer, preparation and properties of strontium, 1906, A., ii, 229.

strontium amalgams, 1906, A., ii, 668.

Gupta, Nogendramohon, composition of the products of the alkaline hydrolysis of crystalline egg-albumin, 1910, A., i. 209.

Gurewitsch, A. L., condensation of tert.-butyl iodide with resorcinol under the influence of ferric chloride in an atmosphere of carbon dioxide or oxygen, 1903, A., 1, 27.

theory of the action of ferric chloride in the synthesis of organic com-

pounds, 1903, A., i, 40.

Gurewitsch, Ch. See Michael I. Konowaloff.

Gurewitsch, M. See Fritz Ephraim.

Gurewitsch, M. L., influence of alkalis on the speed of development of organic developers, 1903, A., ii, 706.

Gurney, Harold P., method of measuring absolute viscosity, 1912, A., ii,

235.

Gurwitsch, L., adsorption phenomena, 1912, A., ii, 833.

Gushoff, M. See Vetcheslav E. Tistshenko.

Gussew, Michael. See Carl Adam Bischoff.

Gussmann, Ernst, a very basic chromic acetate, 1911, A., i, 103.

Ernst. See also Rudolf Gussmann, Friedrich Weinland.

Gustavson, Gabriel, compounds

aluminium chloride which act as ferments in synthetical reactions, 1903, A., i, 470, 804. compounds of hydrogen chloride,

hydrocarbons. and aluminium chloride ferments which are formed in Friedel and Craft's synthesis of benzene homologues, 1905, A., i, 334, 696.

preparation of aluminium bromide,

1907, A., ii, 468.

preparation of cyclopropane, 1908, A.,

products of the action of aluminium chloride and hydrogen chloride on benzene; phenylmethylcyclopentane, 1908, A., i, 328.

Gutbier, Alexander, action of phenylhydrazine on the oxygen compounds of selenium and tellurium, 1903, A., i, 120.

colloidal sulphides, 1903, A., ii, 71.

inorganic colloids, 1903, A., ii, 81. a reaction of potassium ferrocyanide, 1904, A., i, 860.

Rivot's estimation of iron in the presence of zirconium, 1904, A., ii,

applicability of phosphorous acid for the estimation of selenium and tellurium, 1904, A., ii, 842.

double salts of palladous chloride and bromide, 1905, A., i, 584.

derivatives of palladosammine chloride

and bromide, 1905, A., i, 584. colloidal tellurium. IV., 1905, A., ii,

estimation of tellurium, 1905, A., ii,

gravimetric estimation of nitric acid by means of nitron [1:4-diphenyl-3:5-endo-anilodihydrotriazole], 1905, A., ii, 418,

Guthier, Alexander, ruthenium and its compounds, 1909, A., ii, 323.

the new Heraeus platinum crucible lid, 1910, A., ii, 343.

colloidal gold, 1911, A., ii, 1098. Gutbier, Alexander, and Friedrich

Bauriedel, platinum, 1910, A., i, 12.

Gutbier, Alexander, Friedrich Bauriedel, and Carl Julius Obermaier, bromosalts of platinum, 1911, A., i, 32.

Gutbier, Alexander, and Lothar Birckenbach, atomic weight of bismuth. II. Synthesis of bismuth oxide, 1908, A., ii. 600.

Gutbier, Alexander, Lothar Birckenbach, and Rudolf Bunz, electrolysis of bismuth salt solutions, 1908, A., ii. 600.

Gutbier, Alexander, Lothar Birckenbach, and Hans Mehler, atomic weight of

bismuth, 1906, A., ii, 92.

Gutbier, Alexander, and Georg Brunner, comparative experiments on the gravimetric estimation of antimony as trisulphide and tetroxide respectively, 1904, A., ii, 784.

Gutbier, Alexander, and Rudolf Bünz, peroxides of bismuth, 1906, A., ii, 174, 234, 551, 678; 1907, A., ii,

181; 1910, A., ii, 303.

action of ammoniacal hydrogen peroxide on bismuth salts, 1909, A., ii. 407.

Gutbier, Alexander, and Ferdinand Falco, estimation of chlorine in presence of palladium, and estimation of palladium by reduction with alcohol in alkaline solution, 1909, A., ii, 768.

estimation and separation of palladium,

1910, A., ii, 459, 756.

Gutbier, Alexander, and Ferdinand Flury, compounds of sulphur and tellurium, 1903, A., ii, 71.

behaviour of tellurium compounds on heated with ammonium chloride, 1904, A., ii, 115.

[tellurium compounds]; a correction,

1904, A., ii, 166.
position of tellurium in the periodic system of the elements, 1907, A., ii, 255.

freezing of hydrosols, 1909, A., ii, 28. quantitative estimation of tellurium, 1909, A., ii, 516.

tellurium, 1911, A., ii, 201. Gutbier, Alexander, Ferdinand Flury, and C. Ewald, halogen-salts of tellurium [tellurihaloids], 1912, A., i, 689.

Gutbier, Alexander, Ferdinand Flury, and Hans Micheler, tellurium, 1911, A., i, 182,

Gutbier, Alexander, Heinrich Gebhardt, and Paul Haas, atomic weight of palladium. Part II. The analysis of palladosammine bromide, 1909, A., ii, 585.

Gutbier, Alexander, and Balthasar Gossner, atomic weight of tellurium,

1906, A., ii, 436.

Gutbier, Alexander, and W. Grünewald, hexabromoselenates [selenibromides], 1912, A., i, 241; ii, 343.

Gutbier, Alexander, and Gustav Hofmeier, inorganic colloids, 1905, A.,

colloidal metals of the platinum series. I., 1905, A., ii, 396, 533. colloidal silver, 1905, A., ii, 452.

Gutbier, Alexander, and Alfred Hüttlinger, rhodium, 1908, A., ii, 200.

Gutbier, Alexander, and Rudolf Léon Janssen, atomic weight of bismuth. IV. Synthesis of bismuth sulphate, 1909, A., ii, 56.

Gutbier, Alexander, and Albrecht Krell, halogen derivatives of palladium,

1905, A., ii, 534.

palladium, 1906, A., i, 12.

derivatives of palladosammine, 1906, A., i, 244.

compounds of palladous haloids with aliphatic amines, 1906, A., i, 402.

Gutbier, Alexander, Albrecht Krell, and Rudolf Léon Janssen, palladium [compounds of amines with palladous haloids], 1905, A., i, 876.

Gutbier, Alexander, Albrecht Krell, and Martin Woernle, atomic weight of palladium. I. Analysis of palladosammine chloride, 1909, A., ii, 407.

Gutbier, Alexander, and G. A. Leuchs, ruthenihaloids, 1911, A., i, 183.

Gutbier, Alexander, and Fritz Lindner, hexachloro-iridium compounds, 1909, A., ii, 1025.

Gutbier, Alexander, and Johann Lohmann, action of hydrogen sulphide on selenious acid. I. Sensitiveness of selenium sulphide towards light, 1905, A., ii, 84.

action of hydrogen sulphide on selenious acid. II. Selenium sulphide,

1905, A., ii, 241.

nitroxyl chloride, 1905, A., ii, 243. Gutbier, Alexander, and Karl Maisch,

Gutbier, Alexander, and Karl Maisch, osmium, 1910, A., ii, 45.

chloro-salts of osmium, 1911, A., i, 18.

Gutbier, Alexander, and Hans Mehler, atomic weight of bismuth. III. Analysis of bismuth bromide, 1909, A., ii, 55.

Gutbier, Alexander, Georg Metzner, and Johann Lohmann, comparison of the gravimetric methods for estimating selenium, 1904, A., ii, 775.

Gutbier, Alexander, and Hans Micheler, oxides of quinquevalent bismuth,

1908, A., ii, 701.

Gutbier, Alexander, and Ludwig von Müller, rhodium, 1909, A., ii, 674.

Gutbier, Alexander, and Carl Julius Obermaier, ethylene- and propylenediammonium aurihaloids, 1911, A., i, 424.

Gutbier, Alexander, and Fritz Ransohoff, compounds of ruthenium with oxygen,

1905, A., ii, 534.

Gutbler, Alexander, and Friedrich Resenscheck, quantitative separation of tellurium from antimony, 1903, A., ii, 100.

liquid hydrosol of gold, 1904, A., ii.

414.

behaviour of telluric acid during electrolysis; a new modification of colloidal tellurium, 1904, A., ii, 613. action of hydrogen peroxide on

tellurium, 1905, A., ii, 24.

iodometric estimation of telluric acid, 1905, A., ii, 116.

Gutbier, Alexander, and Michael Riess, rhodium, 1909, A., ii, 523.

iridium, 1909, A., ii, 1025. hexahalogen-irideates [iridi-chlorides and iridi-bromides], 1910, A., i, 97.

Guthier, Alexander, and Eugen Rohn, gravimetric estimation of tellurium by means of hypophosphorous acid, 1903, A., ii, 100.

gravimetric estimation of selenium,

1903, A., ii, 390.

Gutbier, Alexander, and Carl Trenkner, Rivot's quantitative estimation of iron in presence of zirconium, 1904, A., ii, 90.

halogen compounds of ruthenium,

1905, A., ii, 463.

Gutbier, Alexander, and Walter Wagenknecht, action of hydrogen peroxide on tellurium dioxide; a new method for the preparation of telluric acid, 1904, A., ii, 613.

Frerich's estimation of tellurium,

1905, A., ii, 201.

1906, A., i, 805.

atomic weight of tellurium. II., 1906, A., ii, 81.

Gutbier, Alexander, and Paul Walbinger, osmichlorides, 1911, A., i, 191.
Gutbier, Alexander, and Martin Woernle, ethylene- and propylene-diamine compounds of palladium,

Gutbier, Alexander, and Martin Woernle, palladium haloids, 1907, A., i, 87.

Gutbier, Alexander, and Hermann Zwicker, ruthenium halogen salts, 1907, A., i, 289.

Guth, Ferdinand, synthetically prepared simple and mixed glycerides of the

fatty acids, 1903, A., i, 225. uthe, Karl Eugen, electrochemical equivalent of silver, 1906, A., ii, 520. Guthrie. Charles Claude, the laking

of dried red blood-corpuscles, 1903, A., ii, 306.

influence of formaldehyde on coagulation and laking of blood, 1903, A., ii, 493.

effect of intravenous injection of formaldehyde and calcium chloride on the hæmolytic power of serum, 1904,

A., ii, 672.

Guthrie, Charles Claude, and F. H. Pike, effect of blood-pressure on

respiration, 1906, A., ii, 686. nutrition of the excised mammalian

heart, 1907, A., ii, 186. Guthrie, Charles Claude, F. H. Pike, and George Neil Stewart, maintenance of cerebral activity in mammals by artificial circulation, 1907, A., ii, 40.

Guthrie, Charles Claude, and A. H. Ryan, alleged anæsthetic properties of magnesium salts, 1910, A., ii, 793.

Guthrie, Charles Claude. See also Orville Harry Brown.

Guthrie, Frederick Bickell, suggested explanation of allotropism based on the theory of directive valency, 1912, A., ii, 930.

Frederick Bickell, A. A. Guthrie, Atkinson, and William Mogford Hamlet, analyses of air from coal

mines, 1903, A., ii, 203.

Guthrie, Frederick Bickell, and C. R. Barker, rapid gravimetric method of estimating calcium, 1903, A., ii, 757.

Guthrie, Frederick Bickell, and Lionel Cohen, effect of lime on the availability of the soil constituents, 1908, A., ii, 889.

occurrence of manganese in soil, and its effect on grass, 1910, A., ii, 444.

Guthrie, Frederick Bickell, and R. Helms, pot experiments to determine the limits of endurance of different farm-crops for certain injurious substances, 1905, A., ii, 755; 1908, A., ii,

Guthrie, Frederick Bickell, and A. Alexander Ramsay, estimation of the free acid in superphosphates, 1910, A., ii, 72.

Guthrie. John Monteath. See John Simpson Ford.

Guthzeit, Max [Adolf], additive compound of two dicarboxyglutaconic ester

radicles, 1907, A., i, 1007.

Guthzeit, Max, and Hermann Eyssen, constitution of the imino-compounds from ethyl ethoxycoumalindicarboxylate and ammonia or alkylamines, 1909, A., i, 674.

Guthzeit, Max, and Erich Hartmann. new cyclic compounds from ethyl dicarboxyglutaconate, 1910, A., i.

Guthzeit, Max, and Martin Lobeck. methyl-ay-dibromo- and dichloro- dicarboxyglutarate and the formation of cyclotrimethylene derivatives from the former, 1908, A., i, 129. Guthzeit, Max, Arno Weiss, and Walter

Schaefer, cyclobutane derivatives as products of the polymerisation of ethyl dicarboxyglutaconate, 1909, A., i, 933.

Gutmann, August, reduction of tetrathionates to sulphites by arsenite and stannite, 1905, A., ii, 384.

reduction of trithionates to sulphites by arsenites and stannites, 1905, A., ii, 813.

action of potassium cvanide on sodium tetrathionate and dithionate, 1906, A., i, 149.

action of sodium arsenite on sodium ethyl thiosulphate, 1907, A., i, 671.

detection of thiosulphates in foods in the presence of sulphites, 1907, A., ii, 298.

volumetric estimation of thiosulphates. also in presence of sulphites, 1907, A., ii, 812.

action of alkalis on tetrathionates. IV., 1907, A., ii, 862.

action of alkalis on sodium ethyl thiosulphate. II., 1908, A., i, 497.

reduction of alkyl nitrates to nitrites in alkaline solution, 1908, A., i, 597.

action of arsenites and cyanides on thiosulphonates, 1908, A., i, 972.

action of carbonates on tetrathionates. V., 1908, A., ii, 173.

compounds of antimony sulphate with metallic sulphates, 1908, A., ii,

volumetric estimation of thiosulphonates, 1908, A., ii, 544.

action of acids on sodium ethyl thiosulphate. III., 1909, A., i, 128.

the action of arsenites on toluenesulphonyl chloride, 1909, A., i, 144. Gutmann, August, action of alkaline reducing agents on cyano-derivatives, 1909, A., i, 895.

the action of arsenites and cyanideon diazo-compounds, sulphides

1912, A., i, 397. **Gutmann**, *Leo*, Erper's gas generating apparatus, 1908, A., ii, 826. improved Kipp apparatus, 1910, A.,

ii, 493. Gutmann, Leo. See also Robert Stollé. Gutmann, Paul. See Otto Wallach.

Gutmann, S. See Ernst Friedmann and Walther Lob.

Gutowsky, Nicolai. Friedrich See Wüst.

Gutt, Johannes, hexahydroaromatic amines, 1907, A., i, 508.

Gutt. Johannes. See also Nicolai D.

Zelinsky.

Guttmann, Artur. See Walter Herz

and Theodor Pfeiffer.

Guttmann, Leo Frank, the determination of melting points at low temperatures, 1905, T., 1037; P., 206; 1907, A., i, 458.

latent heat of fusion of ice, 1907, A., ii, 433.

Guttmann, Leo Frank. See also Theodor

Curtius. Guttmann, Oscar, obituary notice of,

1911, T., 604. Guttmann, Oskar. See Alfred Stock.

Gutton, [Antoine Marie] Camille, influence of the colours of luminous sources on their sensitiveness to nrays, 1904, A., ii, 603.

photographic experiments on the action of n-rays on an oscillating

spark, 1906, A., ii, 142.

Gutzeit, Abraham, and Stanislaus von Kostanecki, 3'-hydroxyflavonol, 1905, A., i, 366.

Gutzeit, Ernst, action of charlock on nitrification, 1906, A., ii, 476.

estimation of nitric acid in soils, 1907,

A., ii, 50.

Guy, J. Sam, and Harry Clary Jones, conductivity and viscosity in mixed solvents containing glycerol, 1911, A., ii. 863.

Guy, J. Sam. See also Harry Clary Jones.

Guye, Charles Eugène, the most probable value of the ratio (ϵ/μ_0) of the charge to the mass of the electron in cathode rays, 1906, A., ii, 516.

Guye, Charles Eugène, and Antoine Bron, difference of potential and the stability of the alternating arc between metals, 1908, A., ii, 561.

Guye, Charles Eugène, and Antoine Bron, stability of the alternating are: a function of the atomic weight of the

metallic electrodes, 1908, A., ii, 755. Guye, Charles Eugène, and Vsévolod Freedericksz, viscosity of solids at low temperatures, 1910, A., ii, 21.

Guye, Charles Eugène, and H. Guye, disruptive discharge in gases at high pressures, 1905, A., ii, 668.

Guye, Charles Eugène, and Saul Mintz, viscosity of certain metals and its variation with temperature, 1908, A., ii, 930; 1910, A., ii, 591.

Guye, Charles Eugène, and H. Schapper. internal friction of metals at low tem-

peratures, 1910, A., ii, 486.

Charles Eugène, and Arthur Schidlof, magnetic hysteresis at high frequencies, 1905, A., ii, 228.

Guye, Charles Eugène, Arthur Schidlof, and Miroslaw Kernbaum, have X-rays an action on radioactive substances? 1908, A., ii, 142.

Guye, Charles Eugène, and (Mme.) Lydie Zebrikoff, difference of potential in the arc produced by a continuous current between metallic electrodes, 1908, A., ii, 150.

Guye, Charles Eugène. See also Édouard Sarasin.

Guye, H. See Charles Eugène Guye.

Guye, Philippe Auguste, electrolysis of alkali chlorides. I. Theory of diaphragm electrolysis, 1903, A., ii, 586.

electrolysis of alkali chlorides. Production of sodium hydroxide in diaphragm electrolysis, 1904, A., ii,

29.

new method for the exact determination of the molecular weights of the permanent gases; atomic weights of hydrogen, carbon, and nitrogen, 1904, A., ii, 475.

calculation of the exact molecular weights of the easily liquefiable gases from their densities; atomic weights of hydrogen, nitrogen, chlorine, sulphur, carbon, 1905, A., ii, 442.

atomic weight of nitrogen deduced from the ratio of the densities of nitrogen and oxygen, 1905, A., ii,

442.

atomic weight of nitrogen [and silver], 1906, A. ii, 19, 20.

atomic weight of nitrogen, 1906, A., ii, 349.

electrochemical problem of the fixation of nitrogen, 1906, A., ii, 533.

Guye, Philippe Auguste, application of the method of limiting densities to permanent gases, 1907, A., ii, 437.

application of the method of limiting densities to liquefiable gases, 1907,

A., ii, 605.

the method of limiting densities, and its application to the atomic weight of nitrogen, 1908, A., ii, 17.

application of the method of limiting densities to organic vapours, 1908,

A., ii, 86.

kinetics of the transformations of radioactive compounds, 1908, A., ii, 451.

physico-chemical constants of some

gases, 1909, A., ii, 466.

importance of physical chemistry for the determination of atomic weights, 1909, A., ii, 989.

application of thermal analysis to organic chemistry. I., 1910, A., ii,

cause of disagreement among the various methods of calculating the deviations from Avogadro's law, 1910, A., ii, 691.

the chemical nature of molecular association; a special study of the case

of water, 1910, A., ii, 841. molecular complexity in the liquid

state, 1911, A., ii, 1067.

relations between critical temperatures, boiling points, and expansion coefficients of liquids, 1912, A., ii, 131.

the proportion of potassium chloride contained in potassium chlorate and its estimation by the nephelometer; atomic weight of silver, 1912, A., ii,

the law of mass action, 1912, A., ii, 838. Guye, Philippe Auguste, and Stefan Bog-

dan, rapid methods for the physicochemical analysis of physiological liquids, 1904, A., ii, 391.

atomic weight of nitrogen; analysis by weighing nitrogen monoxide, 1904,

A., ii, 557.

determination of the atomic weight of nitrogen; gravimetric analysis of nitrous oxide, 1905, A., ii, 702.

Guye, Philippe Auguste, and Ch. Davila, density of nitric oxide; atomic weight

of nitrogen, 1906, A., ii, 20.

Guye, Philippe Auguste, and G. Drouginine, formation of [optically] active compounds by P. Curie's method, 1909, A., ii, 278.

revision of the atomic weight of nitrogen; exact analysis of nitrogen tetroxide, 1910, A., ii, 1056.

Guye, Philippe Auguste, and G. Fluss, direct determination of the atomic weight of chlorine with reference to oxygen, 1909, A., ii, 135.

Guye, Philippe Auguste, and Maurice Gautier, principle of optical super-

position, 1907, A., ii, 417.

Guye, Philippe Auguste, G. Kovacs, and E. Wourtzel, weight of a normal litre of atmospheric air at Geneva, 1912, A., ii, 636.

Guve, Philippe Auguste, and Edouard Mallet, the atomic weights of oxygen and hydrogen and the probable value of an atomic ratio, 1904, A., ii, 392.

Guye, Philippe Auguste, and Alexandre Pintza, density of nitrogen monoxide and the atomic weight of nitrogen, 1904, A., ii, 812. densities of carbon dioxide, ammonia,

and nitrous oxide, 1905, A., ii.

volumetric composition of gaseous ammonia and atomic weight nitrogen, 1909, A., ii, 39.

Guye, Philippe Auguste, and Gasar Ter-Gazarian, atomic weight of silver.

1906, A., ii, 750.

density of gaseous hydrogen chloride: atomic weight of chlorine, 1907, A.,

Guye, Philippe Auguste, and Demetrius E. Tsakalotos, exact determination of water of crystallisation as applied to researches on atomic weights, 1909, A., ii. 475.

Guye, Philippe Auguste, and N. Zachariades, vacuum correction of weighings applied to atomic weight determinations, 1909, A., ii, 989; 1910, A., ii, 116.

Guye, Philippe Auguste. See also Jules Bolle, N. Boubnoff, Louis Friderich. (Miss) Ida Frances Homfray, Edouard Mallet, Theodore Renard, A. Tardy, Demetrius E. Tsakalotos, Eugène Wassmer, and Adam Wroczynski.

Guyot, Alfred, condensation of oxalic esters with tert.-aromatic amines,

1907, A., i, 640.

products of condensation of ethyl oxalate with dimethylaniline in presence of aluminium chloride, 1907, A., i, 640.

synthesis of the auramines by means of the oxalic esters, 1907, A., i,

641.

new general methods for the synthesis of aromatic aldehydes, 1909, A., i, 935.

Guyot, Alfred, and V. Badonnel, condensation of methyl diketobutyrate aromatic hydrocarbons amines, 1909, A., i, 305.

Guyot, Alfred, and Jules Catel, derivatives of dihydroisobenzofuran, 1905, A., i, 226, 540; 1906, A., i, 761;

1907, A., i, 76.

synthesis in the anthracene series; condensation of dihydroisobenzofuran derivatives into 9:10-substituted anthracene derivatives, 1905, A., i, 516.

Guvot, Alfred, and G. Esteva, condensation of mesoxalic esters with aromatic hydrocarbons, 1909, A., i, 236. condensation of mesoxalic esters with

phenolic esters, 1909, A., i, 306.

Guyot, Alfred, and Léon Maurice Granderve, as-tetramethyldiaminophenyldiphenylenemethane and a colouring matter derived from it, 1903, A., i,

amino-derivatives of phenyldiphenylenemethane and the corresponding carbinol, 1905, A., i, 248.

Guyot, Alfred, and A. Gry, new syntheses of vanillin, 1910, A., i, 40.

Guyot, Alfred, and Albin Haller, combination of o-nitrobenzaldehyde with phenol in presence of hydrochloric acid, 1904, A., i, 530.

phthaleins and dibenzoylbenzenes.

1910, A., i, 285.

Guyot, Alfred, and A. Kovache, action of formic acid on triarylcarbinols, 1912,

A., i, 186, 972.

Guyot, Alfred, and Edmond Michel, condensation of mesoxalic esters with aromatic tertiary amines, 1909, A., i,

Guyot, Alfred, and P. Pignet, aminoderivatives of o-dibenzoylbenzene, 1908, A., i, 569.

some o-benzylated dyes from triphenylmethane, 1908, A., i, 569.

Guyot, Alfred, and Ch. Staehling, some derivatives of tetramethyldiaminophenyloxanthranol, 1904, A., i, 346. y-substituted anthracene derivatives,

1905, A., i, 885; 1906, A., i, 17. Guyot, Alfred, and F. Vallette, o-di-

benzoylbenzene and its homologues, 1911, A., i, 652.

Guyot, Alfred. See also Albin Haller. Guyot, J., differences of potential at the contact of two electrolytes; Nernst's theory, 1908, A., ii, 656.

differences in potential of apparent contracts between a metal and electrolytic solutions, 1911, A., ii, 1053.

Guyot, L. See Elophe Bénech.

Guzmán Canancio, Julio de, reaction of stannous iron, 1911, A., ii, 825.

Gwiggner, A., modified Hempel burette. 1910, A., ii, 445.

apparatus for the evolution of large quantities of hydrogen sulphide and partial recovery of the waste gases from precipitation reactions, 1911,

A., ii, 877.

Gwinner, Hans von. See Emil Fischer. Gwosdoff, S., action of haloid compounds of allyl on zinc ethyl iodide; the preparation and isolation of zinc ethyl iodide, 1903, A., i, 795.

Gwyer, Alfred George Cooper, aluminiumbismuth and aluminium-tin alloys,

1906, A., ii, 544.

alloys of aluminium with copper, iron, nickel, cobalt, lead, and cadmium, 1908, A., ii, 284.

Gwyer, Alfred George Cooper. See also

Morris William Travers.

Gyr, Ernst. See Paul Dutoit. Gyr, Joseph, condensation of benzylcyanide-o-carboxylic acid with aldehydes, 1907, A., i, 416.

dehydration of commercial methyl alcohol, 1909, A., i, 2.

esterification, hydrolysis of esters, and formation of salts with arylacetic acids and some of their derivatives. 1909, A., ii, 33.

Gyr, Joseph. See also Augustin Bistr-

zvcki.

Gyr, Karl. See Fritz Foerster.

Gysegem, Joseph van, methyl-n-heptylcarbinol, 1907, A., i, 375.

Gyzander, C. R., estimation of sulphur in pyrites, 1906, A., ii, 391.

H.

Haack, Otto. See August Klages. Haagen, Walter K. van, haloids of

tantalum, 1910, A., ii, 619. Haagen, Walter K. van, and Edgar Fahs Smith, the action of hydrogen fluoride on certain oxides, 1911, A., ii,

Haager, Ernst. See Theodor Curtius. Haager, J., behaviour of nitrosomonoprimary arylcarbamides towards

amines and phenols, 1912, A., i, 103. Haager, J., and Richard Doht, action of nitrous acid on tolyl- and mxylyl-carbamides and on phenylthiocarbamide. II., 1906, A., i, 577.

Haager, J. See also Richard Doht.

Haagn, Ernst, theory of the lead chamber process, 1903, A., ii, 71. mercury arc lamp in vessels of fused silica, 1905, A., ii, 798.

ignition in a vacuum by means of the electric furnace, 1906, A., ii, 48.

Haakh, Hermann, quinhydrones from chloranil and aromatic hydrocarbons, 1910, A., i, 48. quinones, 1911, A., i, 135.

Haakh, Hermann. See Henle and Johannes Thiele.

Haaland, M., glycogen in tumours, 1908, A., ii, 612. mouse

Haan, J. de. See Hartog Jukob Ham-

burger.

Haan, Titus de, condensation of 8diketones with carbamide, 1908, A., i,

Haane, Gunnar. See F. Bengen. Haanen. See Wilhelm Will.

Haar. Anne Wilhelm van der. 1arabinose and dextrose as inversion products of saponin from the leaves of Polyscias nodosa, Forst, 1908, A., i, 904.

plant peroxydases. I. New method of preparing peroxydases, 1910,

A., i, 604.

plant peroxydases. II. Hedera-peroxydase, a glucoprotein, 1910, A., i,

saponin-like glucosides from the leaves of Polyscias nodosa and Hedera helix, 1912, A., i, 885. estimation of hydrastine in hydrastis

extract, 1912, A., ii, 105.

Haarmann & Reimer, preparation of ionone, 1903, A., i, 349.

conversion of geraniol into cyclo-

geraniol, 1903, A., i, 501. derivatives of ionone, 1903, A., i, 504. separation of a- and B-cyclocitrals, 1903, A., i, 565.

farnesol, a new sesquiterpene alcohol, 1904, A., i, 513.

preparation of four isomeric methylionones, 1904, A., i, 595.

[alkylation of \psi-ionone], 1907, A., i,

preparation of coumarinearboxylic

acid, 1908, A., i, 345.

Haarmann, Carl W., caryophyllene, 1909, A., i, 400; 1910, A., i, 496. Haarmann, Wilhelm. See Carl Dietrich Harries.

Haars, Otto, alkaloids of the subaerial parts of Corydalis cava and Corydalis solida, 1905, A., i, 462.

constitution of corydaline, 1905, A., i,

462.

Haarst, J. van, use of amyl alcohol in Gerber's method for the estimation of fat in milk, 1903, A., ii, 516.

rapid method for estimating fat in milk, 1904, A., ii, 78, 789.

estimation of diastase in milk, 1910, A., ii, 667.

Haas, August, mineral occurrences in fossils of the Tyrolese limestones, 1912, A., ii, 564.

Haas, Ernst, the physiology of the glands. IX. The relationship between the hourly excretion of nitrogen and resorption from the intestine and its dependence on rest, work, and diuresis, 1908, A., ii, 874.

Haas, Ferdinand, See Richard Anschütz. Haas, Gustav. See Alfred Einhorn.

Haas, Johannes, chemical behaviour of high percentage ferro-silicon, 1908, A., ii, 110.

Haas, Julius. See Wilhelm Manchot. Haas, Karl. See Carl Bülow, Alfred Kliegl, and William Küster.

Haas, M. de. See Lodewyk Hendrik Siertsema.

Haas, Paul, the condensation of dimethyldihydroresorcin and of chloroketodimethyltetrahydrobenzene with primary amines. Part I. Monoamines: ammonia, aniline, and ptoluidine, 1906, T., 187; P., 17.

condensation of dimethyldihydroresorcin and of chloroketodimethyltetrahydrobenzene primary amines. Part II. Diamines: m- and p-phenylenediamines, 1906, T., 387; P., 63.

the occurrence of methane among the decomposition products of certain nitrogenous substances as a source of error in the estimation of nitrogen by the absolute method, 1906, T., 570; P., 81; discussion, P., 81.

isonitroso- and nitro-dimethyldihydroresorcin, 1907, T., 1433;

191.

the condensation of dimethyldihydroresorcin with ethylamine, 1909, T., 421; P., 19.

inorganic constituents of two Egyptian mummies, 1910, A., ii, 57.

a-hydroxyhippuric acid and a new test for hippuric acid, 1912, T., 1254; P., 163.

Haas, Paul. See also Arthur William Crossley, Carl Graebe, and Henry Rondel Le Sueur.

Haas, Paul (Erlangen). See Alexander

Gutbier.

Haas, Wilhelm. See Robert Pschorr.

HAB

Haas, W. J. de., isotherms of diatomic gases and of their binary mixtures. X. Control measurements with the volumenometer of the compressibility of hydrogen at 20°, 1912, A., ii, 1138.

Haas, W. J. de. See also Heike Kamer-

lingh Onnes.

Haase, Emil. See Ludwig Claisen. Haase, Felix, and Richard Wolffenstein, hydroxylamines, 1904, A., i, 856.

Haase, Max, preparation of monoiodosalicylic acids or its nuclear homologues, 1910, A., i, 740.

preparation of amides of monoiodosalicylic acid and its homologues.

1910, A., i, 740.

preparation of 5-iodo-2-acetoxybenzoic acid, 1910, A., i, 740.

Haase, Max, and Albert Stutzer, behenolic acid, 1904, A., i, 6.

Haase, Otto, 7-phenylhydro-\$-naphthacridine and its nitro-derivatives, 1903, A., i, 366.

3:7-dimethylacridine, 1903, A., i, 366. Haase, Otto. See also Richard Möhlau. Haavardsholm, O. See John Sebelien.

Haber, Fritz, order of magnitude of the time of formation of complex molecules, equilibrium constants, and atomic dimensions, 1904, A., ii, 607. small ionic concentrations, 1904, A.,

ii. 808.

detection and precipitation of the ferrous iron in aqueous solutions of potassium ferrocyanide, 1906, A., i, 149.

the hydrogen-oxygen cell. III., 1907,

A., ii, 67.

reversible action of oxygen on magnesium chloride, 1907, A., ii, 168. hydroxylamine, 1909, A., ii, 396.

Haber, Fritz, Gustav Birstein, and Reinhard Beutner, solid electrolytes; their decomposition by a current and their electromotive properties in galvanic chains, 1908, A., ii, 802. Haber, Fritz, and Ludwik Bruner, the

carbon cell, 1904, A., ii, 696; 1906,

A., ii, 212.

Haber, Fritz, and Joseph Edward Coates, formation of nitric oxide in the carbon monoxide flame, 1909, A., ii, 997.

Haber, Fritz, and Fritz Fleischmann, the hydrogen-oxygen cell, I., 1907,

reversible action of oxygen on magnesium caloride, 1907, A., ii, 84.

Glyn William Fritz, and Haber, Arnold Foster, the hydrogen-oxygen cell. II., A., ii, 66.

Haber, Fritz, and F. Goldschmidt, the anodic attack of iron by stray currents in the earth and the passivity of iron, 190**6**, A., ii, 213.

Haber, Fritz, and Henry James Hodsman, composition of the gases in very

hot flames, 1909, A., ii, 801.

Haber, Fritz, and Wilhelm Holwech. formation of nitric oxide from air in the arc under pressure, 1910, A., ii, 1059.

Haber, Fritz, and Gerhard Just, escape of negative electrons from reacting

metals, 1909, A., ii, 853.

production of negative electricity during the reaction of gases on base metals, 1910, A., ii, 572.

the emission of electrons in chemical

reactions, 1911, A., ii, 954.

Haber, Fritz, and K. Klemensiewicz, electric forces at the junction of two phases, 1909, A., ii, 785.

Haber, Fritz, and Adolf Koenig, forma tion of nitric oxide in high tension

arcs, 1908, A., ii, 34, 940.

Haber, Fritz, Adolf Koenig, and Eilif Platou, formation of nitric oxide in the high tension arc, 1910, A., ii, 1057.

Haber, Fritz, and Burritt Samuel Lacy. inner cone of the bunsen flame, 1910,

A., ii, 122.

Haber, Fritz, and Robert Le Rossignol, equilibrium of ammonia, 1907, A., ii, 454; 1908, A., ii, 362, 819.

dissociation of carbon dioxide in the carbon monoxide-oxygen flame, 1909,

A., ii, 384.

Haber, Fritz, and William Maitland, potentials of iron and the passivity of the metal, 1907, A., ii, 598.

Haber, Fritz, and Alexander Moser, generator gas- and carbon-cells, 1905,

A., ii, 667.

Haber, Fritz, and Gabriel van Oordt, glucinum compounds, 1904, A., ii, 257, 659.

formation of ammonia from its elements, 1905, A., ii, 159, 384, 814.

Haber, Fritz, and Eilif Platou, formation of nitric oxide from air by means of high frequency, alternating, electrical discharges, 1910, A., ii, 1058.

Haber, Fritz, and Franz Richardt, equilibrium of gases in the bunsen flame; chemical determination of temperatures of flames, 1904, A., ii,

Haber, Fritz, A. Rieff, and P. Vogt, validity of Faraday's law in the electrolysis of hot porcelain, 1908, A., ii, 254.

Haber, Fritz, and Rudolf Russ, electrical reduction, 1904, A., ii, 309.

Haber, Fritz, and Stanislaw Tolloczko, reduction to carbon of chemicallycombined carbonic acid; electrochemical changes with solid substances, 1904, A., ii, 813.

Haber, Fritz, and J. Zawadzki, polarisation of solid electrolytes; [the phenomena of passivity], 1911, A., ii,

1053.

Haberlandt, Ludwig, the existence of a diastatic enzyme in leucocytes, 1910, A., ii, 515.

Habermann, H. See Albin Kurten-

acker.

Habermann, Josef, the amount of hydrogen cyanide in cigar smoke, 1903,

A., ii, 174.

separation of sulphur by the incomplete combustion of hydrogen sulphide; a lecture experiment, 1904, A., ii, 165.

experimental demonstration of the indestructibility of matter and of the law of multiple proportions; structure of the bunsen flame; two alloys, 1905, A., ii, 693.

stable cupric hydroxide and the basic salt 7CuO, 2SO₃, 5H₂O (brochantite),

1906, A., ii, 757.

new apparatus; appliance for maintaining constant temperatures in drying-ovens; a fractionating column; receiver for Mitscherlich's apparatus (phosphorus distillation), 1908, A., ii, 17.

1908, A., ii, 17.

Habermann, Josef, and H. Brezina, ethyl acetate, 1909, A., i, 873.

Habermann, Josef, and Richard Ehrenfeld, quantitative separation of leucine and tyrosine, 1903, A., ii, 192.

tobacco-smoke, 1908, A., ii, 888.

Habermann, Josef, Wilhelm Kulka, and E. Homma, the laboratory air and its deleterious constituents, 1911, A., ii, 315

Habermann, Josef, and Albin Kurtenacker, the 4/3 sodium carbonate, 1909, A., ii, 664.

Habershon, Samuel Herbert, iodine staining granules of leucocytes, 1906, A., ii, 96.

Hac, Rudolf. See Jaroslav Milbauer.
 Hackett, Felix E. W., secondary radiation excited by γ-rays, 1909, A., ii, 287.

Hackett, Felix E. W. See also John A. McClelland.

Hackford, John Edward. See Frederic Stanley Kipping, Henry Julius Salomon Sand, and Samuel Russell Trotman.

Hackspill, Louis, preparation of rubidium and cesium, 1905, A., ii, 585.

reduction of silver and of copper chloride by calcium, 1906, A., ii, 161.

alloys of lead and calcium, 1906, A., ii. 671.

reduction of ferric and chromic chlorides by means of calcium, 1907, A., ii, 876.

platinum-thallium alloys, 1908, A., ii, 504.

a new calcium silicide, 1908, A., ii, 589.

electric resistance of the alkali metals, 1910, A., ii, 821.

density, coefficient of expansion, and variation in volume on fusion of the alkali metals, 1911, A., ii, 185.

preparation of alkali metals, 1911, A., ii, 602.

vapour pressure of the alkali metals between 250° and 400°, 1912, A., ii, 430.

Hackspill, Louis, and Robert Bossuet, temperature at which alkali metals attack water, 1911, A., ii, 392.

new alkali phosphides of the type M_2P_5 , 1912, A., ii, 252.

Hackspill, Louis. See also Witold Broniewski.

Hadanck, Erich. See August Michaelis. Haddock, Isaac T. See George William Rolfe.

Haden, R. L. See Joseph Hoeing Kastle. Haddeld, (Sir) Robert, sinhalese iron and steel of ancient origin, 1912, A., ii, 258.

Hadfield, Robert Abbott. See William Fletcher Barrett, (Sir) James Dewar, and John Arnold Fleming.

Hadley, Harry F., derivatives of ethyl a-cyanophenylacetate and ethyl a-cyanobutyrate, 1912, A., i, 699.

Hadlock, W. L., an improvement on the Kjeldahl distilling apparatus, 1912, A., ii, 983.

A., ii, 983. Hadorff, Karl. See Rudolph Fittig.

Haeckel, Siegfried. See Johannes Thiele. Haeffner, Karl. See Carl Dietrich Harries.

Hägglund, Erik, adsorption of dissolved substances, 1910, A., ii, 396.

affinity measurements in alcoholic and aqueous alcoholic solutions, 1912, A., ii, 120.

Hägglund, Erik, hydrolysis in absolute and aqueous-alcoholic solutions, 1912, A., ii, 910.

Haehn, Hugo, new method for the preparation of ketones, 1906, A., i, 400.

vacuum distilling apparatus for solid substances, 1906, A., ii, 841.

convenient method for the preparation of cyclopropane, 1908, A., i, 14.

Haehn, Hugo. See also Eduard Buchner and Karl Kof.

Hähnel, Otto, formation of kaolin, 1908, A., ii, 956.

Hähnel, Otto. See also Franz Fischer. Haehnel, Wolfram, the oxidation potential of manganese dioxide, 1909, A., ii, 959.

Hähnle, Otto. See Karl Auwers.

Hällstén, K., Clapeyron-Clausius equation for the latent heat, 1903, A., ii, 130.

Hällström, Joh. A. of., nuclear synthetical equilibrium between phenols, bicarbonates, and phenolcarboxylic acids in aqueous solution, 1905, A., ii, 511.

Hämäläinen, Juho, influence of the asymmetric carbon atom in pharmacology; the action of d-, r-, and l-camphor on the chloral-poisoned frog's heart, 1909, A., ii, 169.

isomeric borneolglycuronic acids, 1910,

A., i, 326.

fission of borneol- and camphorglycuronic acids by enzymes, 1910, A., i, 326.

the fate of cincole (eucalyptol) in the organism, 1911, A., ii, 137.

the forensic-chemical detection of oil of savin, 1912, A., ii, 812.

Hämäläinen, Juho, and Lennart Sjöström, the limit of glycuronic acid combination in rabbits immunised

against enzymes, 1911, A., ii, 309. Hämäläinen, Juho. See also Emil

Abderhalden.

Haemmerle, Vera, silicate fusions with artificial mixtures, 1910, A., ii, 721.

Haën, E. de, preparation of soluble basic acetates of aluminium, chromium, and iron, 1908, A., i, 386.

Haen, Hugo. See August Klages.

Händel, Ludwig. See Fred Neufeld.
Händel, M., glycogen in the skeleton, 1903, A., ii, 90.

Haenle, Oscar, and Alfred Scholz, the dextrins of pine-honey, 1904, A., ii, 96.

Haensel, E., glycogen of frog's spawn, 1908, A., ii, 769.

Haensel, E., amounts of iron and phosphorus in vegetables, 1909, A., ii, 257.

Haensel, E. See also Joseph Nerking. Haensel, Heinrich, ethereal oils, 1903, A., i, 187; 1906, A., i, 524; 1907, A., i, 65, 781; 1908, A., i, 665; 1909, A., i, 111, 312, 815; 1910, A., i, 401, 864.

Haerdtl, Hugo, action of cyanoacetic acid on crotonaldehyde, 1906, A., i, 62.

Härtel, Richard. See Hans Stobbe. Häse, G. See Carl Liebermann.

Haesler, F., estimation of urea, 1909, A., ii, 275.

Häuser, F., explosive mixtures of coalgas and air, 1906, A., ii, 441.

Haeussermann, Carl, nitrocelluloses, 1904, A., i, 144, 476.

acetylcelluloses, 1905, A., i, 574. tertiary aromatic amines. V., 1906, A. i, 910.

action of nitric acid on cellulose, 1908, A., i, 768.

Häussermann, Johannes. See Edgar Wedekind.

Häussler, Paul. See Hans Rupe. Hafemann, Max, the influence of temperature on motor and sensory nerves

of the frog, 1908, A., ii, 513.

Haferkamp, J. W., intensity minimum of the cyanogen group of bands, $\lambda = 3883.558, 1910, A., ii, 811.$

Haffmans, H. See Hans Murschhauser. Hafner, August. See Hans Kreis. Hafner, Boren, invertase from yeast,

1904, A., i, 958.

Haga, Tamemasa, peroxylaminesulphonates and hydroxylaminetrisulphonates (sulphazilates and metasulphazilates), 1903, P., 281; 1904, T., 78.

hydroxylamine-\alpha\begin{align*}{l} disulphonates (structural isomerides of hydroxylamine-\alpha\begin{align*}{l} disulphonates), 1906, T., 240; P., 29; discussion, P., 30.

simple method of preparing the imides of the aromatic sulphonic acids,

1908, A., i, 870.

Haga, Tamemasa, and Riko Majima, some anhydro-bases from diamines of the fatty series, 1903, A., i, 291.

the fatty series, 1903, A., i, 291.

Hagan, H. H., and J. K. Ormond, the relation of calcium to the cardioinhibitory function of the vagus, 1912,
A., ii, 278.

Hagedor, Fritz. See Carl Dietrich Harries.

Hageman, A. M. See Henry Briggs North. Hagemann, Oskar, "romsuxankalk" in animal metabolism, 1911, A., ii, 507.

the action of mineral substances in the animal body, 1912, A., ii, 778.

Hagen, Ernst, and Heinrich Rubens, relationships between reflective power and electrical conductivity of metals, 1903, A., ii, 348.

influence of temperature on the emissive power of metals, 1909, A., ii,

variation of the emissive power of metals with the temperature in the short-waved ultra-red spectrum, 1910, A., ii, 469.

Hagen, Ernst. See also Heinrich

Rubens.

Hagen, Thomas von der. See August

Michaelis.

Hagenacker, Joh. See Adolf Sieverts.
Hagenbach, August, spectrum of lithium,
1903, A., ii, 122.

Hagenbach, August. See also Heinrich

Mathias Konen.

Hahl, Hans. See Julius Tafel.

Hahn, Alfred. See Erich Böcker and Ernst Deussen.

Hahn, Arnold, a new fractionating column, 1910, A., ii, 183.

fractionating arrangement, 1910, A., ii, 583.

a convenient condenser, 1910, A., ii, 893.

Hahn, Arnold. See also Josef Houben. Hahn, Albert W. See Henry Clapp Sherman.

Hahn, Carl, and Anton Strutz, production of carbon from carbides, 1907, A., ii, 82.

Hahn, Carl. See also Richard An-

schütz.

Hahn, Friedrich L., isolation of an enolic dibromide and the course of the reaction in the bromination of acetophenone and similar ketones, 1911, A., i, 649.

Hahn, Friedrich L. See also Carl Mannich.

Hahn, Heino. See August Klages.

Hahn, O. See Theodor Zincke.

Hahn, Oskar, thermodynamics of water gas; the equilibrium CO₂+H₂=CO + H₂O, 1903, A., ii, 274, 711.

equilibrium $CO + H_2O = CO_2 + H_2$, 1904, A., ii, 343, 643.

Hahn, Otto, a new radioactive element which emits thorium radiation, 1905, A., ii, 432, 789.

a new product from actinium, 1906,

A., ii, 323.

Hahn, Otto, some properties of the a-rays from radiothorium. I., 1906, A., ii, 416, 594.

ionisation ranges of the a-rays of actinium, 1906, A., ii, 718.

radioactinium, 1907, A., ii, 62.

an intermediate product of thorium, 1907, A., ii, 359.

rays from thorium products, 1907, A., ii, 664.

parent substance of radium, 1907, A., ii, 921,

nomenclature of thorium compounds,

1908, A., ii, 454. short-lived intermediate product between mesothorium and radiothorium, 1908, A., ii, 454.

mesothorium, 1908, A., ii, 557.

new phenomenon in the activation with actinium, 1909, A., ii, 206.

relationships in the emission of β-rays and the absorption of these by matter, 1910, A., ii, 673.

the properties of technically prepared mesothorium and its evaluation,

1911, A., ii, 845.

Hahn, Otto, and Lise Meitner, absorption of β-rays of radioactive elements, 1908, A., ii, 452.

actinium-C, a new short-lived product of actinium, 1908, A., ii, 920.

β-rays of actinium, 1908, A., ii, 1007. expulsion of radioactive matter in the transformations of radium, 1909, A., ii, 634.

complex nature of radium-C, 1909, A., ii, 849. a typical β -radiation of radium, 1909,

A., ii, 954.

law of absorption of the β-rays, 1910, A., ii, 8.

a new β-radiation from thorium-X; analogies in the uranium and thorium series, 1910, A., ii, 566.

the distribution of β-rays among the single products of the active deposit of thorium, 1912, A., ii, 514.

Hahn, Otto, and Otto Sackur, the degradation constant of the emanations from emanium and actinium, 1905, A., ii, 432.

Hahn, Otto. See also Otto von Baeyer and Ernest Rutherford.

Hahn, Paul. See Emil Abderhalden. Hahn, Wilhelm. See August Michaelis.

Haid, August. See Julius Schmidt.
Haid, Rudolf, nitro- and amino-derivatives of α-naphthaquinoline and their oxidation to quinoline-7:8-dicarboxylic

acid, 1906, A., i, 605. Haid, Rudolf. See also Ludwig Kaluza. Haigh, Edward, orthobaric volumes in relation to pressure and temperature, 1908, A., ii, 813.

Haigh, Frank Loyal, certain physical properties of the alkali nitrates and chlorides, 1912, A., ii, 929.

Haigh, Frank Loyal. See also Harry

Ward Foote.

Haigh, Leonard Dixon, detection of methyl alcohol when mixed with ethyl

alcohol, 1904, A., ii, 94.

Hailer, Ekkehard [Eugen Reinhold], inhibiting action and germ-destroying power of free sulphurous acid, its salts, and other complex derivatives, 1911, A., ii, 1021.

See Paul Pfeiffer. Haimann, M.

Hain, Johann, a self-acting wash-bottle,

1911, A., ii, 715.

Hairs, Eugène, presence of an alkaloid in the seeds of Lunaria biennis, 1910, A., ii, 234.

Haiser, Franz, and Franz Wenzel, carnine and inosic acid, 1908, A., i, 561; 1909, A., i, 322, 540; 1910, A., i, 543.

Haiser, Franz. See also Josef Herzig. Haitinger, Ludwig, and Karl Ulrich, treatment of pitchblende residue, 1908, A., ii, 857.

Haitinger, Ludwig. See also Viktor von Lang.

Håkanson, G. See Carl Hartwich.

Hake, Cecil Napier, and Marcus Bell, the action of sulphuric and nitric acids in the nitration of cellulose, 1909, A., i, 457.

Hake, Cecil Napier, and Reginald J. Lewis, formation of sulphuric esters in the nitration of cellulose and their influence on stability, 1905, A., i, 512.

Hake, Henry Wilson. See Arthur Monckton Copeman.

Haken, Werner, thermo-electric properties of metallic alloys, 1910, A., ii, 387.

Halban, Hans von, autoracemisation of optically active ammonium salts, 1907, A., ii, 246; 1908, A., i, 627.

rôle of the solvent in chemical kinetics, 1909, A., ii, 722.

simple formation of benzyl ethers,

1910, A., i, 619. kinetics of ammonium salts, 1911, A., i, 852.

Halban, Hans von, and Alexander Kirsch, lecture experiments on the influence of solvents on the velocity of reaction, 1912, A., ii, 1046.

Halban, Johann (Ritter) von. See Alfred

Werner.

Halberkann, Josef, assamin, 1909, A., i, 660.

Halberstaedter, Ludwig. See Julius Morgenroth.

Hald, P. Teteus, action of potassium salts on the circulatory organs, 1905, A., ii, 836.

Haldane, J. B. S. See Claude Gordon Douglas.

Haldane, John Scott, gas analysis apparatus, 1906, A., ii, 121.

Haldane, John Scott, and Edward Palmer Poulton, effects of want of oxygen on respiration, 1909, A., ii, 66.

Haldane, John Scott, and John Gillies Priestley, regulation of lung ventila-

tion, 1905, A., ii, 400.

Haldane, John Scott. See also Arthur Edwin Boycott, Claude Gordon Douglas, and Mabel Purefoy Fitzgerald.

Hale, Arthur James, See Raphael Meldola, Hale, Clarence Frederic, the measurement of very small gas pressures, 1912, A., ii, 230.

Hale, Clarence Frederic, and Vasco Emilio Nunez, oxidation of hydrazine. VI. Reaction between mercuric oxide and hydrazine hydrate in alcoholic solution, 1911, A., i, 845.

Clarence Frederic, and Harry Westfall Redfield, the oxidation of hydrazine. V. Reaction between potassium iodate and hydrazine sul-

phate, 1911, A., ii, 929.

Hale, Clarence Frederic, and Fred Floyd Shetterley, anhydrous hydrazine. A convenient apparatus for the preparation of anhydrous hydrazine, 1911, A., ii, 718.

Hale, Clarence Frederic. See also Walter Parke Bradley.

Hale, Frank Eugene, standard tartar emetic solution and the structural formula of the salt, 1903, A., i, 7.

relation of hydriodic acid and of its salts to the starch and dextrin iodides, 1903, A., i, 151.
rapid method for the estimation of

calcium in water for boiler purposes, 1907, A., ii, 815. recovery of albuminoid ammonia from

distillates contaminated with permanganate, 1907, A., ii, 821.

Hale, Worth, physiological action of the alkaloids of the Papaveraceæ, 1909, A., ii, 333.

Hale, Worth, and Casriel Fishman, excretion of bromides by the kidney,

1908, A., ii, 611. Hale, Worth, and Atherton Seidell, colorimetric and physiological estimation of the active principle of the suprarenal gland, 1912, A., ii, 106.

Hale, William Jay, constitution of dehydracetic acid, 1911, A., i, 721.

the behaviour of acetonylacetone towards B-dialdehydes, 1912, A., i, 566. studies in the cyclopentadiene series.

I. 5-Nitro-2:3-diacetylcyclopentadi-

ene, 1912, A., i, 994.

Hale, William Jay, and Harvey C. Brill, formation of pyrimidines by use of nitromalonaldehyde, 1912, A., i, 216.

formation of 1:3-thiazines from thiocarbamide, 1912, A., i, 306.

Hale, William Jay, William D. McNally, and C. J. Pater, Grignard syntheses in the furan group, 1906, A., i, 199.

Hale, William Jay, and Charles A. Robertson, condensation of nitromalonaldehyde with acetonylacetone, 1908, A., i. 634.

Hale, William Jay. See also Henry

Barker Hill.

Halenke, A., and Max Kling, ricinus residues, 1906, A., ii, 387.

detection of nitrogen in organic substances, 1911, A., ii, 1131.

Halfpaap, Gustav, action of m-xylylene bromide on primary, secondary, and tertiary amines, and on potassium cyanate and thiocyanate, 1903, A., i, 578.

Hall, Archibald A., oil from the roof of the Cockshead Coal Seam, North Staffordshire, 1908, A., ii, 115.

Hall, Archibald A. See also Ludwig

Wolff.

Hall, Alfred Daniel, the mechanical analysis of soils and the composition of the fractions resulting therefrom, 1904, T., 950; P., 152.

the effect of the long-continued use of sodium nitrate on the constitution

of the soil, 1904, T., 964; P., 154; discussion, P., 154. Hall, Alfred Daniel, and Arthur Amos, the determination of available plant food in soil by the use of weak acid solvents. Part II., 1906, T., 205; P., 11; discussion, P., 12.

Hall, Alfred Daniel, and Conrad Theodore Gimingham, the interaction of ammonium salts and the constituents

of the soil, 1907, T., 677; P., 61. Hall, Alfred Daniel, and Norman Harry John Miller, effect of plant growth and of manures on the retention of bases by the soil, 1906, A., ii, 119.

production of acids and alkalis in the

soil, 1911, A., ii, 429.

absorption of ammonia from the atmosphere, 1911, A., ii, 763.

Hall, Alfred Daniel, Norman Harry John Miller, and Conrad Theodore Gimingham, nitrification in acid soils, 1908, A., ii, 524.

Hall, Alfred Daniel, Norman Harry John Miller, and Numa Marmu, the estimation of carbon in soils and kindred substances, 1906, T., 595; P., 103; discussion, P., 103.

Hall, Elliot Snell. See Alexander Smith. Hall, George W., glycolysis, 1907, A., ii,

369.

Hall, Isaac Walker, and George Scott Williamson, the dipeptide splitting action of blood-plasma, and pathological fluids, 1911, A., ii, 302.

the pentide-splitting ferments gastric contents in cancer, 1911, A.,

ii, 310.

Hall, Isaac Walker. See also John William Taylor.

Hall, John Walker, purine substances in human fæces, 1904, A., ii, 358. glycine and total monoamino-acids in pathological urine, 1906, A., ii,

378. Hall, John Walker. See also Richard

Burián.

Hall, L.D. See George Theophilus Kemp. Hall, Robert A., and James Munsie Bell, physical properties of aqueous solutions containing ammonia and citric acid, 1911, A., ii, 657.

Hall, Roy Dykes, metallic acids, 1904,

A., ii, 824.

compounds of the sesquioxides with the acid molybdates, 1907, A., ii, 555.

Hall, Roy Dykes, and Victor Lenher, action of tellurium and selenium on gold and silver salts, 1903, A., ii, 154. Hall, Roy Dykes, and Edgar Fahs Smith,

columbium, 1905, A., ii, 829. Hall, Roy Dykes. See also Edgar Fahs

Smith.

Hall, R. Radclyffe, and J. R. Bovell, composition of Barbados rain, 1910, A., ii, 994.

Hall, Walter. See Martin Kochmann. Halla, Adolf, preparation of colourless alcoholic potassium hydroxide, 1908, A., ii, 944.

See also Franz Wilhelm Halla, Adolf. Dafert.

Halla, Franz, thermodynamic calculation of electromotive forces, 1908, A., ii, 755; 1911, A., ii, 364.

Halla, Ottokar, Friedel-Crafts' reaction,

1911, A., i, 784.

toluoyl- and xyloyl-picolinic acids, 1911, A., i, 1021.

Hallauer, Renno. See August Gürber. Halle. Walter L., formation of adrenaline in the organism, 1906, A., ii, 562.

an extraction apparatus, 1911, A., ii,

Halle, Walter L. See also Robert Pschorr. Hallensleben, Julius. See Paul Rabe.

Hallensleben, Richard. See Adolf von Baever.

Haller, Albin, alkyl- and acyl-cyanocamphors and the esters of alkylcamphorcarboxylic acids; influence of the double linking of the nucleus containing the asymmetric carbon atom on the rotatory power of the molecule, 1903, A., i, 503.

influence exerted by the introduction of double linkings into the nuclei containing the asymmetric carbon atom on the rotatory power of cyclic molecules, 1903, A., i, 563.

a new method of preparing alkyl and alkylidene derivatives of cyclic ketones; alkyl derivatives of men-

thone, 1904, A., i, 600.

1-methyl-4-alkyl-3-cyclohexathe and the corresponding nones phenols, homologues of menthone and menthol, 1905, A., i, 214.

camphoracetic and B-camphorpropionic

acids, 1905, A., i, 601.

alkylthujones and compounds of thujone (tanacetone) with aldehydes, 1905, A., i, 602. the "alcoholysis" of fatty substances,

1907, A., i, 9.

the wax from the palm Raphia ruffia of Madagascar and arachyl alcohol, 1907, A., i, 377.

esterification of castor oil, 1907, A.,

alcoholysis of linseed oil, 1908, A., i,

preparation of αε-diphenyl-ββδδ-tetramethylpentan-y-one and of a-phenylββδδ-tetramethylpentan-γ-one, derivatives of dibenzylacetone diphenylpentan-y-one) and of aphenylpentane-y-one, 1912, A., i, 269.

hydroxyphenyl-, hydroxy-p-tolyl-, hydroxydiphenyl-homocampholic acids and their transformation into benzylidene-, p-tolylidene-, and diphenylmethylene-camphors,

1912, A., i, 359.

Haller, Albin, and Edouard Bauer, benzyl- and phenyl-borneols and their products of dehydration, benzyl- and phenyl-camphenes, 1906, A., 440.

Haller, Albin, and Edouard Bauer, diphenyl- or alkylphenyl-camphorylmethanes and -methylenes.

 $C_8H_{14} < CO$ $C_8H_{14} < CO$ $C_8H_{14} < CO$ $C_8H_{14} < CO$, 1906, A., i, 441.

isomeride of diphenylcamphorylmethane and the conditions of its formation, 1908, A., i, 351.

products of the action of sodamide on

ketones, 1908, A., i, 987.

a general method of preparing mono-, di-, and tri-alkylacetophenones, 1909, A., i, 108.

general method for the preparation of trialkylacetic acids, 1909, A., i.

dimethylcamphor and dimethylcampholic acid, 1909, A., i, 594.

preparation of o-, m-, and p-hydroxy-, p-dimethylamino-, and p-diethylamino-benzylidenecamphors, and of p- and m-tolylidenecamphors, 1909, A., i, 595.

new trialkylacetophenones and trialkylacetic acids derived from them,

1909, A., i, 654.

alkylation of aliphatic ketones by the use of sodamide, 1910, A., i, 219.

alkylation of aliphatic ketones by the use of sodamide; fission of hexaalkylacetones, 1910, A., i, 300.

preparation and properties of 2:2dialkyl-1-hydrindones or 2:2-dialkyl-1-indanones, 1910, A., i, 490.

action of ethyl chlorocarbonate on sodium derivatives of ketones prepared by means of sodamide, 1911, A., i, 299.

oximes and phenylalkylisooxazolones obtained from ethyl benzoylpropionate, benzoyl-n-butyrate, and benzoylisobutyrate, 1911, A., i, 568.

βζ-dibenzoyl-βζ-dimethylheptane and aaee-tetramethylpimelic acid, 1911,

A., i, 651.

ketones of the type of a-benzyl-aadimethylacetophenone; trialkylacetic acids and trialkylmethylcarbinols to which they give rise, 1911, A., i, 726.

synthesis of substituted \(\beta\)-diketones, ketonic esters, and enolic esters by means of ketones and sodamide,

1911, A., i, 726.

Haller, Albin, and Eugene Benoist, action of sodamide and alkyl haloids on benzoylcyclopropane, 1912, A., i, 570.

Haller, Albin, and Gustave Blanc, new syntheses effected by the aid of compounds containing the methylene group attached to one or two acid radicles; action of epichlorohydrin on the sodium derivative of acetylacetone. III., 1904, A., i, 180.

mixed derivatives of d-camphoric acid and \(\beta\)-campholide, 1905, \(\Delta\). i, 858, condensation of ethyl \(\beta\)63-dimethylglycidate with ethyl sodiomalonate:

synthesis of terebic and pyroterebic

acids, 1906, A., i, 625.

Haller, Albin, and André Brochet, oxidation of methyl ricinoleate by

ozone, 1910, A., i, 216.

Haller, Albin, and Alfred Comtesse, action of magnesium derivatives of o- and p-bromoanisole on anthraquinone and β-methylanthraquinone, 1910, A., i, 492.

Haller, Albin, and A. Couréménos, eyanocamphoracetic, a-eyanocamphoriso-propionic, and a-eyanocamphoriso-butyric acids and their principal derivatives, 1905, A., i, 533.

Haller, Albin, and Marcel Desfontaines, influence of the introduction of unsaturated radicles on the rotatory power of active molecules; a-allyl and propyl esters of 4-methyl-2-cyclopentanonecarboxylic acid, 1903, A., i, 628.

increase in the rotatory power of aliphatic compounds on transformation into cyclic compounds, 1905, A., ii,

429.

Haller, Albin, and Alfred Guyot, phthalyl green, 1903, A., i, 200.

preparation and properties of two tetra-alkyldiaminodiphenylanthrones, 1903, A., i, 348.

condensation products of tetra-methyldiaminophenyloxanthranol with benzene, toluene, and dimethylaniline, 1904, A., i, 83.

action of magnesium phenyl bromide on anthraquinone; 9:10-dihydroxy-9:10-diphenyldihydroanthracene,

1904, A., i, 314.

s-9:10-diphenylanthracene and 9:10diphenyldihydroanthracene, 1904, A., i, 659.

syntheses in the anthracene series; II. 9:9:10-Triphenyldihydroanthracene and derivatives, 1904, A., i, 660.

syntheses in the anthracene series. III. 9:9:10:10-Tetraphenyldihydroanthracene and its derivatives, 1905, A., i, 188. Haller, Albin, and Alfred Guyot, syntheses in the anthracene series. IV.
Tetra-alkyl derivatives of 9:10diaminodiphenyl-9:10-diphenyldihydroanthracene, 1905, A., i, 270.

extension of the Friedel-Craft reaction,

1907, A., i, 565.

Haller, Albin, and A. Lassieur, essence of cocoanut butter; composition of cocoanut oil, 1910, A., i, 355.

two active alcohols and a third ketone contained in cocoanut oil, 1910,

A., i, 808.

Haller, Albin, and François March, a new synthesis effected by means of molecules containing a methylene group attached to two negative radicles; action of epichlorohydrin on the sodium derivative of acetone-dicarboxylic esters, 1903, A., i, 318, 714.

condensation of bromoacetyl glycol [a-bromoethyl acetate] with the esters of acetoacetic and acetonedicarboxylic acids, 1904, A., i, 712.

influence of the introduction of unsaturated radicles on the rotatory power of certain molecules; allyl ethers of borneol, menthol, β-methylcyclohexanol, and of linalool, 1904, A., i, 751.

a new method of synthesising alkyl derivatives of certain saturated cyclic alcohols; preparation of homologues of menthol, 1905, A., i,

276

4-benzyl-1-methyl-3-cyclohexanol and 2:4-dibenzyl-1-methyl-3-cyclohexanol, 1905, A., i, 276.

action of aromatic aldehydes on sodium 1-methyl-3-cyclohexanoxide, 1905,

A., i, 771.

rotatory powers of hexahydrobenzylidenecamphor and cenanthylidenecamphor and the corresponding saturated derivatives; comparison of the rotatory powers of these compounds with those of benzylidenecamphor and benzylcamphor, 1906, A., i, 296.

Haller, Albin, and Camille Martine, a synthesis of menthone and men-

thol, 1905, A., i, 220.

menthones and menthols obtained by the catalytic reduction of pulegone with metallic nickel, 1905, A., i, 533.

Haller, Albin, and Jules Minguin, new haloid derivatives of d-benzylideneand benzyl-camphors, 1903, A., i, 267.

- Haller, Albin, and Jules Minguin, influence of solvents on the rotatory power of certain molecules; derivatives of camphor, 1903, A., i, 521.
 - the products of the action at a high temperature of sodium isobutoxide or propoxide on camphor, 1906, A., i, 594.
- Haller, Albin, and Paul Thiébaud Muller, refractometric studies relating to the constitution of some cyanomethylenic acids, 1904, A., ii, 221.
 - constitution of sodium salts of certain acids containing a methylene or methinene grouping; alkyl cyanoacetates, acylcyanoacetates, malonates, and cyanomalonates; malonairile and cyanocamphor, 1905, A., i, 112.

refractometric studies of some derivatives of methane in which two or three atoms of hydrogen are replaced by negative radicles, 1908, A., ii,

refractometric studies of some methane derivatives in which two or three atoms of hydrogen are replaced by negative radicles. II. Sodium salts, 1908, A., ii, 1001.

Haller, Albin, and Robert Padova, benzylidene derivatives of anthrone or anthranol, 1906, A., i, 24.

Haller, Albin, and Charles Weimann, preparation of acylcampholic esters and a new method of formation of hydroxyphenylhomocampholic acid, 1907, A., i, 278.

Haller, Albin, and Youssoufian, alcoholysis of cocoanut oil, 1907, A., i, 10.

Haller, Albin. See also Alfred Guyot. Halliburton, William Dobinson, effect on blood pressure of polypeptides, 1905, A., ii, 265.

the bleaching of flour, 1909, A., ii, 917.

Halliburton, William Dobinson, John Pycock Candler, and Alfred Walter Sikes, the human pituitary, 1909, A., ii, 417.

Halliburton, William Dobinson. See also Thomas Gregor Brodie, Walter Ernest Dixon, and Frederick Walker Mott.

Hallion. See Enriquez.

Hallopeau, L. A., action of zinc on the sodium tungstates, 1904, A., ii, 663.

Hallwachs, Wilhelm, photoelectric fatigue, 1907, A., ii, 327.

- Hallwachs, Wilhelm, photoelectric sensitiveness of potassium as a function of the wave-length, 1909, A., ii, 952.
 - photoelectric measurement of small ozone concentrations; efficiency of Goldstein's ozonisation process at great dilutions, 1909, A., ii, 1050.

Halmai, Béla. See Carl Engler.

Halnan, Edward Thomas. See Leslie Frank Newman.

Halperin, O. See Paul Pfeiffer.

Halpern, Karl. See Heinrich Schicht.
Halpern, Mieczyslaw, influence of the autolytic ferment on pancreatic digestion, 1903, A., ii, 738.

starvation metabolism, 1908, A., ii,

Halpern, Mieczyslaw. See also Anastazy Landau.

Halphen, Georges, detection of resin oil in mineral oil, 1903, A., ii, 186.

differentiation between "mistelles" and liqueur wines, 1903, A., ii, 689. colour reaction of cotton seed oil, 1905, A., ii, 125.

detection of linseed oil in nut oil, 1905, A., ii, 560.

detection of olive oil which has been extracted by means of carbon disulphide, 1905, A., ii, 619.

detection of sophistication in wine, 1906, A., ii, 904.

analysis of fish oils, 1907, A., ii, 410. detection of benzoic acid in butter, 1908, A., ii, 906.

Fiehe's reaction, 1912, A., ii, 498.

Halphen, Georges. See also Armand

Halphen, Georges. See also Armand Gautier. Halpin, J. G. See Elmer Verner

McCollum.
Hals, Sigmund. See Arno Kaoli and

Paul Wagner.
Halse, O. M., normal chromium nitrate, 1912, A., ii, 944.

Halsey, John Taylor, formation of sugar from leveine, 1904, A., ii, 187.

from leucine, 1904, A., ii, 187. Halske. See Siemens & Halske.

Halvorsen, Birger Fjeld. See Carl Liebermann.

Ham, Charles Edward, and Hermann Baleau, effect of acids on blood, 1905, A., ii, 402.

Ham, Charles Edward, and Leonard Erskine Hill, estimation of the gas set free in the body after rapid decompression from high atmospheric pressures, 1905, A., ii, 728.

oxygen inhalation as a means of preventing caisson and divers' sickness,

1905, A., ii, 728.

Ham, Charles Edward, and Leonard Erskine Hill, effect of increased carbon dioxide tension, together with increased atmospheric pressure, 1905, A., ii, 728.

Ham, W. See Eugen Bamberger. Hamann, Georg. See Paul Wagner.

Hamberg, Axel, triplite and tourmaline from Ostergotland, 1904, A., ii, 744. pseudo-cubic antigorite from Sweden, 1904, A., ii, 745.

Hambloch, Anton, estimation of soluble silica in trass, 1912, A., ii, 1095.

Hambrecht, Wilhelm. See Conrad Willgerodt.

Hamburg, Max. See Sigmund Fränkel. Hamburger, Alexander. See Otto Dimroth and Alfred Einhorn.

Hamburger, Anna. See Richard Abegg.
 Hamburger, Elisabeth, narcosis and want of oxygen. IV., 1912, A., ii, 75.

Hamburger, Friedrich, and August. (Ritter) von Reuss, action of unaltered protein solutions on the leucocytes, 1905, A., ii, 744.

Hamburger, Hedwig, formation of lævulie acid from glucosamine, chitin, and chitose, 1911, A., i, 834.

Hamburger, Hartog Jakob, method of stating the concentrations of solutions, 1904, A., ii, 323.

method of determining the osmotic pressure of very small quantities of liquid, 1906, A., ii, 9.

measurement of osmotic pressure in small quantities of fluid, 1906, A., ii, 687; 1907, A., ii, 13.

passage of calcium ions through the blood-corpuscles, 1909, A., ii, 1030. the biology of phagocytes. VII. The influence of calcium ions on chemio-

taxis, 1910, A., ii, 726.

Hamburger, Hartog Jakob, and Svante Arrhenius, nature of precipitin-reaction, 1906, A., ii, 559.

Hamburger, Hartog Jakob, and F. Bubanović, the permeability of red blood-corpuscles in physiological conditions, especially to alkali and alkalicarth metals, 1910, A., ii, 1080.

Hamburger, Hartog Jakob, and J. de Haan, the biology of phagocytes. V. Action of hypo-, iso-, and hypertonic solutions of haloid salts, 1910, A., ii, 421.

the biology of phagocytes. VI. Action of the salts of the alkaline earths on phagocytes, 1910, A., ii, 421.

the effect of substances which dissolve in fat on the mobility of phagocytes and other cells, 1912, A., ii, 65. Hamburger, Hartog Jakob, J. de Haan, and F. Bubanović, the influence of iodoform, chloroform, and other substances soluble in fat on phagocytosis, 1911, A., ii, 504.

Hamburger, Hartog Jakob, and Ebel Hekma, researches in phagocytosis,

1908, A., ii, 205, 510.

the biology of phagocytes; influence of hæmoglobin, etc., on phagocytosis, 1908, A., ii, 511.

Hamburger, Hartog Jakob, and G. Ad. van Lier, permeability of the red corpuscles by anions of sodium salts, 1903, A., ii, 87.

Hamburger, Hartog Jakob, and H. J. van der Schroeff, permeability of leucocytes and lymph cells by anions of sodium salts, 1903, A., ii, 163.

Hamburger, Walter W., intravenous

Hamburger, Walter W., intravenous injection of adrenaline and peptone, 1904, A., ii, 501.

action of extracts of the anterior lobe of the pituitary on blood-pressure, 1910, A., ii, 526.

Hamers, Max. See Alexander Naumann. Hamill, John Molyneux, trypsinogen and enterokinase, 1906, A., ii, 181.

protective mechanism of intestinal worms, 1906, A., ii, 182.

human chyle, 1907, A., ii, 109.

the bleaching of flour, 1911, A., ii, 1001.

Hamill, John Molyneux, and Samuel Barnett Schryver, nitrogenous metabolism in normal individuals, 1906, A., ii, 463.

Hamill, Philip, cardiac metabolism of alcohol, 1910, A., ii, 321.

Hamill, Philip. See also Joseph Barcroft and Walter Ernest Dixon.

Hamlet, William Mogford. See Frederick Bickell Guthrie,

Hamlin, Marston Lovell, a tetra-acetyl aminoglucoside, 1911, A., i, 529. automatic filter, 1911, A., ii, 976.

Hammarsten, Olof, the bile of polar animals. I. The bile of the polar bear. II., 1903, A., ii, 86.

the bile of polar animals. II. The bile of the musk ox, 1904, A., ii, 831.

preparation of crystallised taurocholic acid, 1905, A., i, 33.

chemistry of fishes' eggs, 1905, A., ii, 727.

the value of Almén's bismuth test, and the Worm-Müller copper test for sugar in urine, 1907, A., ii, 137.

the relative value of Almén's and Worm-Müller's tests for sugar, 1907, A., ii, 309. Hammarsten, Olof, the identity of pepsin and rennin, 1908, A., i, 588.

the bile of polar animals. III. The bile of the walrus, 1909, A., ii, 819. colour reaction of cholic acid and dilute hydrochloric acid, 1909, A., ii, 836.

comparative investigations on the activities of pepsin and chymosin of dogs and calves, 1910, A., ii. 876.

the bile of polar animals. IV. The bile of seals, 1910, A., ii, 879.

the preparation of solutions of rennet poor in, or free from, pepsin, 1911, A., ii, 998.

the bile of the hippopotamus, 1911, A., ii, 1010.

Hammer, B. W. See Connand William F. Koelker. See Conrad Hoffmann

Hammer, W. See Hermann von Dech-

end. Hammett, Frederick S. See Burt Laws Hartwell.

Hammond, Harold Sankey. See Herbert

Henry Cousins. Hamonet, (l'Abbé), Jules Léandre, action of sodium on y-phenoxypropyl iodide; diphenoxyhexane, 1903, A.,

preparation and properties of hexaneac-diol, or hexamethylene glycol. and its principal derivatives, 1903, A., i, 306.

preparation of ethers by means of magnesium compounds and halogen methyl ethers, XCH2OR, 1904, A., i, 401.

halogen ether oxides, $RO(CH_2)nX$; magnesium compounds, RO (CH2)n MgX; new syntheses in the tetramethylene series, 1904, A., i, 467.

syntheses of amylene as-glycol, of the nitrile, and of pimelic acid, 1904, A., i, 643.

synthesis in the amylene series; acdiamyloxyamylene(CH2)5(O·C5H11)2 ac-dibromoamylene, and ac-di-iodoamylene, 1904, A., i, 705.

normal diprimary glycols. I. Tetra methylene glycol, 1905, A., i, 403. I. Tetra-

synthesis of diprimary substances, higher homologues of trimethylene derivatives, ethers, dihalogenated derivatives, glycols, etc., by the action of bromomethyl ethers of magnesium derivatives of bromo-(or iodo-) ethers of the type RO(CH₂)_nMgBr, 1905, A., i, 403.

syntheses in the pentamethylene series, 1905, A., i, 403.

Hamonet, (l'Abbé), Jules Léandre, hexamethylene glycol and its derivatives, 1905, A., i, 403.

synthesis in the s-heptane-adn-triol

series, 1906, A., i, 58,

εεε-trichloro-α-methoxypentane-δ-ol and 2-trichloromethyltetrahydrofuran, 1906, A., i, 133.

new method of synthesis of diprimary compounds containing an odd number of carbon atoms: an-dimethoxyheptane, 1907, A., i, 581.

general method for the preparation of fatty or aromatic primary ethers,

1908, A., i. 242.

Hampshire, Charles Herbert. See Arthur William Crossley. Hampton, H. H. See C. A. Mooers.

Hamsik, Ant., action of intestinal lipase, 1909, A., ii, 326.

the influence of bile on fat synthesis due to intestinal and pancreatic lipase, 1910, A., ii, 427.

pancreatic lipase, 1911, A., i, 411. preparation and recrystallisation of hæmin, 1912, A., i, 923.

Hamy, Maurice [Théodore Adolphe], spectrum of zinc, 1904, A., ii, 377.

Hancke, Erwin. See August Morgen. Hancock, Walter Charles, rational analysis of clays, 1910, A., ii, 457.

Hâncu, Vasile H., tautomerism of aliphatic ketones, 1909, A., i, 364; 1910, A., i, 361.

Hâncu, Vasile H. See also Johannes Herzog and Carl Mannich.

Hand, Adolf, cyanide mud, 1905, A., i, 696.

Hand, William Flowers. See Marston Taylor Bogert.

Handa, M., characterisation of indicators, 1909, A., ii, 931.

Handovsky, Hans, changes in the physical conditions of colloids. X. Action of organic bases and amphoteric electrolytes on albumin, 1910, A., i, 646.

Handovsky, Hans, and Richard Wagner, some physico-chemical properties of lecithin emulsions and of lecithinprotein mixtures, 1911, A., i, 408.

Handovsky, Hans. See also Wolfgang Pauli.

Handy, James Otis, a method of analysing some commercial gold alloys, metals present : gold, silver, copper, and occasionally zinc and tin, 1912, A., ii, 694.

Hanfland, Fritz, a self-regulating gas burner, 1911, A., ii, 714.

Hanford, George Arthur, physiological action of cæsium chloride, 1903, A., ii, 502.

Hankam, Oswald. See Adolf Franke. Hankin, Ernest Hanbury, tests for cocaine and certain other anæsthetics, 1911, A., ii, 162.

Hankinson, Rita. See Annie A. Irving. Hanks, Henry G., aragotite from Cali-

fornia, 1906, A., ii, 456.

Hann, Archie Cecil Osborn, and Arthur Lapworth, the acetoacetic ester

synthesis, 1903, P., 189.

optically active esters of B-ketonic and B-aldehydic acids. Part IV. Condensation of aldehydes with menthyl acetoacetate, 1903, P., 291; 1904, T., 46.

reactions involving the addition of hydrogen cyanide to carbon com-Part IV. Addition of pounds. hydrogen cyanide to benzylideneacetophenone, 1904, T., 1355; P.,

additive compounds of . unsaturated cyclic ketones with hydrogen

cyanide, 1904, P., 54.

Hann, Archie Cecil Osborn. See also Hooper Albert Dickinson Jowett and Frank Tutin.

Hannay, James Ballantyne, note on the higher glycerides, 1904, P., 58.

Hanne, Reinhold, the acidity of milk, 1904, A., ii, 845.

Hannemann, K. See Karl Auwers.

Hannes, Berthold, and Alb. Jodlbauer, effect of temperature on the photodynamic action and the action of light on invertase, 1909, A., ii, 848.

Hannig, Emil, fixation of free atmospheric nitrogen by Lolium temulentum infested with a fungus, 1908, A., ii,

Hannover, H. I., porous metals, 1912, A., ii, 645.

Hanriot, [Adrien Armand] Maurice, collargol, 1903, A., ii, 368. so-called colloidal silver, 1903, A., ii,

543, 597.

colloidal gold, 1904, A., ii, 413. active substances of Tephrosia vogelii,

1907, A., ii, 292, 386.

chloralic acids, 1909, A., i, 206. new method for determining the constitution of sugars, 1909, A., i, 287.

chloraloses, 1910, A., i, 95. brown gold, 1911, A., ii, 118, 208.

adhesiveness, 1911, A., ii, 285, 372. tempering of metals, 1912, A., ii, 1137. Hanriot, Maurice, and André Kling,

action of alkalis on chloraloses, 1911, A., i, 524. action of ammonia on chloraloses,

1911, A., i, 525.

Hanriot, Maurice, and François Raoult, magnetisation coefficients of gold, 1911, A, ii, 791.

Hansen, C. See Valdemar Henriques.

Hansen, Christian Johannes, volatilisation and sublimation at minimum temperatures in a vacuum, particularly of high molecular carbon compounds, 1909, A., ii, 212.

a source of error but little considered in the determination of boiling points under diminished pressure,

1909, A., ii, 969.

estimation of the temperature and pressure in vacuum distillation,

1910, A., ii, 267. determination of boiling point. Fall of temperature in vapours of high molecular complexity at small pressures, 1910, A., ii, 827.

fall of temperature in high-boiling vapours at low pressures, 1911, A.,

ii, 468.

Hansen, Emil Chr., occurrence in soil of fungi causing alcohol fermentation, 1905, A., ii, 548.

Hansen, Fr. C. C., freezing point of nitrobenzene, 1904, A., i, 725.

See Niels Hirschfeldt. Hansen. G. Bjerrum.

Hansen, Robert, filter holder, 1909, A., ii. 35.

Hanslian, Rudolf. See Emil Abderhalden and Ernst Beckmann.

Hanson, Edward Kenneth, phycoerythrin, the pigment of the red algæ, 1909, P., 117; discussion, P., 117.

Hanson, Edward Kenneth. See also Robert Selby Morrell.

Hanson, Raymond E., and E. N. Babcock, oils from conifers, 1906, A., i, 869.

Hanssen, C. J. T., reform of chemical and physical calculations, 1909, A., ii, 562; 1912, A., ii, 1157.

Hanssen, Olav, the chemistry of amyloid degeneration, 1908, A., ii, 968.

the formation of carbon dioxide in surviving tissues, 1910, A., ii, 55.

Hanssen, Olav. See also Georges Dreyer. Hansteen, Barthold, correlations in vegetable metabolism, 1909, A., ii, 84.

Hantzsch, Arthur [Rudolf], transformation of bromoamides into amines, 1903, A., i, 29.

formula of trimethylethylene nitrosite,

1903, A., i, 61.

constitution of diazotates and diazohydrates [diazoxides and diazohydroxides], 1903, A., i, 212.

diazoniumazides, Ar'N5, 1903, A., i,

Hantzsch, Arthur [Rudolf], migration of atoms in diazo-compounds, 1903, A., i, 665.

decomposition of diazo-ethers, 1903, A., i. 869.

condition of electrolytes in aqueous

solution, 1903, A., ii, 55. behaviour of sodium sulphate in

aqueous solution, 1903, A., ii, 145. diazo-compounds, 1904, A., i, 201,

amphoteric electrolytes, especially cacodylic acid, 1904, A., i, 381, 725.

isomerism of the diazoxides, 1904, A.,

bases of triphenylmethane dyes, 1904, A., i, 943.

velocity of absorption of gaseous by solid substances, 1904, A., ii, 541.

the constitution and colour of diazoand azo-compounds, 1905, P., 289. nomenclature of compounds of variable

constitution, 1905, A., i, 317. action of hydroxylamine on ethylisonitrosoacetoacetate, 1905, A., i,

constitution of ammonium salts, 1905,

A., i. 576. oxonium and ammonium salts, 1905,

A., i, 605.

normal diazoxides as primary products of the interaction of nitrosobenzenes and hydroxylamine, 1905, A., i, 617.

molecular weight of salts in indifferent solvents, 1905, A., ii, 305.

constitution of some nitrogen sulphonic

acids, 1905, A., ii, 313.

constitution of Fremy's sulphazilate and of Pelouze's nitrosulphate, 1905, A., ii, 699.

cyanuric acid as a pseudo-acid, 1906, A., i, 146.

constitution of thiazine and oxazine dyes, 1906, A., i, 206, 453.

constitution and colour of nitrophenols, 1906, A., i, 353, 833.

pseudo-acids, 1906, A., i, 576, 833. pseudo-acids and amphoteric electro-

lytes, 1906, A., ii, 651. Kauffmann's fluorescence and auxo-

chrome theory, 1907, A., ii, 418. ionic and chromophoric theory of indicators, 1907, A., ii, 612.

fluorescence and chemical constitution; reply to Kauffmann, 1907, A., ii, 834.

aminoazo-compounds, 1908, A., i, 706. Cain's theory of diazo-compounds and ammonium salts, 1908, A., i, 1021.

Hantzsch, Arthur [Rudolf], condition of substances in absolute sulphuric acid, 1908, A., ii, 14, 462; 1909, A., ii, 18, 973.

fluorescence, luminescence, and chemical constitution, 1908, A., ii,

446.

Cain's theory of diazonium and ammonium salts, 1909, A., i, 193,

pantochromism and chromoisomerism of violurates and allied oximinoketone salts, 1909, A., i, 331.

salts of azobenzene, amino- and hydroxy-azo-compounds with mineral

acids, 1909, A., i, 536.

reaction between hydrogen sulphide and cyanaminodithiocarbonates, 1909, A., i, 894.

polymerism as the cause of the difference of colour of haloids and sulph-

ites, 1909, A., ii, 198.

pantachromism of violurates and salts of analogous oximino-ketones, 1910. A., i, 200.

chromoisomerism and homochromoisomerism of nitroanilines, 1910, A., i, 475, 727.

chromoisomerism and homochromoisomerism of azophenols, 1910, A., i, 790.

the equilibrium isomerism of acetoacetic ester and the so-called isorropesis of its salts, 1910, A., i, 811.

optical investigation of the chromophores of coloured salts and acids, 1910, A., ii, 370.

keto-enolic equilibrium of ethylacetoacetate, 1911, A., i, 602.

chromoisomerism of pyridine, quinoand acridine salts, and line, its explanation by valency isomerisin, 1911, A., i, 673.

contradiction of E. Biilmann's interpretation of homochromoisomerism as polymorphism, 1911, A., i, 715.

the colorimetric dilution law, 1911, A., ii, 951.

the homochromoisomerism of the phenylmethylpicramides, 1912, A.,

keto-enolic isomerism of indandione and oxindone derivatives, 1912, A., i, 869.

existence of primary arylnitrosoamines as well as the isomeric anti-diazohydrates, 1912, A., i, 1039.

observations on valency-isomeric ammonium salts, 1912, A., ii, 3. red and blue cobaltous hydroxide,

1912, A., ii, 166.

Hantzsch, Arthur [Rudolf], absorption and refraction methods in relation to ethyl acetoacetate, 1912, A., ii, 313.

significance of the absorption method for the chemistry of the terpenes,

1912, A., ii, 313.

alkaline solutions of zinc hydroxide, 1912, A., ii, 644.

the absorption and refraction methods, 1912, A., ii, 709.

Hantzsch, Arthur, and Samuel James
Manson Auld, mercurinitrophenols.

Manson Auld, mercurinitrophenols, 1906, A., i, 471.

Hantzsch, Arthur, Hugo Bauer, and

Friedrich Hofmann, cyanuric acid derivatives, 1905, A., i, 330.

Hantzsch, Arthur, Montague Bennett Blackler, (Miss) Edith Morgan, and Walter Practorius, relation between colour and constitution of acids, salts,

and esters, 1906, A., i, 856.

Hantzsch, Arthur, Erich Borchers, and Nicolai Rosanoff, isomerism of the salts of nitrophenols and the existence of metaquinonoid compounds, 1907, A., i, 207.

Hantzsch, Arthur, Erich Borchers, Arthur Henry Salway, and Edgar Percy Hedley, yellow, red, green, violet, and colourless salts from dinitro-compounds, 1907, A., i, 500.

Hantzsch, Arthur, and Kenneth Somerville Caldwell, aci-esters of nitro-

form, 1906, A., i, 617.

trinitromethane and triphenylmethane, 1906, A., i, 617.

abnormally high values of ionic conductivity, 1907, A., ii, 328. comparison of acids and pseudo-acids in pyridine solution, 1908, A., ii,

21.

Hantzsch, Arthur, and Robert H. Clark, optical investigation of the condition of chromate and permanganate solu-

tions, 1908, A., ii, 646.

Hantzsch, Arthur, Robert H. Clark, and Kurt Heinrich Meyer, unchangeability of the colour of acids of unchangeable constitution during the formation of alkali salts and ions, 1908, A., ii, 447.

Hantzsch, Arthur, and Oskar Denstorff, addition of halogens and of hydrogen perhaloids to oxygen compounds, 1906, A., i, 745.

pyrone hydroperbromides, 1907, A., i,

233.

Hantzsch, Arthur, and Waldemar Fischer, tris- and hydroxytris-indandiones, 1912, A., i, 872. Hantzsch, Arthur, and Fritz Gajewski, simple indandione and oxindone de rivatives, 1912, A., i, 870.

Hantzsch, Arthur, and Walter Hamis Glover, change of colour in constitutively unchangeable substances, 1907, A., i, 101.

the benzil reaction, 1907, A., i, 538. constitution and colour of derivatives of o-benzoquinone- and naphtha-

quinone-dioximes, 1907, A., i, 1055. Hantzsch, Arthur, and Herbert Gorke, quinonoid aci-nitrophenol esters, 1906,

Â., i, 352.

Hantzsch, Arthur, and Wilhelm Graf, additive compounds of tertiary amines, 1905, A., i, 575.

Hantzsch, Arthur, and Isidor Morris Heilbron, pantachromic salts of oximino-oxazolones, 1910, A., i, 198.

Hantzsch, Arthur, and Harold Hibbert, additive products of trialkyl-phosphines, -arsines, and -stibines, 1907, A., i, 496.

Hantzsch, Arthur, and Friedrich Hilscher, establishment of the isomerism theory of indicators in the case of methyl-orange and helianthin, 1908, A., i, 469.

yellow azo- and violet quinonoid salts of aminoazo-compounds, 1908, A.,

i. 484.

Hantzsch, Arthur, Friedrich Hofmann, and Martin Lehmann, cyamelide, 1905, A., i, 331.

Hantzsch, Arthur, and Oswald Kurt Hofmann, molecular state of organic ammonium haloids in non-dissociating media, 1911, A., i, 608.

Hantzsch, Arthur, and Percy Claude Cameron Isherwood, salts and esters of the violuric acid group, 1909, A., i, 333.

Hantzsch, Arthur, and Basile Issaias, polychromatic and chromotropic violurates, 1909, A., i, 335.

Hantzsch, Arthur, and Georg Kanasirski, coloured and colourless salts of ethylnitrolic acid, 1909, A., i. 281.

ethylnitrolic acid, 1909, A., i, 281. Hantzsch, Arthur, and W. Kemmerich, polychromatic salts from oximinooxazolones, 1909, A., i, 336.

Hantzsch, Arthur, and Antoni von Korczyński, nitroanthrone, 1909, A., i, 394.

Hantzsch, Arthur, and Israel Lifschitz, optical investigation of diazo- and azocompounds, 1912, A., ii, 1116.

Hantzsch, Arthur, and Joseph Lister, hexanitrohydrazobenzene and salts of trinitrodiphenylamine, 1910, A., i, 526. Hantzsch, Arthur, and Joseph Lister, bisindandione and bisoxindone derivatives, 1912, A., i, 871.

Hantzsch, Arthur, Joseph Lister, Rudolf Flade, and Curt B. Hartung, homochromoisomerism, 1910, A., i, 474.

Hantzsch, Arthur, and Kurt Meisenburg, constitution and colour of nitrophenols, and especially of nitroquinol dimethyl ether, 1907, A., i, 513.

molecular refraction of isomerisable unsaturated acids and their salts,

1910, A., ii, 169.

Hantzsch, Arthur, and Kurt Heinrich Meyer, formation of colourless ions from triphenylmethyl bromide, 1910, A., i, 238.

Hantzsch, Arthur, (Miss) Edith Morgan, and Herbert Gorke, behaviour of very weak acids and pseudo-acids towards ammonia, 1907, A., i, 927.

Hantzsch, Arthur, and Jakob Oechslin, metacetaldehyde, 1907, A., i, 1009.

Hantzsch, Arthur, and Stanislaus Opoloski, a violet aci-ether of hexanitrodiphenylamine, 1908, A., i, 526.

Hantzsch, Arthur, and Norman Picton, the chromophore of salts from polynitrobenzene derivatives, 1909, A., i, 467.

Hantzsch, Arthur, and Philip Wilfred Robertson, optical investigation of the copper complex in ammonia and pyridine solutions, 1909, A., ii, 44.

copper complexes in ammoniacal solution, 1909, A., ii, 579.

yellow and red forms of salts and hydrates of hydroxyazo-derivatives, 1910, A., i, 203.

Hantzsch, Arthur, and Robert Robison. pantachromism of dimethyl- and diphenyl-violurates, 1910, A., i, 196.

purpuric acid, 1910, A., i, 200.

Hantzsch, Arthur, and Arthur Henry Salway, colourless, yellow, and red salts of nitro-ketones, 1907, A., i, 555.

Hantzsch, Arthur, and Karl Scholtze, coloured and colourless modifications of the silver salts of halogen phenols, 1908, A., i, 17.

Hantzsch, Arthur, and Yuji Shibata, cobalt thiocyanates and the cause of the colour changes in cobalt salts, 1912, A., i, 97.

Hantzsch, Arthur, and Carel Herman Sluiter, the isomeric nitroso-orcinols,

1906, A., i, 173.

Hantzsch, Arthur, and Fritz Staiger. characterisation of auxochrome actions. 1908, A., ii, 447.

HANU

Hantzsch, Arthur, and Bernhard Conrad Stuer, new products from the action of ammonia on sulphuryl chloride, 1905,

A., ii, 312.

Hantzsch, Arthur, and Kenworthy James Thompson, isomerism of the socalled ethyl benzeneazocvanoacetates, 1905, A., i, 615.

decomposition of diazo-solutions, 1908.

A., i. 1021.

Hantzsch, Arthur, and Richard Vock, diazonium fluorides, 1903, A., i, 664.

interaction of diazonium salts and alcohols, 1903, A., i, 664.

reduction of diazo-compounds, 1903, A., i, 664.

Hantzsch, Arthur, and Kurt Voigt, conjugated aci-nitro-compounds, 1912, A., i, 151.

absorption spectra of nitro-compounds in the ultra-violet, 1912,

A., ii, 508.

Hantzsch, Arthur, and Elkan Wechsler, diazo-compounds. J. Relation between nitroso- and diazo-compounds and diazo-ethers, 1903, A., i, 210.

Hantzsch, Arthur, and Georg Wiegner, velocity of absorption of gaseous by

solid substances, 1908, A., ii, 158. Hantzsch, Arthur, and Mari Wolvekamp, constitution of the so-called dithiocyanic acid and perthiocyanic acid, 1904, A., i, 718.

Hantzsch, Arthur, and Israel Hyman Zortman, bindone and aci-bindone derivatives, 1912, A., i, 872.

Hantzsch, Arthur. See also Samuel James Manson Auld, Heinrich Ley, and Kurt Heinrich Meyer.

Hanus, Josef, estimation of cinnamaldehyde, 1903, A., ii, 768.

various kinds of cinnamon, 1904, A., ii, 582.

estimation of vanillin, 1906, A., ii,

Hanus, Josef, and Franz Bien, researches on the carbohydrates occurring in spices. I. Canella bark, 1906, A., ii,

Hanus, Josef, and Karl Chocenský, estimation of caffeine by means of the immersion refractometer, 1906, A., ii,

Hanus, Josef, and O. Kallauner, the action of hydrogen and sodium peroxides on bismuth salts, 1911, A., ii, 404.

Hanus, Josef, and Otto Quadrat, complex organic aluminium compounds,

1909, A., i, 762.

Hanus, Josef, and Arn. Soukup, the separation of copper from cadmium and zinc by means of "cupferron," 1910, A., ii, 899.

the estimation of copper by means of hypophosphorous acid, 1911, A.,

Hanus, Josef, and Lad. Stekl, the ethyl ester value of fats; a new constant for the detection of cocoanut oil, 1908, A., ii, 641.

Hanzlik, Paul J., method for the estimation of sodium iodide in animal

tissues, 1910, A., ii, 748,

the recovery of alcohol from animal tissues, 1912, A., ii, 302.

Hanzlik, Paul J., and Philip Bouvier Hawk, uric acid excretion in normal man, 1909, A., ii, 79.

Hanzlik, Paul J., and Torald Sollmann, absorption of phenol from the alimentary canal, 1909, A., ii, 498.

Happe, Gustav, a safety wash-bottle, 1911, A., ii, 715.

Happe, Gustav. See also Wilhelm

Koenigs.

Happel, Hans, the law of corresponding limiting curves and especially the behaviour of diatomic substances, 1907, A., ii, 331.

inactive gases and the equation of

state, 1909, A., ii, 806.

extension of the law of corresponding

states, 1909, A., ii, 853.

Harang, P., detection and estimation of trehalose in plants [fungi] by means of trehalase, 1906, A., ii, 311.

Harby, Wilfred Harry. See Alexander Findlay.

Harcourt, Augustus George Vernon, a method for the approximate estimation of small quantities of lead, 1910, T., 841; P., 82; discussion, P., 83.

Harcourt, Augustus George Vernon, and Herbert Brereton Baker, the alleged complexity of tellurium, 1911, T., 1311; P., 187.

Harcourt, Augustus George Vernon, and William Esson, variation with temperature of the rate of a chemical change, 1912, A., ii, 923.

Harcourt, Robert, comparative values of different grades of wheat of crops of 1903 and 1904; 1906, A., ii, 248.

Harden, Arthur, alcoholic fermentation with yeast extract (Buchner's zymase) in presence of blood serum, 1903, A., ii, 319.

Harden, Arthur, zymase and alcoholic fermentation, 1905, A., ii, 275.

action of dextrose on the lactosefermenting organisms of fæces, 1905, A., ii, 748.

Voges and Proskauer's reaction for certain bacteria, 1906, A., ii, 380.

Harden, Arthur, and (Miss) Janet Elizabeth Lane-Claypon, enzymes in sterile milk, 1912, A., ii, 664.

Harden, Arthur, and Hugh Maclean, the alleged presence of an alcoholic enzyme in animal tissues and organs, 1911, A., ii, 215.

the oxidation of isolated animal tissues,

1911, A., ii, 905.

Harden, Arthur, and (Mrs.) Dorothy Norris, the diacetyl reaction for proteins, 1911, A., i, 588.

the bacterial production of acetylmethylcarbinol and By-butylene glycol from various substances. 1912, A., ii, 282, 474.

Harden, Arthur, and Roland Victor Norris, fermentation of galactose by yeast and yeast-juice, 1910, A., ii,

Harden, Arthur, and Sydney Gross Paine, the influence of salts on the auto-fermentation of yeast, 1911, P.,

action of dissolved substances on the auto-fermentation of yeast, 1912,

A., ii, 284.

Harden, Arthur, and William James Penfold, chemical action on dextrose of a variety of Bacillus coli communis (Escherich) obtained by cultivation in presence of a chloroacetate, 1912, A., ii, 970.

Harden, Arthur, James Thompson, and William John Young, apparatus for collecting and measuring the gases evolved during fermentation, 1910,

A., ii, 987.

Harden, Arthur, and George Stanley Walpole, chemical action of Bacillus lactis aërogenes on dextrose and mannitol; production of βy-butylene glycol and acetylmethylcarbinol, 1906, A., ii, 380.

Harden, Arthur, and William John Young, fermentation experiments with extract from top-fermentation

yeast, 1904, A., i, 543. the influence of phosphates on the fermentation of glucose by yeastjuice; preliminary communication, 1905, P., 189.

the alcoholic ferment of yeast-juice, 1905, A., ii, 109; 1906, A., i, 470.

Harden, Arthur, and William John Young, influence of sodium arsenate on the fermentation of glucose by yeast-juice; preliminary 1906, P., 283.

alcoholic ferment of yeast-juice. II. Co-ferment of yeast-juice, 1907,

A., i, 104.

the fermentation of mannose and lævulose by yeast-juice; preliminary note, 1908, P., 115; discussion, P., 116.

the alcoholic ferment of yeast-juice. III. The function of the phosphates in the fermentation of dextrose by yeast-juice, 1908, A., i, 590.

the alcoholic ferment of veast-juice. IV. The fermentation of dextrose, mannose, and lævulose by yeastjuice, 1909, A., i, 863.

function of phosphates in alcoholic

fermentation, 1910, A., i, 292. alcoholic ferment of yeast-juice. Function of phosphates in alcoholic fermentation, 1910, A., ii, 643. the composition of the hexosephos-

phoric acid formed by yeast-juice.

I., 1911, A., i, 422.

the influence of arsenates and arsenites on the fermentation of the sugars by yeast juice, 1911, A., 519.

the preparation of glycogen and yeastgum from yeast, 1912, T., 1928; P., 235.

the mechanism of alcoholic fermenta-

tion, 1912, A., ii, 670. Harden, Arthur. See also Henry William Armit, Gibson Dyson, and Alexander McKenzie.

Hardenbergh, Henry. See Henry

Augustus Torrey.

Harding, Everhard Percy, 2:4:6-trimethylbenzaldazine, 1903, A., i,

improved apparatus for estimating total sulphur in coal gas; modification of Dreschmidt's method, 1906, A., ii, 391.

Harding, Everhard Percy, and Lillian Cohen, reduction of 2:5-dimethylbenzaldazine and the preparation of some salts [of 2:5-dimethyldibenzylamine], 1904, A., i, 36.

Harding, Everhard Percy, and James M. Doran, estimation of carbon disulphide in presence of benzene,

1907, A., ii, 987.

estimation of carbon disulphide in illuminating gas, 1907, A., 987.

Harding, Everhard Percy, and Edgar W. Rice, 2:5-dimethylbenzyl-2:5-dimethylbenzylidenehydrazine, A., i. 286.

Harding, Harry A. See Lucius Lincoln

van Slyke.

Harding, Victor John, substitution in aromatic hydroxy-compounds. Part I. The action of nitric acid on gallic acid trimethyl ether and pyrogallolcarboxylic acid trimethyl ether. 1911, T., 1585; P., 213.

β-hydroxy-aβ-dimethyladipic acid and B-hydroxy-aas-trimethyladipic acid.

1912, T., 1590; P., 219.

action of enzymes on hexose phosphate, 1912, A., i, 928.

Harding, Victor John, and Walter Norman Haworth, the synthesis of A1. cyclopenteneacetic acid and 1-methyl-Δ²-cyclohexene-3-acetic acid, T., 486; P., 61.

Harding, Victor John, Walter Norman Haworth, and William Henry Perkin, jun., experiments on the synthesis of 1-methylcyclohexylidene-4-acetic acid. Part II., 1908, T., 1943; P., 230.

Harding, Victor John, (Miss) Gertrude Maud Walsh, and Charles Weizmann, B-methyl-Δαλ-dedecadiene and Bmethyl- Aay-decadiene, 1911, T., 448: P., 12.

Harding, Victor John, and Charles Weizmann, Δα-nonenoic acid, 1910, T., 299; P., 24.

synthesis of 6-carboxy-3:4-dimethoxyphenylglyoxylic acid, 1910, T., 1126; P., 130.

Harding, Victor John. See also William Henry Perkin, jun.

Hardman, Robert Taylor, and Arthur Lapworth, electromotive forces in alcohol. Part II. The hydrogen electrode in alcohol and the influence of water on its electromotive force, 1911, T., 2242; P., 244.

electromotive forces in alcohol. III. Further experiments with the hydrogen electrode in dry and moist alcoholic hydrogen chloride, 1912,

T., 2249; P., 263. Hardman, Robert Taylor, and James Riddick Partington, an application of Kirchhoff's equation to solutions; a contribution to the thermodynamic theory of solubility, 1911, T., 1769;

Hardt-Stremayr, Emil (Ritter) von, acetyl derivatives of cellobiose, 1907

A., i, 389.

Hardt-Stremayr, Emil (Ritter) von, acetylation of some oxycelluloses, 1907, A., i, 391.

Hardt-Stremayr, Emil (Ritter) von. See

also Zdenke Hanns Skraup.

Hardy, Herbert, and Bernard E. Richens. fractional distillation by means of steam, 1907, A., ii, 531. Hardy, J. See J. Tarbouriech.

Hardy, P., and Jos. Vandormael, partial analysis of natural phosphates as a guide to their conversion into superphosphates, 1911, A., ii, 333.

Hardy, William Bate, action of radium salts on globulin, 1903, A., i, 588. colloidal solutions; the globulins,

1903, A., ii, 469; 1906, A., i, 121. electrolytic colloids, 1911, A., ii, 378. the formation of a heat reversible gel, 1912, A., ii, 836.

general theory of colloidal solutions,

1912, A., ii, 837.

the tension of composite fluid surfaces and the mechanical stability of films of fluid, 1912, A., ii, 838.

Hardy, William Bate, and (Miss) Edith Gertrude Willcock, oxidising action of the rays from radium bromide as shown by the decomposition of iodoform, 1903, A., ii, 622.

Hardy, William Bate. See also Ernest Henry Starling, (Miss) Edith Gertrude Willcock, and Thomas Barlow Wood.

Hare, Clinton Larue, estimation of potassium in fertilisers; substitution of calcium hydroxide for ammonia and ammonium oxalate, 1903, A., ii,

Hare, R. F., the determination of iron and aluminium in inorganic plant constituents, 1910, A., ii, 1001.

Haret, Jacques Danne, and A. Jaboin, new method for introducing radium into the tissues, 1911, A., ii, 418.

See Percy Faraday Harger, John. Frankland.

Hári, Paul, a new nitrogenous constituent of normal human urine, 1905, A., ii, 842.

intramolecular absorption of water in the tryptic digestion of protein, 1908, A., i, 1000.

heat production and enzyme action. III. Action of trypsin, 1907, A., ii, 102.

the influence of intravenous blood transfusion on the metabolism of matter and energy, 1911, A., ii, 739.

the influence of adrenaline on gaseous metabolism, 1912, A., ii, 179.

Hari. Paul, the influence of intravenous blood-transfusion on gaseous metabolism, 1912, A., ii, 952.

the influence of carbohydrates on energy metabolism, 1912, A., ii, 953.

the action of intraperitoneal infusion of blood on the consumption of energy, 1912, A., ii, 953.

Hari, Paul, and Stefan von Pesthy, has the temperature of the food any influence on the gaseous metabolism of man ? 1912, A., ii, 952.

Haring, Kurt. See Ernst Beckmann.

Harker, George, fermentation of cane molasses, and its bearing on the estimation of the sugars present, 1906, A., ii, 810.

Harker, John Allen, specific heat of iron at high temperatures, 1905,

A., ii, 674.

new type of electric furnace, with a redetermination of the melting point of platinum, 1905, A., ii, 798.

Harker, John Allen, and George William Clarkson Kaye, the emission of electricity from carbon at high temperatures, 1912, A., ii, 525.

Harkins, William Draper, Marsh test and excess potential. I. Quantitative determination of arsenic, 1910, A.,

ii, 451.

effect of salts on the solubility of other salts. V. Solubility of uni-bivalent salts in solutions of salts of different types, 1912, A., ii, 27.

effects of salts on the solubility of other salts. VII. Discussion of the solubility relations of uni-bivalent

salts, 1912, A., ii, 28.

Harkins, William Draper, and W. J. Winninghoff, effect of salts on the solubility of other salts. VI. Solubility of difficultly soluble uni-bivalent salts, 1912, A., ii, 27.

Harkort, Hermonn, iron-tungsten alloys,

1907, A., ii, 959.

Harlay, Victor, pectins of aucuba and sweet orange, 1912, A., ii, 479.

Harley, Vaughan [Berkeley], and John Oglethorpe Wakelin Barratt, formation of gall-stones, 1903, A., ii, 500.

Harlow, Frederick J., cubical expansion of fused silica and the variation of the boiling point of aniline with pressure, 1912, A., ii, 128.

Harlow, Marie M., and Percy Gold-thwait Stiles, effect of shaking on ptyalin, 1909, A., i, 861.

Harms, Fritz, cause of the conductivity of air in which phosphorus is oxidised, 1904, A., ii, 331.

Harmsen, Ernst, toxicology of Agaricus muscarius, 1904, A., ii, 283.

Harnack, Alfred, comparison of spectra in the oxy-hydrogen and chlorinehydrogen flames, 1912, A., ii, 215.

Harnack, Erich, and Hermann Hildebrandt, post-mortem action of corrosive poisons in the stomach, 1908, A., ii, 1062.

the varying activity of apomorphine preparations and the pharmacological behaviour of apomorphine derivatives (euporphine, etc.), 1909, A., ii, 1042.

[physiological] action of chloromorphides, 1911, A., ii, 516.

Harnack, Erich, and I. Laible, the action of alcohol on the heat relationships of the animal organisms, 1908, A., ii, 404.

Harold, C. H. H., Maximilian Nierenstein, and Herbert Eldon Roaf, the influence of the presence and position of the various radicles of adrenaline on its physiological activity, 1911, A., ii, 136.

Harper, Henry Winston, and Margaret Holliday, chemistry of fatigue, 1903, A ii 226

A., ii, 226. Harpf, August, autoxidation of sulphur, 1904, A., ii, 556.

solubility of sulphur dioxide in water, 1905, A., ii, 383.

Harpf, August, and Hans Fleissner, explosion of a Küster apparatus for the preparation of pure sodium hydroxide, 1906, A., ii, 850.

Harries, Carl Dietrich, chemistry of india-rubber, 1903, A., i, 189, 642

phenyldiethyltriazine, 1903, A., i, 293.

β-nitrosoisopropylacetone [methyl βnitrosoisobutyl ketone], 1903, A., i, 461.

oxidation by means of ozone, 1903, A., i, 605, 807; 1904, A., i, 361. acetyltrimethylene, 1903, A., i, 606.

new p-menthadiene from dihydrocarvylamine, 1903, A., i, 743.

oxidation of \$\beta\$-hydroxypropionacetal, 1904, A., i, 15.

decomposition of Para caoutchouc by ozone, 1904, A., i, 757.

caoutchouc; latex from Sicily, 1904, A., i, 1038.

varieties of caoutchouc; Weber's dinitrocaoutchouc, 1905, A., i, 223.

caoutehoue; decomposition and constitution of Para caoutehoue, 1905, A., i, 364.

Harries, Carl Dietrich, caoutchouc; relations existing between the hydrocarbons from caoutchouc and guttapercha, 1906, A., i, 30.

decomposition of casein by means of ozone, 1906, A., i, 54.

preparation of ozone, 1906, A., ii,

844. constitution of oleic acid, etc., 1907.

A., i, 11.

action of nitrogen trioxide on caoutchouc, 1908, A., i, 39.

action of ozone on compounds con taining triple linkings, 1908, A., i, 75, 387.

constitution of cyclo-octadiene from ψ-pelletierine, 1908, A., i, 254.

molecular dispersion of succindialdehyde, 1908, A., i, 317.

dihydrotoluene (A^{1:3}-methylcyclohexadiene), 1908, A., i, 520.

hydantoin and the isomerism of the methylhydantoins, 1908, A., i, 578.

lecture experiments with ozone, 1908, A., ii, 171.

glutardialdehyde, 1910, A., i, 361. examination of raw caoutchouc; reply

to Fendler, 1911, A., ii, 545. Δ^{1:3}-cyclohexadiene, 1912, A., i, 343,

preparation of isoprene, 1912, A., i, 406.

artificial caoutchouc, 1912, A., i, 706. \$\beta\$-aldehydopropionic acid, 1912, A., i, 827.

behaviour of ozone towards concentrated sulphuric acid, 1912, A., ii, 343.

Harries, Carl Dietrich, and Ernst Alefeld, semi-aldehyde of succinic acid [β-aldehydopropionic acid], 1909, A., i, 132.

Harries, Carl Dietrich, and Wilhelm Antoni, hydrocarbons of the cyclohexadiene series, 1903, A., i, 613.

Harries, Carl Dietrich, and Max Boegemann, lævulinaldehyde, 1909, A., i, 134.

Harries, Carl Dietrich, Fritz Evers, and Erik Riedl von Riedenstein, action of ozone on organic compounds. III., 1912, A., i, 673.

Harries, Carl Dietrich, and Ugo Ferrari, the ketonic nature of diacetonehydroxylamine and its oxidation to nitroisopropylacetone, 1903, A., i, 320

Harries, Carl Dietrich, and Walther August Franck, action of ozone on oleic acid, 1909, A., i, 131. Harries, Carl Dietrich, Walther August Franck, Karl Kircher, Rudolf Koetschau, and Hans O. Türk, action of ozone on organic compounds.

1910, A., i, 607. Harries, Carl Dietrich, Friedrich Gollnitz, William Sloan Mills, Theodor Stanislaus Warunis, Arthur Stähler, and Heinrich Tietz, reactions of unsaturated ketones, 1904, A., i, 427.

Harries, Carl Dietrich, and Kurt Otto Gottlob, decomposition of terpenoid substances by glowing metallic wires,

1911, A., i, 798.

Harries, Carl Dietrich, Wilhelm Haarmann, and Arthur Stähler, action of hydroxylamine on unsaturated esters, 1904, A., i, 231.

Harries, Carl Dietrich, and Karl Haeffner, ozonides of the simple olefines,

1908, A., i, 846.

Harries, Carl Dietrich, Fritz Hagedor, and Richard Seitz, the constituents

of ozone, 1912, A., i, 407.

Harries, Carl Dietrich, and Alfred Himmelmann, citral, 1907, A., i,

compounds of the citronella series, 1908, A., i, 662.

B-aldehydopropionic acid, 1909, A.,

i. 133. Harries. Carl Dietrich, and Paul

Hohenemser, unimolecular succindialdehyde, 1908, A., i, 133.

Harries, Carl Dietrich, and Manuel Johnson, transformation of carvone into a-phellandrene, 1905, A., i, 535.

Harries, Carl Dietrich, and Karl Kircher, diacetylcarboxylic acid, 1907,

A., i, 466.

Harries, Carl Dietrich, and Rudolf Koetschau, ethylene ozonide, 1909,

A., i, 755.

Harries, Carl Dietrich, and Hermann Krützfeld, succinaldehyde derivatives,

1906, A., i, 930.

Harries, Carl Dietrich, and Kurt Langheld, behaviour of caseinogen towards ozone, 1907, A., i, 571.

behaviour of protein cleavage products and certain sugars with ozone, 1907,

A., i, 571.

- Harries, Carl Dietrich, Kurt Langheld, Carl Thieme, Hans O. Türk, and Valentin Weiss, action of ozone on organic compounds, 1906, A., i, 225.
- Harries, Carl Dietrich, and Riko Majima, constitution of terpinene, 1908, A., i, 733.

Harries, Carl Dietrich, and Heinrich Neresheimer, ozonides of hydroaromatic compounds and the stability of different ring systems, 1906, A., i, 833.

action of ozone on pinene, 1908, A.,

i, 194.

Dietrich, and Carl Karl Harries. Neresheimer, butadienes and some synthetic caoutchouc obtained therefrom, 1911, A., i, 798.

Harries, Carl Dietrich, and A. S. de Osa, phenylbutene, 1903, A., i,

815.

ozonides of simple unsaturated hydro-

carbons, 1904, A., i, 386.

Harries, Carl Dietrich, and John Pal-mén, oxidation of camphene with ozone, 1910, A., i, 497.

Harries, Carl Dietrich, and Irnfried Petersen, synthesis of glycylaminoacetaldehyde, 1910, A., i, 228.

arries, Carl Dietrick, and Paul Reichard, preparation of amino-aldehydes, 1904, A., i, 295. Harries,

Harries, Carl Dietrich, and Louis Roy, transformation products of pulegonehydroxylamine, 1904, A., i, 515.

Harries, Carl Dietrich, and Hans von Splawa Neymann, velocity of decomposition of the ozonides of certain cyclic hydrocarbons, 1908, A.,

so-called pure A1:3-dihydrobenzene and its molecular refraction, 1909, A., i,

an aldehyde from pinene, 1909, A., i, 247.

Harries, Carl Dietrich, and Ludwig Tank, distillation of calcium azelate and the formation of azelaone, 1908, A., i, 35.

conversion of cyclopentene into the mono- and di-aldehydes of glutaric

acid, 1908, A., i, 517.

Harries, Carl Dietrich, and Paul Temme, unimolecular and termolecular glyoxal, 1907, A., i, 183.

Harries, Carl Dietrich, and Carl Thieme, oleic acid ozonide, 1906, A., 793.

Harries, Carl Dietrich, and Hans O. Türk, methylglyoxal and mesoxaldialdehyde, 1905, A., i, 413.

hydrolytic products of oleic acid ozonide, 1907, A., i, 11.

nonaldehyde semicarbazone, 1907, A., i, 587.

Harries, Carl Dietrich, and Richard Weil, βζ-dimethyl-Δβε-heptadiene diozonide, 1904, A., i, 361.

See also

Harries, Carl Dietrich, and Maurus Weiss, hydantoin and the isomerism of the methylhydantoins, 1903, A., i, 738.

Harries, Carl Dietrich, and Valentin Weiss, ozobenzene, 1904, A., i, 861. Harrington, Bernard James, formula of

bornite, 1904, A., ii, 46.

composition of some Canadian amphiboles, 1904, A., ii, 52.

modification of Victor Meyer's apparatus for the determination of vapour densities, 1905, A., ii, 676.

composition of some Montreal mine-

rals, 1906, A., ii, 866.

isomorphism as illustrated by varieties of magnetite, 1907, A., ii, 701.

Harris, Albert Buckley. See John Oglethorpe Wakelin Barratt, and Frederick George Donnan.

Harris, Charles E. See William Gor-

don Little.

Harris, David Fraser, blood of the skate, 1904, A., ii, 55.

reductase in liver and kidney, 1910,

A., ii, 324.

a reducing endo-enzyme in liver and kidney, 1910, A., ii, 730.

influence of protoplasmic poisons on reductase, 1912, A., i, 328.

the intimate associations of inorganic ions with native and derived proteins, 1912, A., i, 1040.

Harris, David Fraser, and Henry Jermain Maude Creighton, reductase of liver and kidney, 1912, A., ii,

1077.

the reduction of ferric chloride by surviving organs, 1912, A., ii, 1191.

Harris, David Fraser, and James Colquhoun Irvine, the use of soluble Prussian-blue for investigating the reducing power of animal bioplasm, 1906, A., ii, 784.

Harris, David Fraser, and William Moodie, action of strychnine on the spinal cord, 1906, A., ii, 475.

the use of soluble Prussian-blue for investigating the reducing power of animal bioplasm, 1906, A., ii, 784.

Harris, Isaac Foust. See Thomas Burr Osborne.

Harris, J. See Otto Weiss.

Harrison, B. H. See Edward Bartow. Harrison, Edward Frank, two modifications of Fehling's solution, 1912,

A., ii, 98.

Harrison, Edward Frank, and D. Gair, quantitative separation of strychnine from quinine, 1903, A., ii, 704. Harrison, Edward Frank, and Percy Arthur William Self, Kjeldahl estimations of nitrogen, 1910, A., ii, 751.

estimation of nicotine in tobacco, 1912, A., ii, 704.

Harrison, Edward Frank.
Alexander Gunn.

Harrison, E. Philip, temperature variation of the coefficient of expansion of pure nickel, 1904, A., ii, 469.

Harrison, John Burchmore, [composition of rain-water: British Guiana], 1911.

A., ii, 530.

Harrison, John Bristowe Pease, estimation of the acid radicle in commercial bismuth subnitrate, 1910, A., ii, 352.
 Harrison, (Miss) J. Peachy. See Eugene

C. Bingham.

Harrison, (Miss) Muriel Kate. See Holland Crompton, and James Frede-

rick Spencer.

Harrison, Thomas Weatherill, and Frederick Mollwo Perkin, the action of methyl sulphate on oils of the aromatic and aliphatic series, 1908, A., ii, 135.

titration with permanganate in presence of hydrochloric acid, 1908,

A., ii, 228.

Harrison, William, the starch-iodine reaction, 1910, P., 252.

electrical theory of dyeing, 1912,

A., ii, 16.

colour and degree of dispersity of colloidal solutions, 1912, A., ii, 240.

Harrison, William Sandilands. Sewilliam Boog Leishman.

Harrop, (Miss) Dorothy, Roland Victor Norris, and Charles Weizmann, derivatives of naphthacenequinone. Part III., 1909, T., 279; P., 33.

some derivatives of anthraquinone, 1909, T., 1312; P., 203.

Harry, Frederick Thomas, and William Rest Mummery, colorimetric estimation of salicylic acid in foodstuffs, 1905, A., ii, 426.

Harst, J. C. van der, estimation of albumin in urine by Esbach's method,

1908, A., ii, 643.

Hart, Edwin Bret, volumetric estimation of caseinogen in cow's milk, 1909,

A., ii, 1060.

Hart, Edwin Bret, and William H.
Andrews, status of phosphorus in certain food materials and animal byproducts, with special reference to the presence of inorganic forms, 1904, A., ii, 201.

Hart. Edwin Bret, George C. Humphrey, and Elmer Verner McCollum, rôle of the ash constituents of wheat bran in the metabolism of herbivora, 1909, A., ii, 413.

Hart, Edwin Bret, Elmer Verner McCollum, and James Garfield Fuller, rôle of inorganic phosphorus in nutrition, 1909, A., ii, 161.

rôle of inorganic phosphorus in the nutrition of animals, 1909, A., ii, 1033.

Edwin Bret, Elmer Verner McCollum, and H. Steenbock, physiological effects on growth and reproduction of rations balanced from restricted sources, 1912, A., ii, 364.

Hart, Edwin Bret, and W. H. Peterson, sulphur requirements of farm crops in relation to the soil and air supply,

1911, A., ii, 431.

Hart, Edwin Bret, and H. Steenbock, the effect of high magnesium intake on calcium excretion by pigs, 1912,

A., ii, 370.

Hart, Edwin Bret, and William E. Tottingham, the nature of the acid soluble phosphorus compounds of some important feeding materials, 1909, A., ii, 926.

Hart, Edwin Bret, and J. J. Willaman, volatile fatty acids and alcohols in corn

silage, 1912, A., ii, 1205.

Hart, Edwin Bret. See also Whitman Howard Jordan, Elmer Verner McCollum, Andrew J. Patten, John Langley Sammis, Lucius Lincoln van Slyke, and Shinkichi K. Suzuki.

Hart, F., natural ferrous oxide hydrate,

1908, A., ii, 861.

quantitative folded filter papers, 1909, A., ii, 178.

analysis of a fossil wood, 1910, A., ii, 1077.

Hart, R. S., preparation of o- and pnitrophenols, 1910, A., i, 730.

Hart, T. Stuart, Folin's method for separating acetone and acetoacetic acid in urine, 1908, A., ii, 742.

estimation of acetone in urine, 1908, A., ii, 783.

Harter, Hans. See Conrad Willgerodt. Harter, Leonard L., variability of wheat varieties in resistance to toxic salts, 1905, A., ii, 754.

Hartl, Ferdinand. See Indwig Vanino. Hartle, (Miss) Hilda Jane. See Percy

Faraday Frankland.

Hartley, Ernald George Justinian, tetramethyl ferrocyanide and some derivatives, 1910, T., 1066, 1725; P., 90, 210.

Hartley, Ernald George Justinian, the constitution of the organic ferrocyanides, 1911, T., 1549; P., 211.

the alkylation of the ferro- and ferricyanides, 1912, T., 705; P., 101.

Hartley, Ernald George Justinian. See

also (the Earl of) Berkeley.

Hartley, Harold Brewer, the spontaneous crystallisation of supersaturated solutions, 1906, P., 60; discussion, P., 60.

Hartley, Harold Brewer, and William Henry Barrett, sodium sulphite and its equilibrium with water, 1909, T., 1178 : P., 164.

the determination of the density of liquids, 1911, T., 1072; P., 100. Hartley, Harold Brewer, and Norman

Phillips Campbell, the solubility of iodine in water, 1908, T., 741; P., 58.

Hartley, Harold Brewer, Norman Phillips Campbell, and Reginald Holliday Poole, the preparation of conductivity water, 1908, T., 428; P., 47; discussion, P., 48.

Hartley, Harold Brewer, Bernard Mouat Jones, and George Adrian Hutchinson, the spontaneous crystallisation of sodium sulphate solutions, 1908, T.,

825 ; P., 70.

Hartley, Harold Brewer, and Noel Garrod Thomas, the solubility of triphenylmethane in organic liquids with which it forms crystalline compounds, 1906, T., 1013; P., 59.

Hartley, Harold Brewer, Noel Garrod Thomas, and Malcolm Percival Applebey, some physico-chemical properties of mixtures of pyridine and water, 1908, T., 538; P., 22; discussion, P., 22.

Hartley, Percival, the fat of the liver, kidney, and heart, 1907, A., ii, 795;

1909, A., ii, 597.

Hartley, Percival, and Julius Berend Cohen, the nitration products of the isomeric dichlorobenzenes, 1904, T., 865; P., 143.

Hartley, Percival, and Anthony Mayrogordato, nature of the fat in normal and pathological human livers, 1908, A., ii, 210.

Hartley, Percival. Berend Cohen. See also Julius

Hartley, (Sir) Walter Noel, the absorption spectra of metallic nitrates. Part II., 1903, T., 221.

on colour changes observed in some cobalt salts, 1903, T., 401; P., 49.

the absorption spectra of nitric acid in various states of concentration, 1903, T., 658; P., 103.

Hartley, (Sir) Walter Noel, the spectrum of pilocarpine nitrate, 1903, P., 122; discussion, P., 123.

the absorption spectrum of p-nitrosodimethylaniline, 1904, T., 1010;

P., 160.

the spectrum generally attributed to "chlorophyll" and its relation to the spectrum of living green tissues, 1904, T., 1607; P., 222.

the preparation of murexide from alloxantin and alloxan, 1905, T.,

1791; P., 166.

the absorption spectra of uric acid, murexide, and the ureides, in relation to colour and their chemical structure, 1905, T., 1796; P., 166.

observations on chemical structure and those physical properties on which the theory of colour is based, 1905, T., 1822; P., 167.

constitution of nitric acid and its hydrates, 1905, A., ii, 815.

the description and spectrographic analysis of a meteoric stone, 1906, T., 1566; P., 251.

presentation of the Longstaff medal to,

1906, P., 169, 246.

continuous rays observed in the spark spectra of metalloids and some metals, 1907, A., ii, 210.

thermochemistry of flame spectra at high temperatures, 1907, A., ii,

517.

devices facilitating the study of spectra,

1907, A., ii, 917.

spectra of calcium and magnesium as observed under different conditions, 1907, A., ii, 919.

the absorption spectrum of camphor,

1908, T., 961; P., 120.

the nature of the impurity found in preparations of triphenylmethane,

1908, P., 94.

absorption spectra of the vapours of benzene and its homologues at different temperatures and pressures, and also of solutions of benzene, 1908, A., ii, 243.

the constitution of p-benzoquinone, 1908, P., 285; 1909, T., 52.

connexion between band and line spectra of the same metallic elements, 1909, A., ii, 279.

mineral constituents of a dusty atmo-

sphere, 1911, A., ii, 558. the absorption spectra of some metallic solutions, 1912, T., 820; P., 109.

the absorption spectra of permanganates, 1912, T., 826; P., 109.

Hartley, (Sir) Walter Noel, and Edgar Percy Hedley, the absorption spectra of phthalic, isophthalic and terephthalic acids, phthalic anhydride, and phthalimide, 1907, T., 314; P., 31.

the absorption spectra of benzoic acid, the benzoates, and benzamide, 1907,

T., 319; P., 31.

Hartley, (Sir) Walter Noel, and Alfred Godfrey Gordon Leonard, the absorption spectra of p-benzoquinone, quinol, and quinhydrone in the state of vapour and in solution, 1908, P., 284; 1909, T., 34.

Hartley, (Sir) Walter Noel, and Otway Henry Little, the course of chemical change in quinol under the influence of radiant energy, 1911, T., 1079; P.,

137.

Hartley, (Sir) Walter Noel, and Henry Webster Moss, the ultimate lines, and the quantities of the elements producing these lines, in spectra of the oxylydrogen flame and spark, 1912, A., ii, 821.

Hartman, Robert Nelson. See Arthur

Michael.

Hartmann, Erich, spectrometric examination of Guthzeit's cyclobutane derivatives, 1911, A., i, 208.

Hartmann, Erich. See also Max Guthzeit. Hartmann, Ernst. See Richard Meyer. Hartmann, Friedrich. See Theodor Curtius.

Hartmann, Hilderich. See Ernst Schmidt.

Hartmann, Johannes [Franz], determination of wave-lengths in the spectrum of Giesel's emanium, 1905, A., ii, 666.

normal lines from the arc spectrum of iron in the definite system of Rowland, 1909, A., ii, 280.

Hartmann, Max. See Otto Dimroth. Hartmann, Miner L. See Raymond Calvier Benner.

Hartmann, Walter. See Ludwig Knorr, and O. Lüttig.

Hartmann, Wilhelm. See Carl Paal. Hartmuth, R. See Alfred Werner.

Hartmuth, R. See Alfred Werner. Hartog, Marcus, embryonic ferments, 1904, A., ii, 624.

Hartogh, Ernst. See Gustav Schultz. Hartogs, J. C. See Arnold Frederik

Holleman.

Hartridge, H., the action of various conditions on carboxyhæmoglobin, 1912, A., i, 399.

heat coagulation of hæmoglobin compounds, 1912, A. i, 400.

Hartridge, H., a spectroscopic method of estimating carbon monoxide, 1912, A., ii, 488.

Hartung, Curt, the action of crystalline aconitine on the isolated frog's heart,

1911, A., ii, 1016.

the action of crystalline aconitine on the motor nerves and skeletal muscles of cold-blooded animals, 1911, A., ii, 1016.

action of crystallised aconitine on respiration, 1912, A., ii, 965.

Hartung, Curt B., molecular complexity of salts in phenol, 1911, A., ii, 697.

Hartung, Curt B. See also Oscar Gros, and Arthur Hantzsch.

Hartwall, Gosta, optical double-isomer-

ism, 1903, A., ii, 3.

Hartwell, Burt Laws, pot experiments

to test field observations concerning soil deficiencies, 1903, A., ii, 97. behaviour of cerium, lanthanum, neodymium, praseodymium, thorium, and zirconium towards organic

bases, 1904, A., ii, 89.

Hartwell, Burt Laws, Alfred W. Bosworth, and James W. Kellogg, estimation of phosphoric acid by the method of ignition with magnesium nitrate and by that of digestion with acids, 1905, A., ii, 353.

Hartwell, Burt Laws, and Frederick S. Hammett, the effect of phosphorus manuring on the amount of inorganic phosphorus in flat turnip roots, 1912.

A., ii, 676.

Hartwell, Burt Laws, and James W. Kellogg, phosphoric acid removed by crops, by dilute nitric acid and by ammonium hydroxide, from a limed and unlimed soil receiving various phosphates, 1907, A., ii, 808.

Hartwell, Burt Laws, and F. R. Pember, relation between the effects of liming and of nutrient solutions containing different amounts of acid on the growth of certain cereals, 1908, A., ii, 420.

sodium as a partial substitute for potassium, 1909, A., ii, 754.

Hartwell, Burt Laws, and Wilhelm B. Quantz, the phosphorus of the flat turnip, 1910, A., ii, 745.

Hartwell, Burt Laws, Homer Jay Wheeler, and F. R. Pember, effect of the addition of sodium to deficient amounts of potassium on the growth of plants in both water and sand cultures, 1908, A., ii, 423.

Hartwell, Burt Laws. See also Homer

Jay Wheeler.

Hartwich, Carl, coca leaves, 1904, A., ii, 73.

Hartwich, Carl, and G. Hakanson, Glyceria fluitans, an almost forgotten cereal, 1905, A., ii, 854.

Hartwich, Carl, and Alfred Hellström, a white Peru balsam, 1905, A., i, 454.

Hartwich, Carl, and Akseli Jama, camomile oil, 1909, A., i, 944.

Hartwich, Carl, and Friedrich Toggenburg, micro-sublimation test for arsenic

trioxide, 1909, A., ii, 437.

Hartwich, Carl, and Wilhelm Uhlmann, detection of fatty oil and its formation, especially in olives, 1903, A., ii, 36.

detection of fatty oils by microchemical saponification, 1903, A., ii, 395.

Hartwich, Carl, and Armand Viullemin, mustard seed, 1905, A., ii, 492.

Hartwig, Ludwig. See Heinrich Beckurts, and Georg Frerichs.

Hartwigsson, H., estimation of sulphur in iron ores, slags, and lime, 1905, A., ii, 552.

Harvey, Alfred William, a note on phenyldimethylallylammonium compounds, 1904, T., 412; P., 64.

 α-benzylphenylallylmethylaumonium compounds; a complete series of four optically active salts, 1905, T., 1481; P., 228.

Harvey, Alfred William, and Arthur Lapworth, sulphocampholenecarboxylic acid, 1903, T., 1102; P., 148.

Harvey, Frederic A., a-rays of radium-B and atmospheric radioactivity, 1909, A., ii, 203.

Harvey, Sidney, estimation of salicylic acid, 1903, A., ii, 249.

Harvey, Thomas Featherstone, iodine absorption of oil of turpentine, 1904, A., ii, 456.

ethereal oil from Salvia sclarea, 1909, A., i, 39.

Harvey, W. Henwood, experimental leucocytosis, 1907, A., ii, 117. auto-intoxication and nephritis in rabbits, 1911, A., ii, 1013.

rabbits, 1911, A., ii, 1013.

Harwood, Henry F. See Paul Jannasch.

Harzbecker, O., and Alb. Jodhauer,
the time relations of Itemolysis on
exposure to light of sensitised red
blood-corpuscles, 1908, A., ii, 866.

Harzer, Albert. See Arthur Kötz. Hascheck, Eduard. See Franz F. Exner.

Hase, Paul. See Karl Beck.

 Hase, R., modified Ostwald's hydrogen sulphide apparatus, 1912, A., ii, 1051.
 Hasegawa. See Karl Bernhard Lehmann. Haselfoot, Charles Edward, charges on ions produced by radium, 1909, A., ii, 285.

Haselhoff, Emil, action of sulphur dioxide, zinc oxide, and zinc sulphate on soils and plants, 1905, A., ii, 193.

injurious action of ammonium thiocyanate [on seeds and plants], 1905, A., ii, 196.

manurial experiments at the Agricultural Experimental Station, Marburg, 1905, A., ii, 650, 854.

buckwheat, 1906, A., ii, 301. action of [furnace] dust on soil and plants, 1907, A., ii, 905.

gaseous compounds produced by the decomposition of calcium cvanamide and their action on plant growth, 1908, A., ii, 728.

decomposition of soil-producing rocks,

1909, A., ii, 259.

action of sulphurous acid on soils,

1909, A., ii, 928.

Haselhoff, Emil, and G. Bredemann, anaerobic nitrogen-absorbing bacteria, 1906, A., ii, 698.

Hasenbäumer, Julius, estimation of potash in soils, ashes, etc., 1904, A.,

ii. 292.

separation of silicic acid when estimating citrate-soluble phosphoric acid, 1906, A., ii, 579.

Hasenbäumer, Julius. See also Josef

König.

Hasenclever, Peter. See Carl Friedheim. Hasenfratz, Victor, bromo-derivatives of the alkaloids of Peganum harmala and their basic derivatives, 1912, A., i, 209.

apoharminecarboxylic acid, apoharmine and some derivatives of this

base, 1912, A., i, 383.

trimethyldiapoharmine, a new base obtained by the application of Hofmann's reaction to apoharmine, 1912, A., i, 577.

hydrogenated derivatives of apohar-

mine, 1912, A., i, 797.

Hasenfratz, Victor. See also Albert Arnaud.

Hashimoto, Sagoro, composition of abnormal milk and ash constituents, 1905, A., ii, 738.

Haskins, Howard D., effect of diuretics with a diet poor in salts, 1904, A.,

ii, 191.

ureine, 1904, A., ii, 754.

nitrogenous metabolism as affected by diet and by alkaline diuretics, 1906, A., ii, 870.

a method of estimating urea, 1906, A., ii, 908.

Haskins, Howard D., effect of transfusion of blood on the nitrogenous metabolism of dogs, 1907, A., ii, 793.

Haskins, Howard D. See also John

James Rickard Macleod.

Haslam, Henry Cobden, separation of proteins, 1905, A., i, 495. separation of proteins. II. Deutero-

albumose, 1908, A., i, 71.

pseudo-globulin, 1912, A., i, 591. Haslam, R. T., qualitative detection of alkali hydrogen carbonates, 1912, A., ii, 686.

Haslinger, Carl, 1:4-anthraquinone,

1906, A., i, 967.

action of ethylamine on isatin, 1907, A., i, 975; 1908, A., i, 454.

Hassel, Carl. See Max Dittrich. Hasselbach, A. See Karl Fries.

Hasselbalch, Karl Albert, the action of light on blood-pigments and bloodcorpuscles, and the optical sensitisation of the action, 1909, A., i, 857. electrometric measurements [of acidity]

in liquids containing carbon dioxide,

1911, A., ii, 182.

Hasselbalch, Karl Albert, and J. Lindhard, a new method for estimating sugar in urine, 1910, A., ii, 905. estimation of sugar by safranine, 1911,

A., ii, 73.

Hasselbalch, Karl Albert, and Chr. Lundsgaard, the electrometric method for measuring the reaction of the blood at body temperature, 1912, A., ii, 180.

Hasselberg, Clas Bernhard, spectra of the metals in the electric arc. VI. Spectrum of molvbdenum, 1903,

A., ii, 706.

spectra of the metals in the electric arc. VII. Spectrum of tungsten, 1905, A., ii, 129.

spectra of the metals in the electric arc. VIII. Spectrum of uranium,

1910, A., ii, 811.

Hasselt, J. F. B. van, constitution of bixin, 1909, A., i, 598; 1911, A., i,

the pepsin-chymosin question, 1911, A., i, 248.

Hassler, Carol. See Josef König.

Hassler, F. See Max Dennstedt. Hasslinger, Rudolf von, artificial diamonds, 1903, A., ii, 142.

occurrence of iron in sulphur, 1904, A., ii, 39.

nature of metallic and electrolytic conduction, 1907, A., ii, 429.

a new form of "tin plague," 1908, A., ii, 953.

Hasslinger, Rudolf von, and Josef Wolf. artificial diamonds, 1904, A., ii, 28.

Hasslinger, Rudolf von. See also Alfred Lipschitz.

Hassreidter, V., solubility of copper sulphide in alkali polysulphides, 1905, A., ii, 285, 611.

estimation of sulphur existing as zinc sulphate in roasted blendes, 1907,

A., ii, 50.

influence of ammonium salts on the titration of zinc with sodium sulphide, 1907, A., ii, 301.

volumetric estimation of zine according to Schaffner, 1908, A., ii, 226.

estimation of sulphur in mineral sul-

phides, 1908, A., ii, 893.

separation of nickel from iron by means of ammonia, 1909, A., ii, 766. rapid estimation of zinc, 1912, A., ii,

Hastings, E. G. See Shinkichi K. Suzuki. Hastings, Thomas W. See Charles Loomis Dana.

Haswell, A. E., modification of the thiosulphate method for the volumetric estimation of iron, 1903, A., ii, 185.

Hata, Sahachiro, inhibition and reactivation of enzyme action by mercuric chloride, 1909, A., i, 543.

liver ferments, with special reference to the gelatinolytic enzyme, 1909, A., ii, 416.

the estimation of pepsin by the clarification of a turbid solution of eggwhite, 1910, A., ii, 168.

Hatai, Shinkishi, influence of lecithin on the growth of the white rat, 1903, A., ii, 669.

effect of inanition on the brain of the

rat, 1904, A., ii, 673.

excretion of nitrogen in the white rat, 1905, A., ii, 740.

effect of partial inanition followed by return to normal diet on the growth of white rats, 1907, A., ii, 371.

Hatcher. Robert Anthony, nicotine poisoning in rabbits and guinea-pigs, 1904, A., ii, 361.

fate of strychnine in the rabbit's intestine, 1904, A., ii, 752.

action of saline solutions on the vitality of blood vessels, 1906, A., ii, 103.

absorption, excretion, and destruction of strophanthine, 1909, A., ii, 169.

Hatcher, Robert Anthony, and Torald Sollmann, the effect of diminished excretion of sodium chloride on the constituents of the urine, 1903, A., ii, 91.

Hatcher, Robert Anthony, and Charles George Lewis Wolf, formation of glycogen in muscle, 1907, A., ii, 490.

Hatcher, Robert Anthony. See also Torald Sollmann.

Hatfield, Henry Stafford, new estimate of the size of an atom, 1909, A., ii,

Hatfield, William Herbert, the decarburisation of iron-carbon alloys, 1909, A., ii, 486.

the chemical physics involved in the precipitation of free carbon from the alloys of the iron-carbon system, 1911, A., ii, 401.

the influence of vanadium on the physical properties of cast iron,

1911, A., ii, 1092.

Hatschek, Emil, crystalline form of calcium carbonate precipitated from concentrated solutions, 1909, A., ii,

the viscosity of the dispersoids, 1911, A., ii, 19, 98.

some reactions in gels, 1911, A., ii, 378. formation of layers in heterogeneous

systems, 1911, A., ii, 972. stability of oil-water emulsions, 1911,

A., ii, 1068.

theory of Liesegang's layers, 1912, A., ii, 439. simple apparatus for preparing emul-

sions, 1912, A., ii, 445. reactions in silicic acid gel, 1912, A.,

camphorylphenylthiosemicarbazide jellies and observations on the structure of jellies, 1912, A., ii, 1149.

Hatschek, Emil, and Alfred Leo Simon, reduction of gold in silicic acid gels and the formation of gold deposits, 1912, A., ii, 772.

Hatt, David. See Richard Willstätter. Hattensaur, Georg, estimation of arsenic in pyrites, 1911, A., ii, 1028. Hattrem, W. M., and Philip Bouvier

Hawk, effects of copious water drinking with meals on intestinal putrefaction, 1911, A., ii, 213.

Hauenstein, Emil. See Richard Willstätter.

Hauenstein, Leonhard. See Gustav Schultz.

Hauers, Rudolf, and Bernhard Tollens, hydrolysis of substances containing pentosans by dilute acids or by sulphites: isolation of pentoses, 1904, A., i, 16.

Hanke, Max, entectic structures in silicate fusions, 1910, A., ii, 510.

Haun, Heinrich. See Karl Feist. Haupt, Willy, determination of vapour density from increase of pressure and the accuracy of this method as compared with that of known methods, 1904, A., ii, 646.

Hauser, Enrique, estimation of hydrogen in technical gas analysis, 1908, A.,

method to avoid cracking vacuum vessels whilst manipulating liquid air, 1909, A., ii, 135.

new form of eudiometer, 1910, A., ii,

Hauser, Fr., effect of electric and magnetic fields on the spontaneous charging of polonium; the penetration power of δ-rays, 1911, A., ii, 685.

the initial velocity of the δ-rays, 1912,

A., ii, 1026.

δ-rays, 1912, A., ii, 1026.

Hauser, Hans. See Eugen Bamberger, and Richard Lorenz.

Hauser, Isaak. See Robert Kremann. Hauser, Otto, bismuth alkali thiosulphates, 1903, A., ii, 487.

basic zirconium sulphate, 1904, A., ii,

zirconium sulphates, 1905, A., ii, 531; 1907, A., ii, 626.

new class of iron compounds, 1905,

A., ii, 715.

preparation of the oxysulphides of zirconium and thorium, 1907, A., ii,

2:1-ferroso-ferric oxide, 1907, A., ii, 470.

a new yttrium columbium mineral, 1907, A., ii, 704.

action of alcohol on zirconium sulphate,

1907, A., ii, 968.

solubility of rare earth oxalates in solutions containing uranyl salts, 1908, A., ii, 987.

risorite, a new mineral, 1909, A., ii,

the so-called dysanalyte from Vogtsburg, in the Kaiserstuhl, 1909, A., ii, 60.

the keilhauite-zirkelite group, and a new mineral of that group, 1909, A., ii, 901.

the plumboniobite earths, 1910, A., ii,

the play of colour of alexandrite, 1910, A., ii, 873.

basic thorium sulphate, 1910, A., ii, 1075.

Hauser, Otto, schaumopal [float-stone]. 1911, A., ii, 808.

Hauser, Otto, and L. Finckh, plumboniobite, 1909, A., ii, 676.

Hauser, Otto, and H. Herzfeld, monoclinic modification of potassium dichromate, 1909, A., ii, 1001.

zirconium sulphates. III. The 4:3 basic zirconium sulphate and its hydrates, 1910, A., ii, 872.

blomstrandine from the Urals, 1911,

A., ii, 46.

Hauser, Otto, and A. Lewite, behaviour of phenols, naphthols, and phenolcarboxylic acids towards quadrivalent titanium, 1912, A., i, 847. hydrosols of columbic and tantalic

acids and the separation of columbium and tantalum according to the method of Weiss and Landecker, 1912, A., ii, 262.

Hauser, Otto, and Ludwig Vanino, pyridine bismuth chloride, 1904,

A., i, 92.

bismuth tetroxide, 1904, A., ii, 569.

Hauser, Otto, and Fritz Wirth, solubilities of the oxalates of the rare earths. I. Solubility of the oxalates of lanthanum, cerium, and samarium in dilute sulphuric and oxalic acids or their mixtures, 1908, A., ii, 778.

solubilities of the oxalates of the rare earths. II. Solubility of manganous oxalate in water, ammonium oxalate, sulphuric or oxalic acid, and their mixtures, 1909, A., i, 360.

basic sulphates of thorium and cerium,

1909, A., ii, 54. estimation of thorium in monazite

sand, 1909, A., ii, 352.

simplification of Mosander's method for the separation of cerium from the other ceritic earths, 1909, A., ii, 940.

the earths of euxenite, 1910, A., ii, 47,

the chemistry of thorium, 1912, A., i,

Hauser, Otto. See also Ernst Biesalski. Hausknecht, Bella. See Stephan Minovici.

Hausmann, Joachim, formation of precipitates in gelatin, 1904, A., ii, 547.

Hausmann, Joachim. See also Roman Zaloziecki.

Hausmann, Max. See Arthur Heffter. Hausmann, Walther, [arsenic in lower animals], 1904, A., ii, 426.

antagonistic action of saponin and cholesterol, 1905, A., ii, 744.

Hausmann, Walther, the photodynamic action of plant extracts containing chlorophyll, 1908, A., ii, 881.

sensibilising action of animal pigments.

I., 1909, A., ii, 69.

photodynamic action of chlorophyll and its relation to the photosynthetic assimilation of plants, 1909, A., ii, 423.

the sensitising action of hæmatopor-

phyrin, 1911, A., ii, 138.

Hausmann, Walther, and Walter Kolmer, action of colloidal poisons on parameecium, 1907, A., ii, 380.

the sensitising action of vegetable and animal pigments on paramœcia,

1909, A., ii, 78. smann, Walther, and Hausmann, Leonold (Ritter) von Portheim, photodynamic action of extracts of etiolated plants,

1909, A., ii, 925.

Hausmann, Walther, and O. Wozasek, inhibition of the toxic influence of solanine by carbon dioxide, 1906, A., ii. 789.

Hausrath, Herbert, differential method of determining small freezing point depressions, 1903, A., ii, 61.

Hausser, W. See Carl Ramsauer. Hauth, August. See Adolf Windaus.

Havas, Em. See Eugène Grandmougin. Havelock, Thomas Henry, optical dispersion: an analysis of its actual dependence on physical conditions, 1911, A., ii, 165.

influence of the solvent on the position of absorption bands in solutions,

1912, A., ii, 110.

Philip Bouvier, influence of rennin on milk digestion, 1903, A., ii, 669.

time relations of protein metabolism, 1904, A., ii, 58.

ether anæsthesia, 1904, A., ii, 194. changes in blood after exercise, 1904, A., ii, 270.

Eck's fistula in dogs, 1905, A., ii,

digestion of urine in the estimation of nitrogen by the Kjeldahl method, 1908, A., ii, 64.

feeding and other experiments on dogs with an Eck fistula, 1908, A., ii, 306.

leucomaines of cod-liver oil, 1908, A., ii, 308.

effect of ether anæsthesia on nitrogen excretion, 1908, A., ii, 410.

effects of copious water drinking with meals on the pancreatic function, 1911, A., ii, 214.

Hawk, Philip Bouvier, analysis of the urine of the fox, dog, and covote, 1911, A., ii, 308.

fasting studies. II. Catalase content of tissues and organs after prolonged fasting, 1911, A., ii, 411.

catalase content of tissues and organs after prolonged fasting, 1911, A., ii,

post-anæsthetic glycosuria, 1912, A., ii, 466.

fasting studies. X. A glycogen-free liver, 1912, A., ii, 660.

Hawk, Philip Bouvier, and Joseph Scudder Chamberlain, metabolism following a small increase in protein ingested, 1904, A., ii, 185.

Hawk, Philip Bouvier, and William John Gies, influence of hæmorrhage on protein katabolism, 1904, A., ii, 184, 497.

Hawk, Philip Bouvier, and Harry Sands Grindley, efficiency of thymol and refrigeration for the preservation

of urine, 1908, A., ii, 409.

Hawk, Philip Bouvier. See also L. T. Fairhall, C. C. Fowler, Paul J. Hanzlik, W. M. Hattrem, Paul Edward Howe, Henry Albright Mattill, M. E. Rehfuss, E. L. Ross, S. A. Rulon, Thomas A. Rutherford, C. P. Sherwin, F. Wills, and S. R. Wreath.

Hawkes, James Leonard. See Benjamin Moore.

Hawley, Lee Fred, identification of solid phases, 1906, A., ii, 854. chemistry of thallium. I. and II.,

1907, A., ii, 460, 770.

Haworth, Walter Norman, the condensation of ketones and aldehydes with the sodium derivative of ethyl cyanoacetate, 1909, T., 480; P., 76.

Haworth, Walter Norman, and Albert Theodore King, the constitution of camphene. Part I. The structure of camphenic acid, 1912, T., 1975; P., 236.

Haworth, Walter Norman, and William Henry Perkin, jun., experiments on the synthesis of the terpenes. Part XII. Synthesis of terpins, terpineols, and terpenes derived from methylisopropylcyclopentanes, Me C,Ha CHMe2, 1908, T., 573; P., 64. Haworth, Walter Norman, William

Henry Perkin, jun., and Otto Wallach, on dl- and $d-\Delta^2$ -m-menthenol(8) and dl- and d- $\Delta^{2:8(9)}$ -m-menthadiene, 1911,

T., 118; P., 4.

Haworth, Walter Norman. See also Harry Dent Gardner, Victor John Harding, William Henry Perkin, jun., and Otto Wallach.

Hawthorne, John, the constitution and properties of acyl thiocyanates, 1906, T., 556; P., 86.

Hawthorne, John. See also Augustus Edward Dixon.

Hay, James Gordon. See Raphael Meldola.

Hayakawa, Masataro, and Tomonori Nakano, the radioactive constituents of the sediments from the springs of Hokuto, Taiwan, 1912, A., ii, 1123.

Hayakawa, Masataro. See also Daniel Vorländer.

Hayashi, Harno. See Carl Jacobj.

Hayden, J. L. R., electrolytic corrosion of iron by direct current, 1912, A., ii,

Hayduck, Fritz, attempts to prepare tetrahydroxyindigotin, 1903, A., i,

nitrovanillin, 1904, A., i, 63.

Havek, H. von, electrolysis of potassium double cyanides, 1904, A., i, 479.

Hayhurst, E. R. See George Theophilus Kemp.

Hayhurst, Walter, and John Norman Pring, the examination of the atmosphere at various altitudes for oxides of nitrogen and ozone, 1910, T., 868; P., 92.

Hayman, J. M., amount and composition of drainage waters collected during the year 1906-7, 1908, A., ii, 891.

Haynes, (Miss) Dorothy. See James Charles Philip.

Haynes, George Secretan, pharmacological action of digitalis, strophanthus, and squill on the heart, 1906, A., ii, 243.

Haynes, Justin H., metallurgy of uranium and vanadium, 1910, A., ii, 618.

Haywood, John Kerfood, estimation of arsenious oxide in Paris green, 1905, A., ii, 754.

composition of the lime, sulphur and salt wash, 1905, A., ii, 312.

Haywood, John Kerfood, and Bernard H. Smith, the hydrogen peroxide method of estimating formaldehyde,

1905, A., ii, 771. Hayworth, William Prince. See Samuel

Shrowder Pickles. Hazard, Robert. See Theodor Posner.

Hazard-Flamand, Maurice, preparation of o-chlorophenol, 1903, A., i, 622.

Hazewinkel, J. J., application of the pyknometric method to the determination of the weight and volume of precipitates suspended in liquids, 1907, A., ii, 194.

Headden, William Parker, [tellurium and tellurite from Colorado; cuprodescloizite from Arizonal, 1904, A., ii, 347.

the Doughty springs: a group of radium-bearing springs in Colorado.

1906, A., ii, 2.

[cubanite as a furnace product], 1906. A., ii, 35.

[columbite, fibroferrite, energite, alunogen, doughtyite, etc.], 1906, A., ii,

phosphorescent calcite, 1906, A., ii,

[cassiterite, jamesonite, tapiolite, etc., from South Dakotal, 1907, A., ii,

occurrence of arsenic in soils, plants, fruits, and animals, 1910, A., ii, 890.

meteoric iron from Currant Creek, Colorado, 1911, A., ii, 1106.

Heald, Walter, absorption of hydrogen by thin metal films, 1907, A., ii, 859.

Healy, Frank A., space relation of forces in the atom, 1909, A., ii, 653.

Heape, Walter, the stimulus to milk secretion, 1906, A., ii, 242. Heaps, William James. See Sidney

Nirdlinger.

Heard, W. Nevill, the precipitation of suspensoid protein by various ions,

1912, A., i, 734. Heath, Fred Harvey, iodometric estimation of arsenic and antimony in the presence of copper, 1908, A., ii, 734.

Heath, Fred Harvey, See also Frank Austin Gooch.

Heath, George L., electrolytic assay of copper containing arsenic, antimony, selenium, and tellurium, 1904, A., ii, 780.

estimation of oxygen and occluded gases in copper, and a correction to the electrolytic assay in the complete analysis of copper, 1912, A., ii, 1091.

Heathcote, Henry Leonard, the passivifying, passivity, and activifying of iron, 1907, A., ii, 851.

Heathcote, Henry Leonard. See also Percy Faraday Frankland.

Heaven, G. S. See Leonard Philip Wilson.

Hebebrand, August, estimation of boric acid occurring naturally in vegetable juices, 1903, A., ii, 181.

Heberlein, Eduard. See Friedrich Wil-

helm Küster.

Hébert, Alexandre, civet, 1903, A., i, 60.

Hébert, Alexandre, action of metals at high temperature on fatty acids,

1903, A., i, 396. presence of hydrocyanic acid in various plants, 1906, A., ii, 882. composition of soils from French

Guinea, 1906, A., ii, 889.

agricultural values of the cacao soils of S. Thomé and the Gold Coast Colony, 1906, A., ii, 889.

toxicity of some rare earths: their action on certain ferments, 1907,

A., ii, 43.

relative toxicity of salts of chromium. aluminium, magnesium, and rare metals, 1907, A., ii, 902.

active principles of the fruit of an

African strychnos, 1908, A., ii, 317. action of zinc dust at high temperatures on various types of aliphatic and aromatic acids, 1909, A., i, 84.

pyrogenic decomposition of metallic xanthates, 1911, A., i, 348.

composition of various oleaginous seeds from French West Africa, 1911, A.,

shea butter, 1911, A., ii, 1126.

oils from different varieties of oilpalm, 1912, A., ii, 196.

composition of the seeds of Funtumia elastica, the rubber tree of the Ivory Coast, 1912, A., ii, 802.

Hébert, Alexandre, and Eugène Charabot, influence of external media on the composition of the organic matter of plants, 1904, A., ii, 140.

Hébert, Alexandre, and F. Heim, toxicity of arsenic trihydride, 1907, A.,

ii, 569.

estimation of traces of arsenic trihydride in the atmosphere, 1907,

A., ii, 578.

Hébert, Alexandre, and André Kling, influence of radium radiations on chlorophyllic and respiratory functions of plants, 1909, A., ii, 753.

Hébert, Alexandre, and Georges Truffaut, chrysauthemums, 1903, A., ii, 608;

1905, A., ii, 475.

influence of external media on the mineral constituents of plants, 1904, A., ii, 140.

nitrogenous and mineral composition of ornamental plants, 1910, A., ii,

150.

Hébert, Alexandre. See also Eugène Charabot.

Hebting, Josef, the removal of the poisonous effects of hydrocyanic acid by substances which split off sulphur, 1910, A., ii, 1096.

Hechler, Willy, fluidity and conductivity of some concentrated aqueous salt solutions below 0°, 1904, A., ii,708.

Hecht, Josef, phenylitaconic acid, 1903, A., i, 700.

Hecht, Josef. See also Rudolf Wegscheider.

Hecht, Leopold. See Otto Ruff.

Heckel, Edouard, influence of anæsthetics and of cold on coumarinproducing plants, 1910, A., ii, 63.

action of cold, of chloroform, and ether on Eupatorium triplinerve,

1911, A., ii, 761.

Heckel, Edouard, and Frédéric Schlagdenhauffen, a copal resin and a new kino yielded by the fruit and bark respectively of Dipteryx odorata, 1904, A., i, 332.

Heckel, Fritz, leucine from casein, 1908,

A., i, 231.

a-w-aminoguanidinesynthesis of hexoic acid, 1908, A., i, 862.

Heckel, Fritz, See also Zdenko Hanns Skraup.

See Emil Knoe-

Wilhelm. Heckel.

venagel. Hecker, Otto, gabbro-rocks of the Val

Tellina, 1904, A., ii, 351. Hecking, Arnulf. See Carl Bülow, and

Gustav Fingerling.

Heczko, Arnold, lecture experiment for demonstrating chemical luminescence, 1911, A., ii, 269.

estimation of tartaric acid, 1911, A., ii, 341.

estimation of total tartaric acid [in crude materials], 1911, A., ii, 342. estimation of sulphur in pyrites, 1912, A., ii, 89, 296.

Hedblom, C. A. See Carl Lucas

Alsberg.

Heddle, Matthew Forster, mineralogy of the Færoe Islands, 1909, A., ii, 62.

Hedenström, August von, preparation of oxalic acid by the fusion of sawdust with potassium hydroxide, 1911, A.,

Hedenström, August von. See also Carl Adam Bischoff, and Theodor Zincke.

See Eduard Hediger, Stephan. Buchner.

Hedin, Sven Gustav, proteolytic enzymes of ox-spleen and serum, 1904, A., ii, 58.

action of trypsin, 1905, A., ii, 541. antitryptic action of serum albumin,

1905, A., ii, 541. time relations of tryptic action, 1906,

A., ii, 780.

Hedin, Sven Gustav, trypsin and antitrypsin, 1906, A., ii, 780.

antitryptic effect of charcoal, 1906, A., ii, 780.

a case of specific adsorption of enzymes, 1907. A., i. 267.

enzymes, 1907, A., i, 267. extraction by caseinogen of trypsin adsorbed by charcoal, 1907, A., i, 268.

inhibition of tryptic digestion, 1907, A., ii, 891.

kinetics of enzymes, 1909, A., i, 73. the kinetics of enzyme actions, 1910, A., i, 290.

the rennet zymogen of the calf's stomach, 1911, A., ii, 621.

the specific inhibition of rennet, and differences between rennets, 1911, A., ii, 998.

the specific inhibition of rennet action, 1912, A., ii, 363.

Hedinger, E. See René Metzner.

Hedley, Edgar Percy, the dynamic isomerism of phloroglucinol, 1906, T., 730; P., 106.

spectroscopical investigation of iso-

spectroscopical investigation of isomerisable nitro-compounds in ultraviolet, 1908, A., i, 382.

Hedley, Edgar Percy. See also Arthur Hantzsch, (Sir) Walter Noel Hartley, and Richard Willstätter.

Hedvall, A., Rinmann's green, 1912, A., ii, 846.

Heen, P. de, new conception of the chemical atom, 1904, A., ii, 553.

experimental demonstrations of thermal phenomena developed in phosphorescent substances: validity of physical theories, 1905, A., ii, 434.

Heen, P. de. See also Henri Micheels.
Heerde, R., and E. Busch, estimation of albumin in barley, 1905, A., ii, 364.

Heerdt, Walter. See Hugo Weil. Heeren, Friedrich. See Emil Knoe-

venagel.

Heermann, Paul, analysis of soluble

glass (sodium silicate), 1904, A., ii, 779.
detection and estimation of sodium

detection and estimation of sodium chloride in [commercial] tin chlorides, 1907, A., ii, 132.

amount of tin in pure stannic chloride solutions of known density, 1907, A., ii, 625.

Hefele, Georg. See Max Busch.

Hefelmann, Rudolf, occurrence of boric acid in common salt, 1905, A., ii, 652. the caffeine-content of raw coffee and a modification of Juckenack and Hilger's method for estimating caffeine, 1909, A., ii, 193. Hefelmann, Rudolf, potassium hydrogen tartrate as standard substance, 1909, A., ii, 516.

Hefelmann, Rudolf, and Paul Mauz, distribution of glycogen in horseflesh, 1906, A., ii, 242.

the intramuscular and extramuscular fat of the principal muscles of horses and oxen, 1906, A., ii, 316.

Hefelmann, Rudolf, Paul Mauz, and F. Müller, analysis of raspberry juice, 1906, A., ii, 387.

Heffner, B. See Wilhelm Manchot.

Heffter, [Karl Wilhelm] Arthur, products obtained by the autoxidation of eosin, 1905, A., i, 897.

reducing constituents of cells, 1907, A., ii, 978.

are there reducing ferments in the animal body? 1908, A., ii, 1054.

Heffter, Arthur, and R. Capellmann, attempts to synthesise mezcaline, 1905, A., i, 877.

Heffter, Arthur, and Georg Fickewirth, the behaviour of atropine in the organism of the rabbit, 1912; A., ii, 586.

the resistance of the rabbit to atropine, 1912, A., ii, 586.

Heffter, Arthur, and Max Hausmann, action of sulphur on proteins, 1904, A., i, 461.

Heffter, Arthur, and Fritz Sachs, strophanthus glucosides from various sources, 1912, A., i, 482.

Hegland, J. M. A., estimation of sugar in urine, 1904, A., ii, 372.

assay of anhydromethylenecitric acid and of "citarine" and "helmitol," 1910, A., ii, 555.

Hegler, C. See Otto Schumm.

Heiberg, M. E., the decomposition curves of solutions of copper salts, 1903, A., ii, 263.

electrolytic estimation of thallium as oxide by anodic precipitation, 1903, A., ii, 614.

Heide, Karl von der, ethyl diazoacetate and systems with conjugated double linkings, 1904, A., i, 582.

new forms of percolating and extraction apparatus, 1909, A., ii, 431.

Heide, Karl von der, and W. I. Baragiola, chemistry and analysis of wines: a criticism of methods and interpretation of results, 1911, A., ii, 529.

Heide, Karl von der, and F. Jakob, detection of benzoic, cinnamic, and salicylic acids in wine, 1910, A., ii, 359.

Heide, Karl von der, and Erwin Schwenk. direct estimation of extract in wines, 1912, A., ii, 695.

the formation of volatile acids by yeast during the process of re-fermentation of wine, 1912, A., ii, 860.

estimation of phosphoric acid in wine,

1912, A., ii, 992.

modification of the processes for the estimation of succinic and malic acids in wines, 1912, A., ii, 1005.

Heide. Karl von der, and H. Steiner, estimation of succinic acid in wine, 1909, A., ii, 444.

estimation of malic acid in wine, 1909,

A., ii, 445.

Heide, Richard von der, a re-fill burette, 1911, A., ii, 651.

improved rapid condenser and extraction apparatus, 1911, A., ii, 651, Heide, Richard von der. See also Eduard

Buchner.

Heidelberger, Michael. See Marston Taylor Bogert, and Floyd Jay Metzger.

Heidenhain, Martin, chemical relations between proteins and aniline dyes,

1903, A., i, 586.

Nile-blue-base as a reagent for atmospheric carbon dioxide; the action of acid dyes on cellulose, alcohol, and acetone, and theory of dyeing histological preparations, 1904, A., i, 179.

Heidenstam, Gust. Peter von. See

Klason.

Heiduschka, Alfred, behaviour of certain substances at low temperatures, 1907, A., ii, 72.

p-toluenesulphinic acid, 1909, A., i, 144.

forensic detection of veronal, 1911. A., ii, 816.

Heiduschka, Alfred, and Theodor Biéchy, estimation of arsenic in urine after the administration of salvarsan, 1911, A., ii. 537.

Heiduschka, Alfred, and Hans Waldemar Gloth, phytosterol from cotton-seed oil, 1908, A., i, 883.

extraction of phytosterols and cholesterols from fats, 1909, A., i, 381.

Heiduschka, Alfred, and Hans Grimm, retene. II., 1912, A., i, 107.

Heiduschka, Alfred, and Karl Pfizenmaier, behaviour of fatty acids in Arnold's distillation process, 1909, A., i. 130.

Heiduschka, Alfred, and Gustav Quincke, estimation of the most important acids that occur in wine in presence of alcohol and glycerol, 1908, A., ii, 73.

Heiduschka, Alfred, and Anton Reuss. estimation of arsenic in arsenical greens, 1911, A., ii, 438.

Heiduschka, Alfred, and Eugen Rheinberger, fatty acids of cod-liver oil. 1910, A., i, 297; 1911, A., 766.

Heiduschka, Alfred, and Hans Riffart,

bixin, 1911, A., i, 315.

Heiduschka, Alfred, and Oscar Rothacker, condensation of phenylazowith phenylmethylpyrazolone, 1909, A., i, 851.

1-phenyl-3-methyl-5-pyrazolone 4-amino-1-phenyl-3-methyl-5-pyr-

azolone, 1912, A., i, 51.

Heiduschka, Alfred, and Emil Scheller. retene, 1910, A., i, 397.

Heiduschka, Alfred, and R. Wallenreuter, oil of the seeds of Struchnos nux vomica, 1912, A., ii, 1087.

Heiduschka, Alfred. See also Gustav Birstein, and Ernst von Meyer.

Heike, W., the system: lead sulphidetin sulphide, 1912, A., ii, 763.

Heikel, Gunnar, birotation of galactose, 1905, A., i, 173.

estimation of acetone, 1908, A., ii, 235.

estimation of vegetable alkaloids by means of mercuric potassium iodide [Mayer's solution], 1909, A., ii, 104.

Heilborn, Walter. See Hermann Grossmann.

Heilbron, Isidor Morris, and James Alexander Russell Henderson, action of semicarbazide hydrochloride on p-quinones; preliminary note, 1912, P., 256.

Heilbron, Isidor Morris, and Forsyth James Wilson, contributions to our knowledge of semicarbazones, 1911, P., 315.

contributions to our knowledge of semicarbazones. Part I. Semicarbazones of phenyl styryl ketone, 1912, T., 1482; P., 192.

Heilbron, Isidor Morris. See also . Arthur Hantzsch, and George Gerald

Henderson.

Heile, Bernhard, isoform, a new antiseptic, 1905, A., ii, 847.

Heilmann, Sebastian. See August

Klages.

Heilner, Ernst, the influence of intake of water on the excretion of nitrogen and chlorides, 1906, A., ii, 295.

action of dextrose on the animal body, 1906, A., ii, 689.

the work of digestion, 1908, A., ii, 305.

Heilner, Ernst, the effect of subcutaneously administered urea on metabolism, 1909, A., ii, 327.

the influence of fat subcutaneously administered on protein metabolism.

1910, A., ii, 625.

the fate of subcutaneously administered sucrose in the animal body, and its effects on protein and fat metabolism, 1911, A., ii, 635.

Heim, F. See Alexandre Hébert.

Heim, Friedrich, auto-decomposition of phenylnitromethane, 1911, A., i, 28. stereoisomeric B-nitro-a-methoxy-aBdiphenylethanes prepared by the addition of alkali methoxide to 7-nitrostilbene, 1911, A., i, 717.

condensation of w-nitrotoluene with benzaldehyde; cis- and trans-7-nitrostilbene, 1911, A., i, 717.

Heim. Friedrich. See also Jakob Meisenheimer.

Heimann, Eberhard, See Paul Jan-Heimannsberg, Alban. See Karl Bern-

hard Lehmann.

Heimbucher, Christoph. See Heinrich

Heimrod, George William, and Phoebus A. Levene, anodic oxidation of aldehydes, 1909, A., i, 85.

the tryptophan-aldehyde reaction, 1910, A., ii, 559.

the oxidation of aldehydes in alkaline solution, 1911, A., i, 13.

Heimsoth, Gustav. See Alois Bömer.

Heine, comparison of the forensic value hæmin and hæmochromogen crystals, 1912, A., ii, 1011.

Heine, Otto. See Karl Andreas Hofmann.

Heine & Co., preparation of nerol from petit grain oil, 1904, A., i, 808. preparation of the terpinoid alcohol,

nerol, 1906, A., i, 521. Heinemann, Felix. Wilhelm See

Traube.

Heinemann, P. G., the kinds of lactic acid produced by lactic acid bacteria, 1907, A., ii, 498.

concentration of diphtheria toxin, 1908, A., ii, 770.

Wilhelm, Heinisch, Wilhelm, form graphite, 1911, A., ii, 391. formation of

Heinisch, Wilhelm, and Julius Zellner, fly agaric (Amanita muscaria), 1904, A., ii, 678.

Heinitz, B. See Otto Lemmermann. Heinle, Eugen. See Julius Schmidt. Heinrich, Ernst, protein digestion in man, 1903, A., ii, 309.

Heinrici, Walter. See August Michaelia. Heintschel, Erwin, formula of triphenylmethyl with quadrivalent carbon, 1903, A., i, 243.

condensation of hydroxyquinol with

aldehydes, 1905, A., i, 809.

Heintz, Walter, new burettes with automatic zero, 1912, A., ii, 294.

Heintz, Walter. See also Hermann Matthes.

Heintzel, Hans. See Otto Diels.

Heinze, Berthold, production and decomposition of glycogen bv lower vegetable organisms, 1904. A., ii, 504.

production and utilisation of glycogen by lower vegetable organisms, 1905,

A., ii, 344.

action of carbon disulphide on lower vegetable organisms and its importance for the fertility of soils, 1906, A., ii, 486.

microbiology of soils, 1906, A., ii, 625, treatment of soils with carbon disulphide, 1907, A., ii, 295, 388,

502, 572.

are fungiable to utilise the elementary nitrogen of the air and to increase the total nitrogen in the soil? 1909, A., ii, 510.

soil-bacteriological investigations.

1911, A., ii, 320.

Heinze, Berthold. See also Wilhelm Krüger.

Heinzelmann, Alfred, colorimetric estimation of mercury in urine, 1911, A., ii, 772.

Heinzelmann, Alfred. See also Otto Ruff.

Heise, George W., equilibrium in systems consisting of lead haloids and pyridine, 1912, A., i, 722.

Heise, Robert. See Emil Abderhalden. Heisler, Robert. See Fritz Ullmann.

Heiten, Edmund. See Eberhard Rim-

Heitman, Arnold H. C., new aromatic ethereal salts formed by the interaction of o-sulphobenzoic anhydride and phenols in the presence of water and an alkali hydroxide, 1912, A., i, 973.

Heitman, Arnold H. C. See also Erik Clemmensen.

Heitz, W. See Fritz Straus.

Hekma, Ebel, liberation of trypsin from trypsin-zymogen, 1903, A., ii, 559.

the stimulating effect of chloride of calcium and of intestinal mucous membrane extract on the action of trypsin, 1911, A., i, 511.

Hekma, Ebel. See also Hartog Jakob

Hamburger.

Helbig, Demetrio, direct synthesis of nitrogen trioxide, 1903, A., ii, 361. new synthesis of nitrogen pentoxide, 1903, A., ii, 361.

Helbig, Demetrio, and Giuseppe Fausti, liquid hydrogen chloride as an electrolytic solvent, 1904, A., ii, 225.

Helbig, Maximilian, an attempt to synthesise 1:2-coumaran, 1908, A., i, 357.

Helbronner, André, derivatives and condensation products of β-hydroxy-α-naphthaldehyde, 1903, A., i, 764.

Helbronner, André. See also Victor Henri.

Hele, Thomas Shirley, metabolism in cystinuria, 1909, A., ii, 683.

Hele, Thomas Shirley. See also Archibald Edward Garrod.

Helferich, Burckhardt. See Emil

Fischer.

Hell, Carl [Magnus], preparation of stilbene, 4-methoxystilbene, and αmethylstilbene, 1904, A., i, 242.

[p-methoxyphenylethylcarbinol], 1905,

A., i, 436.

Hell, Carl, and Hugo Bauer, aromatic propylene derivatives, 1903, A., i, 242; 1904, A., i, 241. aromatic propylene derivatives. II.

o-Anethole, 1903, A., i, 479. indole derivatives from ethylisoeu-

genol, 1904, A., i, 343.

aromatic propylene compounds. IV. iso Eugenol ethyl ether, 1904, A., i, 385.

Hell, Carl, and Hermann Cohén, indole derivatives from anethole, 1904, A., i,

Hell, Carl, and Alexander Hofmann, pmethoxyphenylethylcarbinol, 1905, A., i, 58.

o- and p-methoxyphenylethylcarbinols and the corresponding anetholes,

1905, A., i, 435.

Hell, Carl, and Oscar Schaal, hexahydroacetophenone, dodecahydrobenzophenone, dodecahydrodiphenyl, and other hydroaromatic derivatives, 1907, A., i, 1049.

hexahydropropiophenone, hexahydrobenzyl methyl ketone, ethyl cyclohexylacetoacetate, and a compound, $C_{10}H_{12}O_4$, obtained in the preparation of the acetoacetate, 1909, A., i, 593.

Hell, Carl, and Hugo Stockmayer, aphenyl-a-anisylpropene, 1904, A., i, 241. Hell, Carl, and Friedrich Wiegandt, a-phenylatilbene and the methylene ether of 3:4-dihydroxystilbene, 1904, A., i, 490.

Helle, Karl, Paul Theodor Müller, Wilhelm Prausnitz, and Heinrich Poda, changes in the composition of the milk of the cow on different diets, 1912. A., ii, 786.

Heller, Gustav, benzoylation of isatin, indigotin, and anthranil, 1903, A., i,

827.

history of anthranil, 1904, A., i, 160. constitution of anthranil, 1905, A., i, 130; 1909, A., i, 832.

a new step in the reduction of the nitro-group, 1906, A., i, 585.

behaviour of the group N°C'N. towards acylating agents. II., 1907, A., i, 261.

influence of hydroxyl ions on azocoupling, 1908, A., i, 300.

preparation of acylbenzoic acids from phthalic anhydride, hydrocarbons, and aluminium chloride, 1908, A., i, 648.

the colour and affinity for mordants of anthraquinone derivatives, 1908, A., i, 995.

the action of dichloroacetic acid on aniline and its homologues, 1909, A., i, 20.

quantitative development of the Sandmeyer reaction, 1910, A., i, 240.

reduction and derivatives of o-nitrocinnamoylformic acid, 1910, A., i, 558.

[constitution of benzoylanthranil], 1911, A., i, 81.

simplest indophenols and indamines, 1912, A., i, 916.

Heller, Gustav, and Karl Amberger, reduction of isatin, 1904, A., i, 416.

Heller, Gustav, Karl Amberger, and Richard Emrich, action of dichloroacetic acid on aniline and the toluidines, 1904, A., i, 730.

Heller, Gustav, and Sato Aschkenasi, action of dichloroacetic acid on aniline and its homologues. III., 1910, A., i, 738.

 Heller, Gustav, and Friedrich Frantz, a new step in the reduction of the nitrogroup. III., 1910, A., i, 848.
 Heller, Gustav, Friedrich Frantz, and

Heller, Gustav, Friedrich Frantz, and Heinrich Jürgens, o-nitrophenylglyoxylic acid, 1911, A., i, 864.

Heller, Gustav, and Otto Fritsch, transformation of pyrogallol triacetate, 1912, A., i, 874.

Heller, Gustav, and Wilhelm E. Galleh. influence of hydroxyl ions on azocoupling. II., 1910, A., i, 286.

Heller, Gustav, and Erich Grünthal, colour and affinity for mordants of anthraquinone derivatives. 1910, A., i, 859.

the constitution of anthranil, 1911. A., i, 275.

Friedel-Crafts' reaction. II.. 1912. A., i, 357.

Heller, Gustav, Erich Grünthal, and Hans Ruhtenberg, abnormal Friedel-Crafts' reactions. II., 1912, A., i,

Heller, Gustav, and Max Kammann, derivatives of 3:5-dinitrophenol, 1909, A., i, 567.

Heller, Gustav, and Georg Kretzschmar. transformation of a phloroglucinol derivative into one of cyclohexantrione. II., 1912, A., i, 274.

Heller, Gustav, and Alfred Kühn, behaviour of the group N'C'N towards acylating agents, 1904, A., i, 942.

Heller, Gustav, and Otto Langkopf, salts of mineral acids derived from the phthaleins. I., 1906, A., i, 671.

transformation of a phloroglucinol derivative into one of cyclohexantrione, 1909, A., i, 656.

Heller, Gustav, and P. Leyden, action of dichloroacetic acid on aniline and its homologues. II., 1908, A., i, 216.

Heller, Gustav, and Heinrich G. Mayer, derivatives of o-nitromandelonitrile, 1906, A., i, 585.

Heller, Gustav, and Heinrich L. Meyer, fluorescein and the non-existence of of \$3-p-dibromodinitrobenzene, 1905, A., i, 788.

asymmetric dibromofluorescein, 1909, A., i, 585.

Heller, Gustav, and Friedrich Michel, dithiocarbamates derived from secondary aromatic amines, 1903, A., i, 477.

combination of formaldehyde with

indigotin, 1903, A., i, 834. Heller, Gustav, and Otto Nötzel, colour phenomena in alkaline isatin solutions, 1907, A., i, 442.

trisbenzeneazophenol, 1907, A., i, 800. constitution of anthranil. V., 1908, A., i, 267.

Heller, Gustav, and Hans Ruhtenberg, a-naphthol-4-carboxylic acid, 1912, A., i, 358.

Heller, Gustav, and Sigismund Schmeja, dihydroquinaldine bases, 1911, A., i, 747.

Heller, Gustav, and Kurt Schülke. Friedel and Crafts' reaction, 1908, A.,

Heller, Gustav, and Julius Sölling, reduction of nitro-compounds with zinc dust and acetic acid, 1908, A., i, 867.

N-hydroxydioxindole: trioxindole. 1909, A., i, 183.

Heller, Gustav, and Apostolos Sourlis, a new step in the reduction of the nitro-group. II., 1908, A., 208.

reduction of nitro-compounds with zinc dust and acetic acid. 1908, A., i, 913.

stable primary nitrosoamine, 1910, A., i, 749.

Heller, Gustav, and Walter Tischner. bromination of o-nitrophenylpropiolic acid, 1910, A., i, 37.

reduction of o-nitrophenylpropiolic acid, 1910, A., i, 64.

anomalous products of benzoylation, 1910, A., i, 770.

the course of the Sandmeyer reaction, 1911, A., i, 243.

Heller, Gustav, Walter Tischner, and Edmund Weidner, reduction of nitrocompounds with zinc dust and acetic acid. III., 1910, A., i, 596.

Heller, Gustav. See also Ernst Deussen. Heller, Hans. See Arnold Reissert. Heller, Ida. See Paul Pfeiffer.

Heller, J., and Stanislaus von Kostanecki, action of benzoyl chloride on xanthen, 1908, A., i, 445.

Heller, Max. See Hans Stobbe.

Heller, Wilhelm. See Otto Ruff, and Rudolf Schenck.

Hellsing, Gustaf, chrysean, 1904, A., i, 100.

a-acetylaminoisobutyronitrile. 1904. A., i, 563.

Hellsten, A. F., influence of alcohol, sugar, and tea on the contractility of muscle, 1905, A., ii, 335.

the influence of training on the output of carbon dioxide in isometric muscular work, 1909, A., ii, 1029.

Hellström, Alfred. See Carl Hartwich. Helm, Reiner von der, long-waved portion of the banded nitrogen spectrum, 1910, A., ii, 811.

Helms, R. See Frederick Bickell Guthrie.

Helwig, Peter. See Alexis V. Saposhnikoff.

Hemmelmayr [von Augustenfeld], Franz [Josef], ononin, 1903, A., i, 508; 1904, A., i, 814.

Hemmelmayr [von Augustenfeld]. Franz [Josef], action of nitric acid on B-resorcylic acid and its derivatives, 1904, A., i, 319.

nitro-derivatives of β-resorcylic acid [2:4 dihydroxybenzoic acid], 1905,

A., i, 288.

action of phosphorus pentasulphide on carbamide and thiocarbamide, 1905, A., i, 695.

onocerin (onocol), II., 1906, A., i,

356; 1908, A., i, 184.

elaterin, 1906, A., i, 973; 1907, A., i, 230.

gentisic acid (2:5-dihydroxybenzoic acid) and derivatives, 1909, A., i,

trihydroxybenzoic acids, 1911, A., i,

some new derivatives of the dihydroxybenzoic acids, 1912, A., i, 977.

Hemmeter, O. See Hermann Finger. Hempel, Hans. See Adolf Beythien.

Hempel, Walther [Mathias], estimation of hydrogen and methane in gas mixtures, 1912, A., ii, 987.

Hempel, Walther, and Ralph L. von quantitative Klemperer, spectral

analysis, 1910, A., ii, 995. Hempel, Walther, and Paul Rucktäschel, carbides and silicides; a general method for the determination of carbon in carbides, 1904, A., ii, 397.

Hempel, Walther, and Carl Schubert, dissociation of certain oxides, carbonates, and sulphides, 1912, A., ii, 904.

Hempel, Walther, and Georg Vater, adsorption of gases by carbon and other porous substances, 1912, A., ii, 903.

Hempel, Walther, and Max Gustav Weber, the preparation of hydrogen selenide and telluride, 1912, A., ii, 1165.

Hempel, Walther. See also Hermann Ehlert.

Hempelmann, Ernst. See Karl Fries. Hemptinne, Alexandre [Paul] de, luminescence of gases, 1903, A., ii, 193.

influence of pressure on the propagation of explosion in gases, 1903, A.,

synthesis of stearic acid by means of the electric discharge, 1904, A., i, 843.

critical pressure of luminescence of

gases, 1904, A., ii, 1.

influence of the electric discharge at points on the combination and decomposition of gases, 1904, A., ii, 224.

Hemptinne, Alexandre [Paul] de, synthesis of hydrogen peroxide, 1912, A., ii, 247.

the action of the electric discharge on liquids and gases, 1912, A., ii, 323. atoms, molecules, ions, electrons, 1912, A., ii, 749.

Hemsalech, Gustave Adolphe, the relative duration of the rays of calcium in the spark with self-induction, 1910, A., ii, 765.

relative duration of spectral rays emitted by magnesium vapour in the electric sparks, 1910, A., ii,

1014.

line spectrum of air given by the selfinduction spark, 1911, A., ii, 449.

spectrum of air given by the initial discharge of the spark with selfinduction, 1911, A., ii, 558.

relative velocities of the luminous vapours of different elements in the electric spark, 1912, A., ii, 403.

Hemsalech, Gustave Adolphe, and Charles de Watteville, spectroscopic study of flames of various kinds, 1908, A., ii, 336.

flame spectra of iron, 1908, A., ii, 445. the spectrum of iron observed in the oxyhydrogen blowpipe flame, 1908, A., ii, 547.

spectra of the calcium flame, 1908, A.,

ii, 745.

line spectrum of calcium given by the oxy-acetylene burner, 1910, A., ii,

the yellow, orange, and red regions of the high temperature flame spectrum of calcium, 1910, A., ii, 86.

flame spectrum of iron at a high temperature, 1910, A., ii, 172.

Henderson, Andrew. See Thomas Stewart Patterson.

Henderson, George Gerald, double chloride of molybdenum and potassium, 1903, P., 245.

the molybdilactate and tungstilactate of ammonium, 1906, P., 148.

contributions to the chemistry of the terpenes. Part II. The oxidation of limonene with chromyl chloride, 1907, T., 1871; P., 247.

Henderson, George Gerald, and James Watson Agnew, contributions to the chemistry of the terpenes. Part IV. The oxidation of pinene with mercuric

acetate, 1909, T., 289; P., 35. Henderson, George Gerald, and Robert Boyd, the oxidation of monohydric phenols with hydrogen peroxide, 1910,

T., 1659; P., 204.

Henderson, George Gerald, and Robert Boyd, contributions to the chemistry of the terpenes. Part XII. Synthesis of a menthadiene from thymol and of a diethylcyclohexadiene from phenol, 1911, T., 2159; P., 276.

Henderson, George Gerald, and William Cameron, contributions to the chemistry of the terpenes. Part V. The action of chromyl chloride on terpinene and on limonene, 1909, T.,

969; P., 151.

Henderson, George Gerald, and William Caw, contributions to the chemistry of the terpenes. Part XIII. The preparation of pure bornylene, 1912, T., 1416; P., 187.

Henderson, George Gerald, and Wilfred James Stevenson Eastburn, the conversion of pinene into sobrerol, 1909,

T., 1465; P., 211.

Henderson, George Gerald, and John Clark Galletly, behaviour of metals when heated in ammonia, 1908, A., ii, 485.

Henderson, George Gerald, and Thomas Gray, the action of chromyl chloride on stilbene, styrene, and phenanthrene, 1904, T., 1041; P., 173.

Henderson, George Gerald, Thomas Gray, and Ewing Smith, the chemistry of the terpenes. Part I. The oxidation of pinene with chromyl chloride, 1903, T., 1299; P., 195.

Henderson, George Gerald, and Isidor Morris Heilbron, contributions to the

chemistry of the terpenes. Part III. Some oxidation products of pinene, 1908, T., 288; P., 31.

contributions to the chemistry of the terpenes. Part X. The action of chromyl chloride, nitrous acid, and nitric acid on bornylene, 1911, T., 1887; P., 248.

the constitution of camphene, 1911,

T., 1901; P., 249.

Henderson, George Gerald, and Ernest Ferguson Pollock, contributions to the chemistry of the terpenes. VIII. Dihydrocamphene and dihydrobornylene, 1910, T., 1620; P., 203.

Henderson, George Gerald, and James Prentice, the influence of molybdenum and tungsten trioxides on the specific rotations of l-lactic acid and potassium *l*-lactate, 1903, T., 259; P., 12.

Henderson, George Gerald, and Schachno Peisach Schotz, contributions to the chemistry of the terpenes. Part XV. Synthesis of a menthadiene from carvacrol, 1912, T., 2563; P., 314.

Henderson, George Gerald, and (Miss) Maggie Millen Jeffs Sutherland, contributions to the chemistry of the terpenes. Part VII. Synthesis of a monocyclic terpene from thymol, 1910, T., 1616; P., 203.

contributions to the chemistry of the terpenes. Part IX. The oxidation of camphene with hydrogen peroxide, 1911, T., 1539; P.,

277.

contributions to the chemistry of the terpenes. Part XIV. The oxidation of pinene with hydrogen peroxide, 1912, T., 2288; P., 270.

Henderson, George Gerald. See also

John Clark Galletly.

Henderson, James Alexander Russell. See Isidor Morris Heilbron.

Henderson, Lawrence Joseph, heats of

combustion of atoms and molecules, 1905, A., ii, 145. equilibrium in solutions of phosphates,

1906, A., ii, 185, 469.

position isomerism and heat of combustion, 1907, A., ii, 846.

union of the serum proteins with

alkali, 1908, A., i, 301.

the relationship between the strength of acids and their capacity to preserve neutrality, 1908, A., ii, 268.

theory of neutrality regulation in the animal organism, 1908, A., ii, 467.

diagrammatic representation of equilibria between acids and bases in solution, 1908, A., ii, 675.

neutrality equilibrium in blood and protoplasm, 1910, A., ii, 139.

ionic equilibrium in the organism. III. Measurements of the acidity of normal urine, 1910, A., ii, 327.

instability of dextrose at the temperature and alkalinity of the body, 1911, A., i, 769.

process of acid excretion, 1911, A., ii,

Henderson, Lawrence Joseph, and Herman Morris Adler, retention of alkali by the kidney, 1909, A., ii, 500.

Henderson, Lawrence Joseph, and Otis Fisher Black, neutrality of proto-

plasm, 1907, A., ii, 371.

equilibrium between carbon dioxide, sodium hydrogen carbonate, monosodium phosphate, and disodium phosphate at body temperature, 1908, A., ii, 467.

Henderson, Lawrence Joseph, and Alexander Forbes, estimation of the intensity of acidity and alkalinity with 2:5-dinitroquinol, 1910, A., ii, 541.

Henderson, Lawrence Joseph, and Charles Tripp Ryder, direct determination of heats of reaction, 1907, A., ii, 666.

Henderson, Lawrence Joseph, and Karl Spire, ionic equilibrium in the animal organism. I. The equilibrium acids and bases in the urine, 1909, A., ii, 165.

Henderson, Lawrence Joseph. See also Reginald Fitz, Theodore William

Richards, and Karl Spiro.

Henderson, Percival, thermodynamics of liquid cells, 1907, A., ii, 426; 1908, A., ii, 655.

Henderson, Velyen E., ureter pressure,

1906, A., ii, 107.

the inhibition of the action of chemical muscle-stimuli by non-electrolytes, 1911, A., ii, 55.

Henderson, Velyen E., and Otto Loewi. action of vaso-dilators, 1905, A., ii,

physiology of the kidneys. Mechanism of urea diuresis, 1905,

A., ii, 739.

influence of pilocarpine and atropine on the circulation through the sub-maxillary gland, 1905, A., ii, 743.

Henderson, Velyen E. See also Otto Loewi.

Henderson, William E., modified jacket for a Victor Meyer vapour density apparatus, 1912, A., ii, 432. Henderson, William Hope.

See Carl

Friedheim.

derson, Yandell, production of "shock" by loss of carbon dioxide, Henderson. 1907, A., ii, 636.

carbon dioxide in the regulation of the heart rate, 1908, A., ii, 210.

acapnia and shock. III., 1909, A., ii, 421.

acapnia and shock. IV. Fatal apnœa after excessive respiration, 1910, A., ii, 137.

acapnia and shock. V. Failure of respiration after intense pain, 1910,

A., ii, 227.

acapnia and shock. VII. Failure of the circulation, 1910, A., ii, 1093.

Henderson, Yandell, and Edward Francis Crofutt, fate of oil injected subcutaneously, 1905, A., ii, 735.

Henderson, Yandell, and Arthur L. Dean, protein synthesis in the animal

hody, 1903, A., ii, 668.

Henderson, Yandell, and Gaston Holcomb Edwards, nuclein metabolism in lymphatic leucæmia, 1903, A., ii, 671.

Henderson, Yandell, and Donald G. Russell, a simple method for determining the carbon dioxide content of the alveolar air by means of barvta. 1912, A., ii, 387.

Henderson, Yandell, and Martin McRae Scarbrough, acapnia and shock. IV. Acapnia as a factor in the dangers of

anæsthesia, 1910, A., ii, 622. Henderson, Yandell, and Frank Pell Underhill, acapnia and glycosuria,

1911, A., ii, 813. Henderson, Yandell. See also Claude

Gordon Douglas.

Hendrick, James, estimation of calcium by the use of sugar solution, 1907. A., ii. 815.

field trials with nitrogenous manures from the atmosphere, 1911, A., ii,

Hendrick, James. See also Ach. Grégoire. Hendrixson, Walter Scott, silver as a

reducing agent, 1903, A., ii, 596. action of chloric acid on metals, 1904, A., ii, 656.

method for the estimation of chloric

acid, 1904, A., ii, 679. perchloric acid in electrochemical analysis, 1912, A., ii, 485.

Henglein, M., barytes from the Freiberg mining district, 1911, A., ii, 902.

Henius, Kurt, the utilisation of carb-

onyldicarbamide, 1912, A., ii, 659. Henjes, Friedrich. See Otto Wallach. Henke, Kurt. See Theodor Zincke.

Henkel, Hugo, and A. W. Roth, chemical and physical methods for the analysis of pure dilute aqueous solutions of glycerol, 1906, A., ii, 129.

Henkel, Paul, oxidation of a- and Bdimethyluracils, 1911, A., i, 159.

Henle, Franz, salts of benzamide with dicarboxylic acids, 1905, A., i, 437.

reduction of derivatives of carboxylic acids to derivatives of aldehydes. II., 1905, A., i, 490.

reduction of a 3-unsaturated carboxylic esters with aluminium amalgam, 1906, A., i, 669.

triquinoyl, 1907, A., i, 144.

3:6-dihydroxyquinonebisdiazoanhydride, 1907, A., i, 161.

halogen derivatives of 1:3:4-triketocyclopentane. III., 1907, A., i, 222. the optical rotatory power of mineral

oils, etc., 1909, A., ii, 675.

Henle, Franz, and Hermann Haakh, total asymmetric synthesis, 1909, A. i, 6.

Henle, Franz, and Gustav Schupp, action of hydrogen chloride on mixtures of nitriles and aldehydes or ketones, 1905, A., i, 413.

preparation of mesoxaldialdehyde,

1905, A., i, 413.

Franz. See also Johannes Henle. Thiele.

Henneberg. Wilhelm, occurrence glycogen in distillery yeasts, press yeasts, and top brewery yeasts, 1903, A., ii, 168.

behaviour of cultures of some races of yeast at different temperatures in reference to activity of the enzymes, length of life, resisting power, and death, 1904, A., ii, 634.

resting yeast in moist and pressed conditions; action of foreign organisms on the behaviour and duration of life of yeast cells, 1905, A., ii,

acidifying and fermenting yeast mashes (behaviour of Bacillus delbrücki at different temperatures), 1905, A., ii. 848.

bacteriological investigations in the acetic acid factory, 1906, A., ii, 475. poisonous action of formic acid on

different fungi, 1906, A., ii, 479. quick-vinegar and wine vinegar bacteria, 1906, A., ii, 568.

behaviour of cultivated varieties of yeast in composite nutrient solutions, 1908, A., ii, 416.

amount of glycogen in differently-fed yeast cultures, 1911, A., ii, 519.

Hennecke, H., new process for titrating iodine, 1905, A., ii, 281.

Hennicke, Hans. See Robert Behrend. Hennicke, Rudolf. See Adolf Beythien, and Hans Stobbe.

Hennig, W. See Ernst Schmidt.

Henning, Fritz. See Ludwig Holborn, and Friedrich Kohlrausch.

Henning, H. See Max Trautz.

Henning, Wilhelm. See Ernst von Meyer.

See Alexander Nau-Henninger, Emil. mann.

Hennis, Wilhelm. See Eduard Jordis. Henny, Théodore. See Louis Pelet-Jolivet.

Henrard, J. Th., hydroanethole, 1907, A., i, 411.

reduction of safrole and isosafrole, 1907, A., i, 917.

Henrard, J. Th. See also Johan Frederik Evkman.

Henri, Victor, action of invertase, 1903, A., i, 219, 304.

Henri, Victor, general theory of the action of certain diastases, 1903, A., ii, 135.

theoretical study of the dissociation of oxyhæmoglobin; effects of concentration and temperature, 1904, A., i, 357.

action of enzymes, toxins, antitoxins, and agglutinins, 1905, A., ii, 237.

physico-chemical researches on hæmolysis, 1905, A., ii, 265.

action of invertin in a heterogeneous medium, 1906, A., i, 327.

laws of the action of enzymes and heterogeneous catalysis, 1906, A.,

influence of the medium on Brownian motions, 1908, A., ii, 760.

electrical migration of enzymes, 1909. A., i, 344.

ultra-violet radiation from quartzmercury lamps, 1911, A., ii, 833.

influence of different physical conditions on the ultra-violet radiations from quartz-mercury lamps, 1911, A., ii, 833.

Henri, Victor, André Helbronner, and Max von Recklinghausen, new lamp with very powerful ultra-violet radiation, and its use in sterilising large quantities of water, 1912, A., ii, 1132.

Henri, Victor, and (Mme.) Victor Henri, excitability of organisms by ultra-violet light; latent period; law of thermic independence, fatigue, and recovery phenomena, 1912, A., ii, 964.

Henri, Victor, and S. Lalou, action of emulsin on salicin and amygdalin; theory of the action of emulsin, 1903, A., i, 643; ii, 678.

osmotic regulation of fluids in the interior of echinoderms, 1904, A.,

Henri, Victor, S. Lalou, André Mayer, and G. Stodel, complexes of two colloids: (I) of the same electrical sign; (II) of opposite electrical sign, 1904, A., ii, 243.

Henri, Victor, and J. Larguier des Bancels, law of the action of trypsin on

gelatin, 1903, A., i, 591.

Henri, Victor, and André Mayer, action of radium emanations on hæmoglobin and red corpuscles, 1904, A., ii, 184.

colloidal solutions; application of the phase rule to the precipitation of colloids, 1904, A., ii, 325.

composition of colloidal granules,

1905, A., ii, 14.

Henri, Victor, and Albert Ranc, decomposition of glycerol by ultra-violet rays, 1912, A., i, 528.

Henri, Victor, and Joseph Schnitzler, action of ultra-violet rays on acetic fermentation in wine, 1909, A., ii, 753.

Henri, Victor, and G. Stodel, sterilisation of milk by ultra-violet rays, 1909, A., ii, 335.

Henri, Victor, and René Wurmser, the law of photochemical absorption for the reaction products by means of ultra-violet rays, 1912, A., ii, 883.

Henri, Victor. See also Jean Bielecki, Henri Bierry, (Mlle.) P. Cernovodeanu, Pierre Girard, (Mme.) Girard-Mangin,

and (Mme.) Victor Henri.

Henri, (Mme.) Victor, and Victor Henri, variation of the abiotic power of the ultra-violetrays with their wave-length, 1912, A., ii, 873.

Henri, (Mme.) Victor. See also Victor

Henri.

Henrich, Ferdinand [August Karl], constitution of nitroresorcinol, 1903, A., i, 88.

constitution of mononitroso-orcinol.

1903, A., i, 413.

history of the nature of radicles, 1903, A., ii, 16.

preparation of colloidal metal solu-

tions, 1903, A., ii, 299. two modifications of a-nitrosoresorcinol monoethyl ether, 1904, A., i, 1006;

1905, A., i, 201. the Wiesbaden thermal springs and their radioactivity, 1905, A., ii, 6, 221; 1907, A., ii, 150; 1909, A.,

ii, 953. apparatus for separating nitrogen quickly and completely from a mixture of gases containing it, 1905, A., ii, 24.

fumarole products of Vesuvian lava, 1906, A., ii, 685.

fumarole action. II., 1907, A., ii,

investigations on the gases of the Wiesbaden thermal springs, 1909,

A., ii, 66. apparatus for separating the inactive gases from inixtures by means of

the electric flame, 1909, A., ii, 1000. the determination and convenient estimation of the radioactivity mineral springs, 1910, A., ii, 249.

an improvement in Fresenius' method for estimating hydrocarbons in gases, 1910, A., ii, 355.

[analysis of gases from mineral springs],

1910, A., ii, 1111.

Henrich, Ferdinand [August Karl]. Beckmann transformation, 1911, A., i, 650.

Henrich, Ferdinand, and Günther Bugge, radioactive constituents of Wiesbaden thermal springs, 1905, A., ii,

sinter from the Wiesbaden thermal springs, 1912, A., ii, 570.

Henrich, Ferdinand, and Karl Dorschky, constitution of orsellinic acid, 1904, A., i, 501.

derivatives of ethyl amino-orsellinate: contribution to formation of litmus

dyes, 1904, A., i, 502.

Henrich, Ferdinand, and W. Eichhorn, an apparatus for the rapid quantitative removal of nitrogen from a gaseous mixture by means of electric sparks, 1912, A., ii, 385,

Henrich, Ferdinand, and Heinrich Eisenach, action of nitrous acid on resorcinol monomethyl ether, 1904,

A., i, 1007.

Henrich, Ferdinand, and Fritz Glaser, apparatus for the determination of the radioactivity of springs, 1912, A., ii, 119, 724.

Ferdinand, and Wilhelm Henrich, Meyer, two mononitro-derivatives of

oreinol, 1903, A., i, 413.

Henrich, Ferdinand, Wilhelm Meyer, and Karl Dorschky, derivatives of B-amino-orcinol, 1904, A., i, 494.

Ferdinand, and Godhart Nachtigall, action of nitric acid on the monomethyl ether of orcinol, 1903, A., i, 414.

Henrich, Ferdinand, and Gustav Opfermann, connexion between the fluorescence and chemical constitution of derivatives of benzoxazole, 1904, A., i, 934.

Henrich, Ferdinand, Karl Raab, and Karl Ruppenthal, stereoisomeric oximes of dypnone and benzylideneacetophenone, 1907, A., i, 324.

Henrich, Ferdinand, W. Reichenburg. Godhart Nachtigall, Walter Thomas, and C. Baum, action of diazo-compounds on ethyl glutaconate, 1910, A., i, 900.

Henrich, Ferdinand, and Paul Roters, orcinol monomethyl ether and an oxidation product of amino-orcinol monomethyl ether(2-amino-5-hydroxy-3-methoxytoluene), 1909, A., i, 57.

Henrich, Ferdinand, and Fritz Schierenberg, derivatives of 2-amino-5-ethoxyphenol, 1904, A., i, 1049.

an oxidation product of amino-orcinol monomethyl ether, 1905, A., i, 93.

Henrich, Ferdinand, G. Taubert, and H. Birkner, derivatives of 4-aminoorcinol(2-amino-3:5-dihydroxytoluene, 1912, A., i, 184.

enrich, Ferdinand, and Walter Thomas, action of diazobenzene on Henrich. glutaconic acid and ethyl glutaconate, 1908, A., i, 114.

Henrich, Ferdinand, and Benno Wagner, of derivatives 4-aminoresorcinol, 1903, A., i, 88.

Henrich, Ferdinand, and Alfred Wirth, stereoisomeric oximes of dypnone, 1904, A., i, 431, 751.

Henriet, H., atmospheric formic acid, 1903, A., i, 600.

formaldehyde in atmospheric 1904, A., i, 289, 649.

estimation of formaldehyde in the atmosphere, 1904, A., ii, 598.

Henriet, H., and Marius Bouyssy, origin of atmospheric ozone, and causes of the variation of carbon dioxide in the air, 1908, A., ii, 578.

volumetric estimation of carbon dioxide and other acids in air, 1908, A., ii,

734.

method for measuring the degree of vitiation of a confined atmosphere, 1911, A., ii, 532.

Henriot, Emile, condensation of radioactive emanations, 1908, A., ii, 651. radiation of potassium salts, 1909, A.,

ii, 458. the rays of potassium, 1910, A., ii, 678. the radiations of the alkali metals,

1911, A., ii, 354.

radiation of rubidium, 1911, A., ii, 571. Henriot, Émile, and Gustave Vayon, radioactivity of potassium salts, 1909, A., ii, 635.

Henriques, Valdemar, protein synthesis in animals, 1908, A., ii, 207.

estimation of amino-acids in urine, 1909, A., ii, 506, 525.

can nitrogenous equilibrium be maintained on diets containing zein or gliadin as the only nitrogenous constituents? 1909, A., ii, 594.

Henriques, Valdemar, and S. A. Gammeltoft, estimation of urea in urine,

1911, A., ii, 670.

Henriques. Valdemar, and J. K. Gjaldbäk, estimation of peptide compounds in proteins and in their cleavage products, 1910, A., ii, 764. plastein formation, 1911, A., ii, 505;

1912, A., ii, 1188.

hydrolytic decomposition of proteins by pepsin, trypsin, acids, and alkalis, 1912, A., i, 59.

Henriques, Valdemar, and C. Hansen, protein synthesis in the animal body, 1905, A., ii, 180; 1907, A., ii, 39.

can nitrogenous equilibrium in the animal organism be attained by means of heteroalbumoses? 1906,

A., ii, 779.

the importance of so-called plantamides in animal metabolism, 1908, A., ii, 119.

Henriques, Valdemar, and Sören Peter Lauritz Sörensen, the quantitative estimation of amino-acids, polypeptides, and hippuric acid in urine by means of formaldehyde titration, 1910, A., ii, 164, 466.

Henry, Alfred, determination of the absolute value of the mass of molecules of liquids and particularly of the mercury molecule, 1912, A., ii, 443.

Henry, Charles, spectrophotometry, viscosimetry, and electric signs of solutions, 1908, A., ii, 88.

Henry, Ed., fixation of atmospheric nitrogen by dead leaves, 1905, A., ii,

decomposition of fallen leaves, 1905, A., ii, 112. Henry, Emile, new theory of nitrogen

fixation by plants, 1912, A., ii, 797. Henry, Louis, propylene monochlorohy-

drins, 1903, A., i, 2. chloroethyl nitrite, 1903, A., i, 223. monocarbon derivatives. XIV. Action of ammonia on formaldehyde, 1903,

A., i, 233. propylene derivatives, 1903, A., i,

volatility of carbon compounds in relation to molecular weight and formula, 1903, A., ii, 8.

trichloroisopropyl alcohol, 1904, A.,

monocarbon compounds; methylene hydroxybromide, 1904, A., i, 364. volatility of carbon compounds, 1904,

A., i, 466. methyl ether of acetylcarbinol, COMe CH₂ OMe, 1904, A., i, 474. the doubly linked carbon-nitrogen

carbon-nitrogen system > C:N, 1904, A., i, 854. derivatives of glycollonitrile, 1904,

A., i, 982. aminoethyl ether, 1905, A., i, 119. fusibility in the series of normal di-

primary glycols, 1905, A., i, 254. normal Co secondary alcohols, 1905, A., i, 402.

derivatives of aaa-trichloroisopropyl alcohol, 1905, A., i, 558.

Henry, Louis, derivatives of n-hexoic acid, 1905, A., i, 561.

condensation of nitromethane with alkyl derivatives of aminomethyl alcohol, 1905, A., i, 609, 661.

of s-tetrachloroisopropyl crystals formal, 1905, A., i, 634.

stoicheiometrical laws and the atomic theory, 1905, A., ii, 81.

the !U(OH) group of tertiary alcohols, 1906, A., i, 133.

the addition of hydrogen chloride to

isobutylene oxide, $O < \bigcap_{CH_2}^{CMe_2}$, 1906, A., i, 228; 1907, A., i, 7.

the alcoholic function, 1906, A., i,

hexamethylethane, 1906, A., i, 473. synthesis of pentamethylethanol, 1906, A., i, 477.

volatility in various groups of compounds, 1906, A., i, 549.

methylene compounds, 1906, A., i, 558.

some synthetical reactions of pinacolin, 1906, A., i, 618.

acetyl chloride and hydrochloric acid as reagents for distinguishing between the various types of monohydric alcohols, 1906, A., i, 781.

succinic pinacone [Se-dimethylhexaneβε-diol], 1906, A., i, 922.

molecular state of water; its chemical constitution and the relative value of the two valencies of the oxygen atom, 1906, A., ii, 17.

bromine as a differential reagent for isomeric secondary and tertiary aliphatic alcohols, 1907, A., i, 4. addition of hypochlorous acid to

ethylene compounds, 1907, A., i, 7. butyrolactone and as-dimethylsuccinic [8-methylpentane-a8-diol], glycol 1907, A., i, 106.

action of phosphorus pentabromide on phenol ethers, 1907, A., i, 206.

various syntheses of dimethylisopropylcarbinol, CMe2Prs OH, 1907, A., i, 273.

identity of the four valencies of the carbon atom, 1907, A., i, 374.

direct dehydration of dimethylisopropylcarbinol, 1907, A., i, 374.

preparation of ethylene glycol and other alcohols, 1907, A., i, 377. dihydroxytetramethylacetone, 1907, A., i, 587.

various syntheses with compounds containing the group CMe2Cl·Ci, 1907, A., i, 670.

Henry, Louis, acetic esters, 1907, A., i,

oxalic aldehyde [glyoxal], 1907, A., i.

synthesis of secondary isoamyl alcohol, 1907, A., i, 744.

structural stability of ethylene oxide. 1907, A., i, 745.

hydrolysis of the ethylenic oxides by sulphuric acid, 1907, A., i, 745.

symmetrical dimethylethylene oxide, 1907, A., i, 817.

the series resulting from the methylation of ethyl alcohol, with regard to the aptitude for isomeric change of the haloid ethers, 1907, A., i, 886.

CHM_e 0, propylene oxide,

A., i, 887. bisecondary butylene monochlorohydrin, OH CHMe CHMeCl, 1907,

A., i, 887. hydroxy- and ethoxy-derivatives of normal primary butylamine, 1907,

A., i, 898. relative volatility of various groups of

acetic esters, 1907, A., i, 1002. isomeric change of isobutyl alcohol effected by nitrous acid, 1908, A., i, 2. action of nitrous acid on allylamine,

1908, A., i, 81.

relative volatility of certain groups of mixed carbon compounds, 1908, A., i, 305.

relative volatility of certain groups of mixed carbon compounds. Mixed methylenic compounds, 1908, A., i. 381.

volatility in "methylation" series of methyl derivatives, 1908, A., i, 381.

methylation in the ethylene derivatives from the point of view of volatility, 1908, A., i, 752.

relative stability of cyclic polycarbon groups, 1908, A., i, 881.

direct dehydration of certain tertiary alcohols, 1909, A., i, 79.

Henry, Louis, Buelens, and Joseph Muset, secondary alcohols derived from the octane, CHMe2:[CH2]4.CH3, 1906, A., i, 723.

Henry, Louis, and Aug. de Wael, new syntheses of pentamethylethanol and of hexamethylethane, 1906, A., i, 782.

Henry, Thomas Anderson, and Samuel James Manson Auld, probable existence of emulsin in yeast, 1906, A., ii, 114.

occurrence of cyanogenetic glucosides in feeding-stuffs, 1908, A., ii, 619.

Henry, Thomas Anderson. See also Wundham Rowland Dunstan.

Henschke, Fritz, condensation of phenol with formaldehyde, 1905, A., i, 429.

Hensel, Marie, estimation of phenol in urine, 1912, A., ii, 695.

Henseling, Friedrich. See Max Mayer. Hensgen, Carl, dissociation of electro-

lytes, 1906, A., ii, 73. Henstock, Herbert, some derivatives of 2- and 3-phenanthrol, 1906, T., 1527;

P., 235.

Henstock, Herbert, and Charles Henry Graham Sprankling, aay-trimethylaayy-tetramethyltricarballylic and αγ-dimethylbutane-aβδacids dicarboxylic acid, 1907, T., 354; P., 32.

Henstock, Herbert, and (Miss) Bertha Elizabeth Woolley, the action of phosphorus pentachloride on hydroxytrimethylsuccinic ester; 1:2-dimethylcyclopropane-1:2-dicarboxylic (1:2-dimethyltrimethylene-1:2-dicarboxylic acid), 1907, T., 1954; P., 235.

Henstock, Herbert. See also William

Arthur Bone.

Hentschel, G., the technical analysis of

cement, 1912, A., ii, 867.

Hentzschel, Willibald, theoretical considerations respecting the origin and essence of chemical elements, 1904, A., ii, 327.

Henz, F., separation of antimony and tin with oxalic acid, 1904, A., ii, 150. estimation of acids in waste gases, 1906, A., ii, 122.

Henze, Martin, gorgonin and iodogorgonic

acid, 1903, A., i, 668.

demarcation currents produced by chemical reagents, 1903, A., ii, 163. spongosterol, a cholesterol-like sub-

stance from Suberites domuncula, and its probable relationship to lipochrome, 1904, A., i, 410; 1908, A., i, 418.

hæmocyanin, 1905, A., i, 164.

muscle of octopods, 1905, A., ii, 270. iodogorgonic acid, 1907, A., i, 370;

1911, A., i, 617. chemical investigations on the octopus,

1908, A., ii, 517.

chemical composition of the skeletal substance of Velella spirans, 1908, A., ii, 517.

amount of dissolved organic compounds in the sea, and their significance in its internal economy, 1908, A., ii, 706.

the influence of oxygen pressure on the gaseous exchange of certain seaanimals, 1910, A., ii, 785.

Henze, Martin, occurrence of betaine in

cephalopods, 1911, A., ii, 216. the blood of ascidians. I. Vanadium compound in the blood-corpuscles, 1911, A., ii, 740.

the blood of ascidians. II., 1912, A.,

ii, 654.

Henzerling, Carl, ethylcreatinine, 1911, A., i, 21

Hepburn, Joseph S., studies on chicken fat. II. Oxidation of chicken fat by means of hydrogen peroxide, 1912, A.,

Hepburn, Joseph S. See also (Miss) Mary Engle Pennington.

Hepner, Albert. See August Michaelis. and Theodor Pfeiffer.

Hans, Hepner, nitro-derivatives β-naphthaquinoline, 1907, A., i, 244. Hepp, Eduard. See Otto Fischer, and

Otto Frobenius.

Heraeus, Wilhelm C., cause of the destruction of platinum crucibles in phosphate analyses, 1903, A., ii, 82.

platinum gauze for contact action in organic ultimate analysis, 1906, A.,

ii, 900.

Heraeus, Wilhelm C., and Wilhelm Geibel, a cause of the destruction of platinum vessels, 1907, A., ii, 969. Heramhof, Heinrich. See

Muthmann.

Herb. Otto. See Hans von Liebig.

Herbette, Jean, new form of thallium tartrate; isomorphous mixtures of thallium and potassium tartrates, 1905, A., i, 566.

isomorphism, 1906, A., i, 929.

isomorphism of potassium chlorate and nitrate, 1906, A., ii, 660.

mixed crystals of barium chloride and bromide, 1906, A., ii, 669.

Herbig, W., the examination of woolfat, 1907, A., ii, 59.

Herbst, Carl. See Augustin Bistrzycki. Herbst, Edgar, action of atmospheric oxygen on Para caoutchoue, 1906, A., i, 196.

Herbst, Karl, reversion of phosphoric acid in superphosphates, 1908, A., ii,

Herbst, Wilhelm. See August Michaelis. Herder, Max, new reagents for alkaloids and their microscopical application, 1906, A., ii, 406.

Herder, P. C. den, estimation of carbohydrates in foods, 1909, A., ii, 1057.

Herforder Maschinenfett- & Oel-Fabrik, Leprince & Siveke, reduction of unsaturated fatty acids and their glycerides, 1903, A., i, 547.

Hering, H. Ewald, activity of nerves on the heart perfused with Ringer's

solution, 1904, A., ii, 55. **Hérissey**, *Henri*, isolation of crystallised galactose from the products of the digestion of the galactans of the horny albumen by seminase, 1903, A., ii, 170, 232.

preparation of crystalline gentiogenin,

1905, A., i, 805.

prulaurasin, a crystalline cyanogenetic glucoside obtained from the leaves of cherry laurel, 1906, A., i, 31.

estimation of small quantities of benzaldehyde, 1906, A., ii, 312.

nature of the cyanogenetic glucoside in the seeds of Eriobotyra japonica, 1906, A., ii, 882.

presence of prulaurasin in Cotoneaster microphylla, 1907, A., ii, 123.

presence of amygdonitrile-glucoside [1-mandelonitrile-glucoside] in Cerasus padus, 1907, A., i, 863.

production of prulaurasin by the action of a soluble enzyme on isoamygdalin, 1907, A., i, 863.

preparation of true arbutin, 1910, A., i,

presence of mandelonitrile-glucoside in Photinia serrulata, 1912, A., ii,

Hérissey, Henri, and Léon Bourdier, new glucoside (erytaurin) obtained from the common century, 1908, A., i,

Hérissey, Henri, and Géza Doby, oxidation of dimethyldehydrodiisoeugenol and of dimethyldehydrodivanillin, 1909, A., i, 788.

Hérissey, Henri, and C. Lebas, occurrence of aucubin in Garrya spp, 1911,

A., ii, 63.

utilisation of aucubin by Aspergillus niger, 1911, A., ii, 759.

Hérissey, Henri, and Charles Lefebyre, presence of raffinose in Taxus baccata,

1907, A., ii, 715.

Hérissey, Henri. See also Léon Bour-dier, Émile Bourquelot, and Henri Cousin.

Heritage, Gertrude L. See Elmer Peter

Herles, Franz, optically active nonsaccharine substances in sugar beet which are eliminated by the action of lime in the purification of the sap, their polarimetric estimation, 1908, A., ii, 1077.

Herlitzka, Amedeo, autodigestion of pepsin, 1904, A., ii, 828. catalases, 1907, A., i, 102.

Herlitzka, Amedeo, catalase: antagonism between catalases and peroxydases, 1907, A., i, 1102.

calorimetric investigation on protein precipitation, 1908, A., i, 706.

influence of temperature on the refractive index of white of egg, 1910, A., ii, 1013.

the condition of chlorophyll in plants. and colloidal chlorophyll, 1912, A., ii, 287.

colloidal chlorophyll and certain colloidal derivatives of chlorophyll, 1912, A., ii, 1115.

Herman, I. See Edmond Emile Blaise. Herman, M., nitrometer [volumeter] with barometric correction, 1909, A., ii, 181.

Hermann. Gottfried, the combining power of the chlorides of copper, lead, iron, zinc, tin, and bismuth, and the combining power of the chlorides, bromides, and iodides of copper and cadmium, and the sensitiveness of the solid solutions to light, 1911, A., ii, 801.

Hermann, Hugo, lariciresinol, 1903, A., i, 267.

ultimate analysis of organic substances, 1905, A., ii, 767; 1906, A., ii, 398.

settling of clay emulsions, 1907, A., ii,

detection of colloidal silicic acid, 1907, A., ii, 578,

estimation of tungstic acid and silicic acid, 1912, A., ii, 1215.

Hermann, Paul, calcium magnesium orthosilicate series, 1907, A., ii, 544. Hermann, Paul. See also Victor Gold-

schmidt. Hermann, Peter, anilides of rhamnose and arabinose, 1905, A., i, 327.

Hermann, Richard, nitrophenyldiguan-

ides, 1905, A., i, 950. Hermann, W. See Johannes Stark. Hermann, Walter, action of oxidising

and reducing gases on the colour of minerals, 1909, A., ii, 56.

Hermanns, L. toxicological investigations on bio-electric currents. II. The pharmacological specificity of chemical alterations in the current, 1912, A., ii, 663.

Herms, Paul. See Ludwig Berend, and Heinrich Biltz.

Hernández. See Ferrer Hernández. Hernando, the influence of substances of the digitalin group on blood-pressure

in the rabbit, 1911, A., ii, 1017. Herold, F. See Georg Lockemann. Herold, Fritz. See Heinrich Kiliani. Herold, Ignaz, causticising potassium sulphate, 1905, A., ii, 584.

Herold, Julius, jun., assay of [commercial] gelatin, 1911, A., ii, 348.

Herold, Viktor. See Fritz Foerster, and Franz Sachs.

Herpertz, Joseph, the spectra of arsenic and the spectrum of antimony in a Geissler tube, 1906, A., ii, 821.

Herr, V. F., a new dephlegmator for the fractionation of naphtha, 1908, A.,

condensation of petroleum and its distillates with methylal and sulphuric acid, 1910, A., ii, 904.

Herre, Erich. See Fritz Ullmann.

Herrenschmidt, H., extraction of vanadium from natural lead vanadate, and preparation of some of its alloys, 1904, A., ii, 823.

purification of sodium vanadate liquors; the processes of double decomposition for the industrial separation of metals, 1905, A., ii, 41.

Herrick, James Bryan. See Emil Abder-

halden.

Herring, Percy Theodore, action of pituitary extracts on the frog's circulatory system, 1904, A., ii, 833. crystals in the nuclei of liver cells, 1908, A., ii, 782.

Herrmann, August, estimation of glycerol

in urine, 1904, A., ii, 595.

Herrmann, Edmund, and Julius Neumann, the lipoid content of the blood of normal and pregnant women and of new-born children, 1912, A., ii, 954.

Herrmann, Erich, occurrence of lithium in the human body, 1905, A., ii, 735.

Herrmann, Felix, compounds of gold with organic sulphur groups, 1905, A., i, 733.

fission by means of hydrogen chloride,

1907, A., i, 52.

reduction of cupric compounds by ferrous salts in ammoniacal solution, 1907, A., ii, 689.

simple method for the estimation of formaldehyde, 1911, A., ii, 161.

Herrmann, Franz, rottlerin, 1908, A., i. 99.

Herrmann, Franz. See also Karl W. Rosenmund.

Herrmann, Georg. See Karl Bernhard Lehmann.

Herrmann, J., and A. Chain, plasteins,

1912, A., i, 401.

Herrmann, Karl, fatigue effects and initial velocities in the photoelectric action in a vacuum, 1912, A., ii, 716.

Herrmann, Karl, the photo-electric effect in antimony cadmium alloys, 1912, A., ii, 716.

Karl. See also Willy Herrmann. Marckwald.

Herrmann, Kurt, refraction and dispersion of helium, 1908, A., ii, 333,

Herrmann, Ludwig. See Wilhelm Traube.

Herrmann, Otto, a biological method for the detection of morphine, 1912, A., ii. 611.

Herrmann, Peter, action of calcium hydroxide on isobutaldehyde, 1904, A., i, 370.

Herrmann, Willy. See Albert Laden-

Herrmannsdorfer, Adolf, the course of the daily excretion of chlorides in the urine, 1912, A., ii, 276.

Herrmuth, E. See Carl Liebermann. Herschel, P. See Reinhold von Walther.

Herscher, M. See A. Gilbert.

Herschfinkel, Heinrich, evolution radium emanation, 1909, A., ii, 714. decomposition of earbon dioxide by ultraviolet rays, 1909, A., ii, 778.

radio-lead, 1910, A., ii, 817.

action of the radium emanation on thorium salts, 1911, A., ii, 843. attempts to prepare metallic radium,

1911, A., ii, 844.

Herschfinkel, Heinrich. See also Fritz Ephraim.

Herschkowitsch, Mordko, change of rock crystal into the amorphous condition, 1904, A., ii, 254.

oxidation of ammonia by potassium permanganate and the effect of ammonium salts on the reaction, 1909, A., ii, 40.

Herschmann, Friedrich, 9:10-phenanthraquinoline, 1908, A., i, 683.

Herschmann, Friedrich. See also Ferdinand Blumenthal.

Herscovici, Berla. See Alfred Stock. Hertenstein, Heinrich, spectra of the arc

light aureol, 1912, A., ii, 505. spectrum of arc light aureols, 1912, A., ii, 614.

Herter, Christian Archibald, reducing action of the animal organism under the influence of cold, 1904, A., ii,

employment of reducible pigments in the study of poisons, 1904, A., ii,

757.

influence of fever on the reducing action of the organism, 1905, A., ii, 103.

Herter, Christian Archibald, relation between scatole and the p-dimethylaminobenzaldehyde reaction urine, 1906, A., ii, 108.

production of methyl mercaptan by fæcal bacteria in peptone bouillon,

1906, A., ii, 378.

bacterial processes in advanced anæmia, 1906, A., ii, 786.

bacterial production of scatole and its occurrence in the human intestine, 1907, A., ii, 710.

the occurrence of scatole in the human

intestine, 1908, A., ii, 211.

the relation of nitrifying bacteria to the urorosein reaction of Nencki and Sieber, 1908, A., ii, 212.

influence of meat on the dimethylaminobenzaldehyde reaction urine, 1908, A., ii, 410.

indoleacetic acid as the chromogen of urorosein, 1908, A., ii, 410.

scatole and indole in wood of Celtis reticulosa, 1909, A., ii, 426.

action of sodium benzoate on the multiplication and production of gas by various bacteria, 1910, A., ii, 147.

Herter, Christian Archibald, and Carl Ten Broeck, biochemical study of Proteus vulgaris, 1911, A., ii, 758.

Herter, Christian Archibald, and M. Louise Foster, estimation of indole, 1906, A., ii, 134.

separation of indole from scatole and their estimation, 1906, A., 910.

Herter, Christian Archibald, and Arthur I. Kendall, Bacillus infantilis, 1909, A., ii, 422.

the influence of dietary alternations on the types of intestinal flora, 1910,

A., ii, 323.

Herter, Christian Archibald, and Alfred Newton Richards, influence of chloroform on intravital staining methylene-blue, 1904, A., ii, 756.

Herter, Christian Archibald, and Herbert C. Ward, gas production by fæcal bacteria grown on sugar bouillon, 1906, A., ii, 381.

Herter, Christian Archibald. Paul Ehrlich.

Herter, Mary Dows. See Henry Drysdale Dakin.

Herterich, August. See Bruno Emmert, and Julius Tafel.

Herting, Otto, estimation of chlorides in bromides, 1911, A., ii, 435. assay of sweet spirits of nitre, 1911,

A., ii, 662.

Hertkorn, J., the toxic action of the free fatty acids in animal and vegetable fats and oils, 1911, A., ii, 138. balling-together phenomena, 1911, A., ii, 190.

Hertwig, Oscar, the action of radium emanations on the development of animal eggs. I. and II., 1910, A.,

ii. 320, 983,

investigations with mesothorium on animal germ cells; an experimental proof of the idioplasmic nature of the nuclear material, 1911, A., ii, 1118.

Herty, Charles Holmes, optical rotation of spirits of turpentine, 1908, A., i,

Herty, Charles Holmes, and R. O. E. Davis, character of the compound. formed by the addition of ammonia to ethyl phosphite-platochloride, 1908, A., i, 598.

Herty, Charles Holmes, and W. S. Dickson, volatile oil of Pinus serotina,

1908, A., i, 435.

Frederick, filtration Hertz, Arthur through animal membranes; the saline contents of the blood compared with those of other serous fluids, 1906, A., ii, 686.

Hertz, Arthur Frederick, Frank Cook, and Edward Gustave Schlesinger, the action of saline purgatives, 1910, A., ii, 145.

Hertz, Gustav, the ultra-red absorption spectrum of carbon dioxide in its dependence on pressure and partial pressure, 1911, A., ii, 830.

Hertz, Gustav. See also J. Franck.

Hertz, Paul, dependence of the conductivity of binary normal electrolytes on the concentration, 1912, A., ii, 120.

Hertzberg, W. See Alfred Wohl.

Hertzka, Richard, condensation of di-benzyl ketone with aldehydes under the influence of hydrochloric acid, 1905, A., i, 291.

Hertzmann, Julian. See Arthur Rosenheim.

Hervieux, Ch., urinary indoxyl, 1904, A., ii, 63.

Hervieux, Ch. See also Charles Porcher. Herwerden, (Fräulein) H. A. van, and Wilhelm Eduard Ringer, the acidity of the gastric juice of Scyllium stellare, 1911, A., ii, 1109.

Herwerden, Maria van, rennet action 1907, A., i, 810.

gastric digestion in fishes, 1908, A., ii. 872.

Herz, Albert. See Emil Knoevenagel. Herz, Alfred. See Rudolf Friedrich Weinland.

Herz, Otto. See Emil Erlenmeyer, jun. Herz, Paul, by-products from the preparation of piperonalindigotin and its oxidation, 1905, A., i, 778.

Herz, Paul. See also Eilhard Alfred

Mitscherlich.

Herz, Walter [Georg], dialysis experiments with metallic hydroxides, 1903, A., ii, 62.

solubility of boric acid in acids, 1903,

A., ii, 288.

bismuth oxychloride and oxybromide,

1904, A., ii, 42. nature of the alkaline solution of chromium hydroxide, 1905, A., ii,

bismuthous compounds. III., 1909,

A., ii, 150.

an example of solubility influence,

1910, A., ii, 192.

reciprocal solubility influence, 1910,

A., ii, 275.

the influence of chlorides on the solubility of boric acid, 1910, A., ii,

some complex metallic cations, 1910,

A., ii, 611.

the solubility influence of electrolytes,

1910, A., ii, 711.

the reaction between strentium sulphate and sodium carbonate, 1910, A., ii, 849.

equilibria in the action of potassium hydroxide on mercuric bromide and chloride, 1910, A., ii, 945.

equilibria in the precipitation of lead hydroxide, 1910, A., ii, 1067.

solubility studies, 1911, A., ii, 261. reactions of mercurous chloride, 1911, A., ii, 285.

solubility of aluminium hydroxide,

1911, A., ii, 728.

the equilibrium CaSO₄ + Na₂CO₃ = CaCO₂ + Na₂SO₄, 1911, A., ii, 794. equilibria in the precipitation of lead carbonate, 1911, A., ii, 972.

velocity of racemisation, 1911, A., ii,

974.

the solubility of alkali salts in the corresponding acids, 1912, A., ii,

distribution law, 1912, A., ii, 1152.

Herz, Walter, and Hans Gerhard Anders, solubilities in mixed solvents. IV. Solubilities of certain mercury salts, 1907, A., ii, 159.

solubilities in mixed solvents. V.,

1907, A., ii, 848.

Herz, Walter, and Alfred Bulla, hydrolysis of bismuth haloids, 1909, A., ii, 320.

influence of temperature on the hydrolysis of bismuth haloids, 1909, A.,

ii, 674.

equilibrium reactions with bismuth hydroxide, 1909, A., ii. 896.

the periodides and perbromides of the alkaline earth metals, 1911, A., ii, 801.

Herz, Walter, and Hermann Dick, velocity of the reaction between bromine and benzaldehyde, 1908, A., ii, 762.

Walter, and Herbert Fischer, Herz. distribution of soluble substances between water and amyl alcohol, 1905, A., ii, 79.

distribution of soluble substances between water and aromatic hydro-

carbons, 1905, A., ii, 304.

Herz, Walter, and Artur Guttmann, bismuthous compounds, 1907, A., ii,

274; 1908, A., ii, 199.

Herz, Walter, and Max Knoch, determinations of solubility in mixtures of solvents, 1904, A., ii, 709; 1905, A., ii, 510.

solubilities in mixed solvents. III. Solubility of calcium hydroxide in aqueous glycerol, 1905, A., ii, 709. molecular weight of mercuric the

iodide, 1905, A., ii, 822.

Herz. Walter, and Friedrich Gustav Kuhn, solubilities in mixed solvents, 1908, A., ii, 569; 1909, A., ii, 28.

Herz, Walter, and Alfred Kurzer, partition law in mixed solvents, 1910, A.,

ii, 399, 1045.

Herz, Walter, and Martin Lewy, partition of some organic acids between two solvents, 1906, A., ii, 76.

examples of the law of partition, 1906,

A., ii, 530. Herz, Walter, and Georg Muhs, solubility of salts of the alkaline earths with organic acids in acetic acid, 1904, A., i, 11.

the equilibrium, Mg(OH)2+2NH4Cl= MgCl₂+2NH₄·OH, 1904, A., ii,

interaction between bismuth oxyhaloids and an aqueous solution of potassium hydroxide, 1904, A., ii, 413.

Walter, and Bruno Mylius, Herz, velocity of the addition of bromine to cinnamic acid, 1907, A., i, 55. velocity of addition of iodine to allyl

alcohol, 1907, A., i, 671.

Herz, Walter. See also Richard Abegg

and Albert Ladenburg.

Herzbaum, Alex. See Emilio Noelting. Herzberg, Gustav. See Georg Schroeter. Herzberg. Wilhelm, detection of woodfibre, 1905, A., ii, 657.

Herzen, Edouard, surface tension of

mixtures of normal liquids, 1903,

A., ii, 132. representation of the vapour pressures of aqueous solutions, 1911, A., ii,

reciprocal solubility of sodium carbonate and sodium hydrogen carbonate in water, 1911, A., ii, 724.

a generalisation of van't Hoff's formula,

1912, A., ii, 226.

Herzenstein, (Miss) Anna. See Wil-

helm Schlenk.

Herzfeld, Alexander, and Hermann Zimmermann, estimation of crystal sugar in raw sugar, 1912, A., ii, 303.

Herzfeld, E., methods of estimating sugar in blood, 1912, A., ii, 608. estimation of small quantities of bil-

irubin, 1912, A., ii, 612, 706.

Herzfeld, E. See also Ernst Winterstein, and Hans von Wyss. Herzfeld, Eugen. See Gustav Schultz.

Herzfeld, H. See Otto Hauser.

Herzfeld, Hermann, separation of min-eral oil from oil of turpentine and resin oil, 1903, A., ii, 186.

Herzfelder, Armand Dezsö, estimation of free phosphoric acid; amount present in superphosphates, 1903, A., ii,

Herzig, Josef, reduction of triphenylcarbinol, 1904, A., i, 582. methyl tannin, 1908, A., i, 186; 1912,

A., i, 792.

aurin dimethyl ether, 1908, A., i,

detection of methoxyl- and methylimino-groups, 1908, A., ii, 638. tannin, 1912, A., i, 641.

Josef, and Paula Bottcher, colourless tetramethylquercetin, 1912, A., i, 707.

Herzig, Josef, and S. Epstein, resoflavin. V. Lactone dyes, 1908, A., i, 899.

Herzig, Josef, Geza Erdös, and Grete Ruzicka, galloflavin. VI. Lactone dyes, 1910, A., i, 676.

Herzig, Josef, and Br. Erthal, preparation of hexa- and penta-methyl-

phloroglucinol, 1910, A., i, 667.

alkylation in the nucleus, 1911, A., i,

hexa- and penta-methylphloroglucinol, 1911, A., i, 778.

Herzig, Josef, Robert Fischer, Wolfgang Kluger, Adolf Mayrhofer, and Jacques Pollak, brazilin and hæmatoxylin, 1906, A., i, 871.

Herzig, Josef, and Br. Hofmann, 2:5dihydroxybenzophenone, 1908, A.,

completely methylated flavone derivatives, 1909, A., i, 165, 403.

Herzig, Josef, and K. Klimosch, the two isomeric monoalkyl ethers of euxanthone, 1909, A., i, 46.

constitution and colour of xanthones and allied substances, 1909, A., i,

Herzig, Josef, and Richard Kohn, phloroglucide, 1908, A., i, 879.

Herzig, Josef, Julius Polak, and Marianne von Bronneck, constitution of ellagic acid, 1908, A., i, 546.

Herzig, Josef, and Jacques Pollak, isomeric ethers of pyrogallol, 1903, A., i, 89; 1904, A., i, 808, 876.

the phthaleins, 1903, A., i, 95.

brazilin and hæmatoxylin, 1903, A., i, 270, 713; 1904, A., i, 81; 1905, A., i, 605; 1906, A., i, 198.

alkyl derivatives of gallic acid, pyrogallolcarboxylic acid, and pyrogallol, 1903, A., i, 346.

trimethylbrazilone, 1903, A., i, 508. brazilin from brazilein, 1904, A., i. 178.

Herzig, Josef, Jacques Pollak, Eugen G. Galitzenstein, and Robert Fischer, brazilin and hæmatoxylin, 1904, A., i,

Herzig, Josef, Jacques Pollak, Eugen G. Galitzenstein, and Bruno Vouk, brazilin and hæmatoxylin, 1904, A., i, 908. Herzig, Josef, and V. Renner, tannin

methyl ether, 1909, A., i, 713. Herzig, Josef, and F. Schmidinger, condensation products of gallic acid di-

and tri-methyl ether. VII. Lactone dyes, 1910, A., i, 677.

Herzig, Josef, and R. Schönbach, methylation of glucosides, 1912, A., i, 707.

Herzig, Josef, and J. Tichatschek, replacement of the acetyl group by methoxyl under the action of diazomethane, 1906, A., i, 173.

substitution of the acetyl by the methyl group by means of diazo-

methane, 1906, A., i, 431.

Herzig, Josef, and Rudolf Tscherne, galloflavin and resoflavin, 1904, A.,

methylated tannin, 1905, A., i, 354. resoflavin and galloflavin, 1907, A., i, 421.

Herzig, Josef, Rudolf Tscherne, S. Epstein, and Marianne von Bronneck, resoflavin and its analogue from gallic

acid, 1908, A., i, 547.

Herzig, Josef, Franz Wenzel, Bernhard Batscha, Franz Haiser, and Paul Kurzweil, ether-esters of β-resorcylic, orsellinic, and orcinolcarboxylic acids, 1904, A., i, 246.

Herzig, Josef, Franz Wenzel, Carl Eisenstein, and Bernhard Batscha, esters of phloroglucinolcarboxylic

acids, 1903, A., i, 491.

Herzig, Josef, Franz Wenzel, Heinrich Gehringer, and E. Kerényi, ethers and homologues of phloroglucinolaldehyde [2:4:6-trihydroxybenzaldehyde], 1904, A., i, 251.

Herzig, Josef, Franz Wenzel, and E. Hornstein, alkylation of the nucleus

of phenols, 1907, A., i, 43.

Herzig, Josef, Franz Wenzel, Wilhelm Reismann, and Peter Rona, tetramethylphloroglucinolaldehyde, 1906, A., i, 93.

Herzig, Josef, Franz Wenzel, A. Schwadron, and Karl Zeidler, tetra- and penta-methylorcinol, 1911, A., i, 776.

Herzog, C. See Felix Kauffer.

Herzog, Eduard, detection of fusel oil in brandy, 1911, A., ii, 446.

Herzog, Franz. See Conrad Willgerodt. Herzog, Gustav. See Gustav Schultz. Herzog, Johannes, caryophyllin, 1905,

A., i, 804.

diphenylcarbamyl chloride as a reagent for phenols, 1907, A., i, 512.

analysis of crude cresols, 1908, A., ii,

constituents of the rhizome of Imperatoria ostruthium, 1908, A., ii, 978.

a new formation of esters by the action of chlorocarbonates on acids, 1909, A., i, 568.

Herzog, Johannes, and Kurt Budy, quaternary ammonium chlorides from diphenylcarbamide chloride and pyridine or quinoline, 1911, A., i, 680.

Herzog, Johannes, and Vasile H. Hancu, preparation of diphenylated acid amides by the action of diphenylcarbamide on acids, 1908, A., i,

pimpinellin, 1908, A., i, 905.

estimation of phenolic hydroxyl groups, 1908, A., ii, 327.

Herzog, Johannes, and Dankert Krohn, constituents of the rhizome of Imperatoria, 1910, A., i, 124.

Herzog, Reginald Oliver, histidine, 1903,

A., i, 431.

Herzog, Reginald Oliver, alcoholic fermentation. I., 1903, A., ii, 230.

lactic acid fermentation, 1903, A., ii, 446; 1907, A., i, 267.

fermentations and heat change, 1903. A., ii, 468.

biology of yeast, 1903, A., ii, 504. proteolytic enzymes, 1904, A., i, 129. action of emulsin, 1904, A., ii, 164.

velocity of pepsin secretion in the dog,

1904, A., ii, 497. velocity of enzymatic action, 1904. A., ii, 506; 1905, A., i, 164.

influence of temperature on the rate of development of organisms, 1906, A., ii, 115.

velocity of fermentations. III., 1906,

A., ii, 698.

chemical recognition of some physiologically important substances: [alcohol; lactic acid; amino-acids], 1907, A., ii, 312.

molecular weight and magnitude of the particles of colloids, 1907, A., ii, 939.

negative absorption, 1908, A., ii, 928.

the relationship between pepsin and rennin, 1909, A., i, 621.

relation between surface tension and specific volume of non-associated liquids, 1909, A., ii, 124.

calculation of critical densities, 1909, A., ii, 643.

preparation of pure invertase, 1911, A., i, 1052.

solutions, 1911, A., ii, 23.

the viscosity of colloidal solutions, 1911, A., ii, 373.

Herzog, Reginald Oliver, and Josef Adler, changes in tanning [processes], 1908, A., ii, 262.

adsorption of sugars by animal char-

coal, 1909, A., ii, 469.

Herzog, Reginald Oliver, and R. Betzel, theory of disinfection, 1910, A., ii, 882; 1911, A., ii, 1020.

Herzog, Reginald Oliver, and Franz Hörth, action of vapours on yeast cells, 1907, A., ii, 804.

the stereochemistry of lactic acid fermentation, 1909, A., ii, 601.

the estimation of mannose, arabinose, xylose, and hydrolysed milk sugar, 1909, A., ii, 625.

Herzog, Reginald Oliver, and H. Kasarnowski, diffusion of colloids, 1907, A., ii, 934; 1908, A., i, 707.

Herzog, Reginald Oliver, and M. Margolis, the action of pepsin on egg-albumin, 1909, A., i, 621.

Herzog, Reginald Oliver, and August Meier, oxidation by fungi, 1908, A., ii, 1063; 1909, A., ii, 423.

action of oxydases. II., 1911, A., i,

936.

Herzog, Reginald Oliver, and A. Polotzky, citric acid fermentation, 1909, A., i, 285.

action of oxydases. I., 1911, A., i,

Herzog, Reginald Oliver, and Otto Ripke, conversion of cinnamic acid into styrene by means of moulds, 1908, A., ii, 1064.

behaviour of certain mould fungi towards organic acids. I., 1911, A.,

ii. 915.

Herzog, Reginald Oliver, Otto Ripke, and O. Saladin, behaviour of certain mould fungi towards organic acids. II., 1911, A., ii, 915.

Herzog, Reginald Oliver, and Georg Rosenberg, changes in tanning [pro-

cesses], 1910, A., ii, 934.

Herzog, Reginald Oliver, and O. Saladin, alteration in the fermentative properties of yeast cells on killing by means of acetone, 1911, A., ii, 914.

behaviour of certain mould fungi towards amino-acids, 1911, A., ii,

915.

Herzog, Reginald Oliver, and P. Slansky, the optically active modifications of lactic acid, 1911, A., i, 764.

Herzog, Reginald Oliver. See also C. Th. Becker, and Carl Engler.

Hes, A., gravimetric estimation of nitric

acid, 1909, A., ii, 265.

Hesehus, Nicolaus Alexandrovitsch, heat actions of radium bromide, naphthalene, and camphor, 1905, A., ii, 297.

sensitiveness of selenium to light,

1906, A., ii, 348.

dependence of contact electrification on the capacity of ionic dissociation and on superficial density, 1911, A., ii, 13.

electric properties of substances in relation to their allotropic state,

1912, A., ii, 121.

Heslop, Mary Kingdon, and John Armstrong Smythe, dyke rocks in Northumberland, 1910, A., ii, 313.

Hess, Alfred, determination of volume change on liquefaction, 1905, A., ii, 373.

Hess, C. L. von, physiology of lymph. XVIII. The relation of the pancreas to the lipase of the blood and the lymphs, 1912, A., ii, 62. Hess, C. L. von. See also Hugh Mc-Guigan.

Hess, Edgar, preparation of ketone orthoethers, 1908, A., i, 762.

Hess, Edgar. See also Hans Reitter.

Hess, Fritz. See Otto Dimroth.

Hess, Frank Lee, and Roger Clark Wells, strüverite from the Black Hills, South Dakota, 1911, A., ii, 499.

Hess, Hans. See Carl Graebe.

Hess, Hermann. See Adolf von Baeyer, and Heinrich Wieland.

Hess, Kurt. See Emil Fischer, and Ludwig Knorr.

Hess, Leo, estimation of "neutral" sulphur in urine, 1909, A., ii, 180.

Hess, Leo, and Paul Saxl, the action of arsenic on autolysis, 1908, A., ii, 968.

Hess, Viktor F., general relationship between volume contraction and the three usual forms of the refraction formula in the case of mixtures of liquids, 1909, A., ii, 1.

Hess, Viktor F. See also Stepan Meyer, and Egon (Ritter) von Schweidler.

Hess, Walter. See Otto Fischer.

Hesse, Albert [Friedrich], essential oil of tuberose blossoms and its production during enfleurage, 1903, A., i, 507. oil of jasmine blossoms. VII., 1904,

A., i, 516.

pinene hydrochloride and camphene hydrochloride, 1906, A., i, 375.

the magnesium derivatives of the aromatic chloro-compounds, 1908, A., i, 592.

Hesse, Albert, and Franz Otto Zeitschel, essential oil of orange blossoms. II., 1903, A., i, 189.

Hesse, August, a new burette for testing normal solutions, 1905, A., ii, 55. a simple method for the estimation of

the fat in butter, 1905, A., ii, 125. estimation of fat and water in butter

by Gerber's method, 1905, A., ii,869. **Hesse**, August, and W. D. **Kooper**, is the so-called peroxydase actually a ferment? 1911, A., i, 592.

the nature of peroxydase, 1912, A., ii, 1107.

Hesse, Bernhard C. See Julius Stieglitz.

Hesse, Hugo. See Otto Mumm.

Hesse, Ludwig. See Arthur Kötz.

Hesse, [Julius] Oswald, normal quinine hydrobromide, 1903, A., i, 111.

coca leaves, 1903, A., i, 191.

lichens and their characteristic constituents, 1903, A., i, 702; 1905, A., i, 138; 1906, A., i, 280; 1907, A., i, 777; 1911, A., i, 208. Hesse, [Julius] Oswald, opium bases,

1903, A., i, 773. some archil lichens and their chromogens, 1905, A., i, 140.

coto bark, 1905, A., ii, 752.

dehydracetic acid, 1908, A., i, 390. compounds from rhubarb and allied substances, 1908, A., i, 438.

root of Rheum rhaponticum and Austrian rhubarbs, 1908, A., ii, 418. commercial chrysarobin, 1912. A., i.

physcion, 1912, A., i, 284.

Hesse, Paul. See Robert Behrend. Hessen, Victor. See Bernhard Schöndorff.

Hessenland, Max. See Karl Anwers. Hessler, John C., phenylmalononitrile, 1904, A., i, 830; 1908, A., i, 182.

Hest, J. J. van, yeast, 1904, A., ii, 278. Heteren, Willem Jacob van, tin amalgams, 1905, A., ii, 39,

supposed allotropy of gold, 1905, A.,

ii, 260.

Heteren, Willem Jacob van, and H. van der Waerden, examination of mintnickel, 1909, A., ii, 350.

Heteren, Willem Jacob van. See also Hendrik Willem Bakhuis Roozeboom.

Hetper, Josef, the action of potassium permanganate on organic compounds, 1911, A., ii, 339; 1912, A., ii, 811.

Hetper, Jósef, and Léon Marchlewski, colouring matter of blood, 1904, A., i, 463, 839.

Hepter, Josef. See also H. Goldmann. Hetsch, Heinrich, present position of the problem of the chemical sterilisation of drinking water, 1906, A., ii, 569.

Hett, Paul, and Adolph Gilbert, iodometric estimation of vanadic acid in vanadium ores, 1906, A., ii, 708.

Heuberger, K. See Alexander Tschirch. Heublein, O. See Josef Tillmans.

Heubner, Otto. See Max Rubner.

Heubner, Wolfgang, fibrinoglobulin, 1905, A., i, 725.

mytolin, a protein from muscle, 1905, A., ii, 841.

physiological action of physostigmine,

1905, A., ii, 847. the lability of lecithin, 1909, A., i, 5. phosphorus metabolism. IV. Phosphorus excretion of a new-born child, 1910, A., ii, 519.

chemical constitution and physiological action, 1911, A., ii, 515.

Heubner, Wolfgang, and M. Reeb, phosphorus in certain foods, 1908, A., ii, 1052.

Heubner, Wolfgang, and H. Rosenberg. photographic determination of the intensity distribution in blood spectra, 1912, A., ii, 313.

Heubner, Wolfgang, and Georg Wiegner, distilling apparatus for nitrogen estimations by Kjeldahl's method, 1910,

A., ii, 240.

Heubner, Wolfgang. See also Richard Willstätter.

Heurung, A., magneto-optical effects exhibited by chlorine and iodine, 1911, A., ii, 963; 1912, A., ii, 510.

Heuse. Edward 0. See William

Maurice Dehn.

Heuse, Wilhelm. See Karl Scheel. Heuser, G. See Theodor Zincke.

Heusler, Friedrich, magnetisable alloys of manganese, 1910, A., ii, 179.

Heusler, Friedrich, and Franz Richarz, magnetisable manganese alloys. X. Manganese-aluminium-copper, 1909, A., ii, 240.

manganese, aluminium, and copper,

1910, A., ii, 99.

Heusner, Karl. See Conrad Willgerodt. Hevesy, Georg von, the electrolytic separation of the alkali metals from fused alkali hydroxides and the solubility of the metals in the electrolyte, 1909, A., ii, 806.

the electrolytic preparation of rubi-

dium, 1910, A., ii, 611.

alkali hydroxides. I. The binary systems: sodium and potassium hydroxides; potassium and rubidium hydroxides, and sodium and rubidium hydroxides, 1910, A., ii, 835.

electrolysis of the iodides of the alkaline earths dissolved in pyridine,

1910, A., ii, 928.

the detection of actinium emanation in minerals containing actinium, 1912, A., ii, 116.

the solubility of actinium emanation in liquids and charcoal, 1912, A., ii, 117.

electrochemistry of radioactive substances, 1912, A., ii, 414.

Hevesy, Georg von, and Richard Lorenz, electro-capillary phenomena with fused salts, 1910, A., ii, 822.

Hevesy, Georg von, and Ernst Wolff, silver-nickel thermo-element, 1910, A., ii, 574.

Hevesy, George von. See also Richard Lorenz.

Hewett, D. Foster, vanadium deposits in Peru, 1910, A., ii, 719.

See

Frederick William. Hewitt, Augustus Désiré Waller.

Hewitt, John Theodore, fluorescence of naphthalic anhydride, 1903, A., i, 346.

a new mercuric oxychloride, 1907, P., 10; discussion, P., 10.

aminoazo-compounds, 1908, A., i, 581.

constitution of indicators used in acidimetry, 1908, A., ii, 269.

Hewitt, John Theodore, and John Jacob Fox, studies in the acridine series. Part II. Action of methyl iodide on benzoflavine (2:8-diamino-5-phenyl-3:7-dimethylacridine), 1905, T., 1058; P., 215.

Hewitt, John Theodore, James Kenner, and Harry Silk, the bromination of phenols, 1904, T., 1225; P., 125.

Hewitt, John Theodore, William Lewcock, and Frank George Pope, derivatives of p-hydroxystilbene, 1912, T., 604; P., 69.

Hewitt, John Theodore, and (Miss) Gladys Ruby Mann, estimation of ferric iron in the presence of certain organic sub-

stances, 1912, A., ii, 606.

Hewitt, John Theodore, and Herbert Victor Mitchell, the nitration of substituted azophenols, 1905, T., 225; P., 61.

the constitution of o-hydroxyazocompounds; preparation of benzeneazodimethylcoumarin, 1905, P., 298; 1906, T., 13.

azo-derivatives from a-naphthamethylcoumarin, 1905, P., 302; 1906, T.,

17

the mobility of substituents in derivatives of β -naphthol, 1906, T., 1167; P., 170; discussion, P., 171.

colour and constitution of azo-compounds. Part I., 1907, T., 1251; P., 182.

Hewitt, John Theodore, Sidney Herbert Newman, and Thomas Field Winmill, studies in the azine series. Part I. The constitution of safranine, 1909,

T., 577; P., 86.

Hewitt, John Theodore, Frank George
Pope, and (Miss) Winifred Isabel
Willett, the absorption spectra of
mitro-compounds, 1912, T., 1770; P.,

Hewitt, John Theodore, and William Henry Ratcliffe, derivatives of ohydroxyazobenzene, 1912, T., 1765; P. 229.

Hewitt, John Theodore, and David Bernard Steinberg, action of Grignard reagents on esters of dibasic acids; preliminary note, 1912, P., 140. Hewitt, John Theodore, and Ferdinand Bernard Thole, the colour and constitution of azo-compounds, 1909, T., 1893; P., 208; 1910, T., 511; P., 54.

the structure of xanthonium and acridinium salts; preliminary note,

1910, P., 225.

Hewitt, John Theodore, and William Thomas, the colour and constitution of azo-compounds. Part III., 1909, T., 1292; P., 190.

Hewitt, John Theodore, and Norman Walker, action of bromine on benzeneazo-o-nitrophenol, 1906, T., 182;

P., 16.

dibromoaminoazobenzene, 1907, T., 1138; P., 161.

Hewitt, John Theodore, and Thomas Field Winmill, association of phenols in the liquid condition, 1907, T., 441; P., 10; discussion, P., 10.

arsenic diiodide, 1907, T., 962; P., 150.

Hewitt, John Theodore. See also (Miss) Olive Eveline Ashdown, (Miss) Kathleen Balls, Bertram Haward Buttle, Albert Ernest Dunstan, and John Jacob Fox.

Hewitt, Thomas Edwin, colorimetric estimation of phosphorus [in iron], 1905, A., ii, 353.

Hewlett, Richard Tanner, agglutination in dysentery, 1904, A., ii, 362. detection of Bacillus enteritidis sporo-

genes in water, 1904, A., ii, 633. **Reycock**, Charles Thomas, and Francis

Edward Everard Lamplough, the
boiling points of mercury, cadmium,
zinc, potassium, and sodium, 1912, P.,

Q

Heycock, Charles Thomas, and Francis Henry Neville, constitution of the copper-tin series of alloys, 1904, A., ii, 172.

Heyde, Arnold. See Walther Borsche. Heyden, Friedr. See Chemische Fabrik von Friedr. Heyden.

Heyden, Friedrich von der. See Karl Auwers.

Heyden, Paul. See Bernhard Schöndorff.

Heyden, Wilhelm. See August Michaelis. Heydenreich, Karl, copper spirals for use in combustions of nitrogenous substances, 1907, A., ii, 130.

Heyder, Richard. See Emil Fromm.

Heydrich, K., relation between the specific gravity and optical constants

of isomeric organic compounds, 1910, A., i, 705.

Heydweiller, Adolf, is the coefficient of magnetic susceptibility for iron and manganese salt solutions dependent on the field strength ? 1903, A., ii, 710.

surface tension of dilute aqueous solutions, 1908, A., ii, 356.

heat of ionisation and the ionisation constant of water, 1909, A., ii, 292.

relationship between physical properties of solutions. I. Density and electrical conductivity of aqueous solutions of salts, 1910, A., ii, 106, 398.

connexion between the physical properties of solutions. III. The ionic moduli of the density in water, 1912, A., ii, 433.

Heydweiller, Adolf, and F. Kopfermann, electrolysis of glass, 1910, A., ii, 685.

Heyer, Karl, estimation of calcium oxide in presence of calcium carbonate, etc., 1909, A., ii, 267, 1053.

Heyer, Richard. See Otto Wallach, and

Richard Zsigmondy.

Heygendorff, von, apparatus for rapidly obtaining a stream of water at constant temperature for refractometers and polarimeters, 1909, A., ii, 306.

new burette attachment to store bottle,

1909, A., ii, 341.

cheap crucible supports, 1911, A., ii, 199.

exact reading device for the Mohr-Westphal balance, 1912, A., ii, 150. Heyl, C. See Johan Erik Johansson.

Heyl, Frederick William, and Lemuel Charles Raiford, analysis of Zygadenus I., 1911, A., ii, 325. intermedius.

Heyl, Frederick William. See also Treat Baldwin Johnson, Thomas Burr Osborne, and Lemuel Charles Raiford.

Heyl, Georg [Paul], poisonous principle contained in some kinds of Delphinium (delphocurarine), 1903, A., i,

alkaloids of Dicentra formosa, 1903,

A., i, 716.

estimation of morphine by means of its reducing action on silver nitrate, 1903, A., ii, 459.

Corydalis aurea, 1910, A., ii, 441. alkaloids of Corydalis solida, 1910, A., ii, 441.

examination of benzaldehyde for chlorine compounds, 1912, A., ii,

Heymann, Felix, influence of castration on the phosphorus of the female organism, 1904, A., ii, 355.

Heymann, Fritz. See Ludwig Berend.

Heymann, Harry, heterogeneous reactions, 1912, A., ii, 1155.

Heymann, Leonid. See Fritz Ephraim. Heymann, Paul. See Richard Stoermer. Heyn, Emil, copper and oxygen, 1904, A., ii, 406.

unstable and metastable equilibria in iron-carbon alloys, 1904, A., ii, 737.

composition of the copper-cuprous oxide eutectic, 1906, A., ii, 672.

[electromotive force of iron], 1907, A., ii, 428.

the equilibrium diagram of ironcarbon alloys, 1910, A., ii, 298.

theory of the formation of graphite in iron alloys, 1911, A., ii, 391. Heyn, Emil, and Otto Bauer, copper,

and oxygen, 1905, A., ii, tin. 169.

copper and sulphur, 1906, A., ii, 230.

copper and phosphorus, 1906, A., ii,

corrosion of iron by water and water solutions, 1908, A., ii, 849.

influence of the treatment on the solubility of iron and steel in sulphuric acid, 1909, A., ii, 486.

Heyn, Myron. See Heinrich Biltz. Heyne, Gerhard. See Ernst Wilke-Dörfurt.

Heynemann, Hans. See Alfred Stock. Hezner, Laura, a new chromiferous magnesium hydroxycarbonate, 1912, A., ii, 1061.

Hibbert, (Miss) Eva, titration of copper and chromium and of copper, chromium, and iron in admixture, 1909, A., ii, 349.

volumetric estimation of titanium and of titanium in the presence of iron, 1909, A., ii, 351.

See also Edmund Hibbert, (Miss) Eva. Knecht.

Hibbert, Gilbert Stanley. See Oskar Baudisch.

Hibbert, Harold, preparation of trialkylstilbines, -arsines, and -phosphines by the Grignard reaction, 1906, A., i. 153.

the estimation of hydroxyl derivatives in mixtures of organic compounds, 1909, P., 57.

a method for determining the relative reactivity of organic compounds, 1909, P., 57; discussion, P., 58; 1912, T., 341.

the stability of compounds derived from tertiary amines and magnesium alkyl haloids, 1909, P., 118.

Hibbert, Harold, the quantitative estimation of hydroxy-, amino-, and imino-derivatives of organic compounds by means of the Grignard reagent, and "the nature of the changes taking place in solution, 1912, T., 328; P., 15.

Hibbert, Harold, and John Joseph Sudborough, additive compounds of s-trinitrobenzene and alkylated arvlamines, 1903, T., 1334 : P., 225. estimation of hydroxyl groups in carbon compounds, 1903, P., 285;

1904, T., 933. Hibbert, Harold, and Archibald Wise, a new method for the separation of tertiary from secondary and primary amines, 1909, P., 119; 1912, T., 344.

See also Arthur Hibbert, Harold. Hantzsch, Arthur Michael, and John

Joseph Sudborough.

Hibsch, Josef Emanuel, and Arthur Scheit. dense minerals from the leucite-basanite of the Eulenberg near Leitmeritz, Bohemia, 1912, A., ii, 774.

Hickey, Charles Hendee. See Gregory Paul Baxter.

Hickmans, (Miss) Evelyn Marion.

Alexander Findlay.

Hicks, William Brooks, the use of sulphur monochloride in the determination and analysis of the rare earth minerals, 1911, A., ii, 934.

Hicks, William Longton, 2-methyl-1:3dihydrobenzoxazine-4-one and related derivatives, 1910, T., 1032; P., 91. Hicks, William Longton. See al

See also Ludwig Knorr, and Arthur Walsh

Titherley.

William Mitchinson, critical study of spectral series. alkalis, hydrogen and helium, 1910, A., ii, 86.

a critical study of spectral series. II. The p- and s-sequences and the atomic volume term, 1912, A., ii, 512.

Hidden, William Earl, minerals [tengerite? etc.] from Llano County, Texas, 1905, A., ii, 585.

Hidden, William Earl, and Charles Hyde Warren, yttrocrasite, a new yttrium-thorium-uranium titanite, 1907, A., ii, 103.

Hidding, Hubert. See Hans Mursch-

hauser.

Hiendlmaier, Heinrich. See Karl Andreas Hofmann.

Hieper, A. See Theodor Pfeiffer. Hiestand, O. See Ernst Winterstein. Highee, Howard Haynes. See Julius Stieglitz.

Higgin, Alfred James. See Edward Henry Rennie.

Higgins, Eric, new formulæ correlating the various constants for non-associated liquids, 1908, A., ii, 668.

Higgins, Eric. See also John Livingston

Rutgers Morgan.

Higgins, Harold Leonard, and Francis Gano Benedict, some energy factors of the urine excreted after severe muscular exercise, 1911, A., ii, 909.

Higgins, Harold Leonard, and Alice Johnson, elementary analysis by means of a calorimetric bomb, 1910, A., ii,

460.

Higgins, Harold Leonard. See also Joseph Barcroft, Francis Gano Benedict, and Hope Sherman.

Higgins, Sydney Herbert, the action of carbon dioxide in the bleaching process, 1911, T., 858; P., 67.

an experimental investigation of the bleaching process, 1911, P., 314; 1912, T., 222.

an experimental investigation of the bleaching process. Part II. The action of neutral salts on bleaching solutions, 1912, P., 130.

Higgins, William Frederick. See Samuel

Walter Johnson Smith.

Higley, George Oswin, certain compounds of chromium, 1904, A., ii, 565.

Higley, George Oswin, and Wilbur Pardon Bowen, excretion of carbon dioxide during exercise, 1905, A., ii, 44.

Higley, Louis Allen, behaviour of sodium and sodium alkyloxides towards various esters of acetic acid, 1907, A., i. 461.

Higson, (Miss) Annie, and Jocelyn Field Thorpe, a method for the formation of succinic acid and of its alkyl derivatives, 1906, T., 1455; P., 242.

Higuchi, Shigeji, chemical investigations of placenta, 1909, A., ii, 76.

pharmacological actions of the placenta, 1909, A., ii, 503.

ash constituents of the placenta, 1909, A., ii, 1034.

Higuchi, Shigeji. See also Walther

Hilbing, W. See Julius Bredt.

Hildebrand, Joel H., detection of anions in the electrolytic way, 1907, A., ii, 574.

a new arrangement of the König spectrophotometer and its application to the determination of chemical equilibria, 1908, A., ii, 646. are spectrum of columbium, 1908, A.,

ii, 1045.

Hildebrand, Joel H., Jones and Allen's "colour demonstration of the dissociating action of water," 1909, A.,

purification of mercury, 1909, A., ii, 734.

colour of iodine solutions, 1910, A., ii,

thermal dissociation of barium per-

oxide, 1912, A., ii, 335. Hildebrand, Joel H., and Ben Leon Glascock, colour of iodine solutions. 1909, A., ii, 225.

Hildebrandt, Adolf. See Emil Maass. Hildebrandt, Felix. See Julius Wagner.

Hildebrandt, Hermann, [chloro- and bromo-hippuric acids], 1903, A., i.

behaviour of carvone and santanol in the animal body, 1903, A., ii, 166.

fate of some cyclic terpenes and camphor in the animal body, 1903, A., ii. 166.

behaviour of halogen-substituted toluenes and aminobenzoic acids in the organism, 1903, A., ii, 228.

biological behaviour of nerol, geraniol, and cyclogeraniol, 1903, A., ii, 660.

indicanuria, 1903, A., ii, 673.

o-thymotinpiperidide, 1905, A., i, 80. pharmacological studies on synthetical bases of the piperidine series, 1905,

A., i, 153. pharmacology of ammonium bases, 1905, A., ii, 743.

pharmacology of some condensation products of p-aminoacetophenone with aldehydes, 1905, A., ii, 743.

pharmacology of sulphones, 1905, A., ii, 744.

the glucoside structure of conjugated glycuronic acids, 1906, A., i, 84.

behaviour of toluidines in the animal organism, 1906, A., ii, 110.

pharmacological behaviour of hydroxybenzyltannins, 1907, A., i, 715. bebeerine, 1907, A., i, 869.

detection of chlorates in urine, 1907, A., ii, 298.

the biological behaviour of phenylalkylamines and phenylalkylam-monium bases, 1907, A., ii, 496.

[condensation products of tannic acid and formaldehyde with the phenols], 1908, A., i, 185.

the formation of hydrogen sulphide from protein and sulphur, 1908, A., i, 709.

Hildebrandt, Hermann, the pharmacology of phenanthrene and its hydro-derivatives, 1908, 876.

the pharmacology of the quinatoxins,

1908, A., ii, 877.

oxidation of borneolglucoside in a biochemical manner, 1909, A., ii. 918.

pharmacological and chemo-therapeutic studies in the toluidine

series, 1911, A., ii, 514.

[physiological action of] thebaine, morphothebaine, thebenine, some of their derivatives, A., ii, 517.

Hildebrandt, Hermann. See also Emil Fromm, and Erich Harnack. See Richard

Hildebrandt, Karl. Stoermer.

Hildesheim, Oscar, and John Beresford Leathes, synthesis of higher fatty acids in the liver, 1904, A., ii, 355.

Hildesheimer, Arnold, derivatives of aamino-n-butyric acid, 1910, A., i, 891.

Hildesheimer, Arnold. See also Carl

Neuberg.

Hilditch, Thomas Percy, the relation between unsaturation and optical activity. Part I. The menthyl and bornyl esters of \(\beta\)-phenylpropionic, cinnamic and phenylpropiolic acids, 1907, P., 287; 1908, T., 1.

the relation between unsaturation and optical activity. Part II. Alkaloid salts of corresponding saturated and unsaturated acids, 1908, T., 700;

P., 61.

the relation between unsaturation and optical activity. Part III. Optically active salts of acids containing adjacent unsaturated groups, 1908, T., 1388; P., 186.

aromatic a-disulphones, 1908, T.,

1524; P., 192.

the relation between unsaturation and optical activity. Part IV. The relative influence of bi-, quadri-, sexa-valent sulphur on rotatory power, 1908, T., 1618; P., 195.

note on the optical rotatory power of menthyl cinnamate, 1908, P.,

the effect of contiguous unsaturated groups on optical activity. Part I.,

1909, T., 331; P., 29.

the effect of contiguous unsaturated groups on optical activity. Part II. Acids containing two adjacent ethenoid groups, 1909, T., 1570; P., 214.

Hilditch, Thomas Percy, the effect of contiguous unsaturated groups on optical activity. Part III. The normal series of fatty dibasic acids, 1909, T., 1578; P., 214.

the effect of contiguous unsaturated groups on optical activity. Part V. Physico-chemical evidence of the structure of "a-disulphoxides,"

1910, T., 1091; P., 95.

intermolecular condensation of aromatic sulphinic acids. Part I., 1910, T., 2579; P., 294.

the effect of contiguous unsaturated groups on optical activity. Part VI. The influence of molecular symmetry; application to the relative rotatory powers of position-isomerides, 1910, P., 141.

the relative effect of ethylenic and acetylenic linkings on optical rotatory power, 1911, T., 218; P., 6.

the effect of contiguous unsaturated groups on optical rotatory power. Part VI. The influence of the carbonyl group on optical rotatory power. Part VII. The relative influences of aromatic and hydroaromatic nuclei on optical rotatory power. Part VIII. The influence on optical activity of two contiguous unsaturated groups in comparison with that of one unsaturated group at varying distances from the optically active complex, 1911, T., 224;

the intramolecular condensation of aromatic sulphinic acids. Part II. The interaction of aromatic disulphoxides and sulphuric acid, 1911,

T., 1091; P., 139.

molecular rotatory power in normal homologous series. Part I. Optically active derivatives of the higher aliphatic alcohols and acids, 1911, P., 311; 1912, T., 192.

effect of molecular symmetry on the optical activity and relative rotatory power of aromatic position isomer-

ides, 1911, A., i, 892.

intramolecular rearrangements of aliphatic sulphoxides, 1912, A., i, 71.

Hilditch, Thomas Percy, and Albert Ernest Dunstan, the correlation of viscosity with other constitutive properties; preliminary note, 1910, P., 341.

the correlation of viscosity with other physical properties. Part I. The ethenoid and ethinoid unsaturation,

1911, P., 93.

Hilditch, Thomas Percy, and Albert Ernest Dunstan, relations between viscosity and other physical properties. III. The influence of neighbouring unsaturated groups, 1912, A., ii, 1143.

Hilditch, Thomas Percy, and Samuel Smiles, the influence of mercuric iodide on the formation of sulphonium iodides, 1907, T., 1394; P., 206.

aromatic selenonium bases, 1908, T.,

1384.

chlorides of aromatic sulphinic acids, 1909, A., i, 18.

intramolecular rearrangements of diphenylmethane o-sulphoxide, 1910, P., 174; 1911, T., 145; P., 3.

a synthesis of derivatives of phenothioxin, 1911, T., 408; P., 44.

the constitution of dehydro-\$\beta\$-naphthol sulphide and the interaction of sulphuric acid with aromatic o-hydroxysulphoxides, 1911, T., 973; P., 123.

the intramolecular rearrangement of diphenylamine o-sulphoxides. Part IV., 1912, T., 2294; P., 276.

Hilditch, Thomas Percy. See also Harold Christopher, John Norman Collie, Albert Ernest Dunstan, Sydney Robert Edminson, and Sanuel Smiles.

Hilditch, Warren Witherell. See Lafayette Benedict Mendel, and Frank

Pell Underhill.

Hildt, Lad., Léon Marchlewski, and J. Robel, the chlorophyll group; action of acids on chlorophyll, 1908, A., i, 439.

transformations of chlorophyll under the influence of acids, 1908, A., i, 668

Hileman, Albert, elimination and alkalimetric estimation of silicon fluoride in the analysis of fluorides, 1906, A., ii, 798.

iodometric estimation of fluorine, 1906, A., ii, 895.

Hilgenberg, Gustav. See Conrad Will-

gerodt. Hilgendorff, Gustav. See Emil Erlen-

meyer, jun.

Hilger, Albert, vegetable mucilages, 1903, A., i, 793.

Hilger, Albert, and W. Merkens, solanin, 1903, A., i, 846.

Hilger, Albert, and S. Rothenfusser, application of the β-naphthylhydrazones to the detection and separation of the sugars, 1903, A., ii, 187.
Hilgers, Joseph. See Roland Scholl.

517

Hill, Arthur Croft, reversibility of enzyme or ferment action, 1903, T., 578; P., 99; discussion, P., 100.

Hill, Arthur Croft. See also Arthur

Gamgee.

Hill, Arthur E., relative solubility of the silver haloids and silver thiocyanate, 1908, A., ii, 378.

inconstancy of the solubility product,

1910, A., ii, 936.

Hill, Arthur E., and John P. Simmons, solubility of salts in concentrated acids, 1909, A., ii, 647.

Hill, Arthur E., and William A. H. Zink, volumetric estimation of barium, 1909, A., ii, 267.

Hill, Arthur E. See also Martin Andre

Rosanoff.

Hill, Arthur Edwin, a new form of calcium chloride tube for combustion, 1906, P., 87.

a new form of gas burette, 1908, T.,

1857; P., 210.

a combined stopcock and capillary connecting tube for gas burettes, 1908, P., 95.

a new form of potash bulb, 1908, P.,

182.

Hill, Arthur Joseph. See Treat Bald-

win Johnson.

Hill, Archibald Vivian, mode of action of nicotine and curare, determined by the form of the contraction curve and the method of temperature-coefficients, 1910, A., ii, 59.

[relative velocities of diffusion], 1910,

A., ii, 695.

heat production of muscle, 1910, A., ii, 730.

the position occupied by the production of heat in the chain of processes constituting a muscular contraction, 1911, A., ii, 215.

a differential micro-calorimeter for the estimation of heat-production in physiological, bacteriological, and enzyme actions, 1912, A., ii, 20.

total energy exchanges of intact coldblooded animals at rest, 1912, A.,

ii, 181.

the absence of temperature changes during the transmission of a nerveimpulse, 1912, A., ii, 367.

a new calorimeter for small warmblooded animals, 1912, A., ii, 462.

heat production of surviving amphibian muscle during rest, activity, and rigor, 1912, A., ii, 784.

Hill, Archibald Vivian. See also Joseph

Barcroft.

Hill, Charles Alexander, lead in pharmacopæial chemicals, 1905, A., ii, 356.

crystallisation of sodium salicylate solution, 1911, A., i, 53.

Hill, Charles Warren. See Victor Lenher, and Charles W. Stoddart.

Hill, Ernest George, the analysis of Reh, the alkaline salts in Indian usar land, 1903, P., 58.

the coloured constituents of Butea

frondosa, 1903, P., 133.

the hydrolysis of ammonium salts by water, 1906, T., 1273; P., 204.

Hill, Ernest George, and Annoda Prasad Sirkar, a new colouring matter from Nyctanthes Arbor-tristis, 1907, T., 1501; P., 213.

electric conductivity and density of solutions of hydrogen fluoride, 1910,

A., ii, 27.

Hill, Henry Barker, and Otis Fisher Black, preparation of formiminoethyl ether, 1904, A., i, 296.

action of potassium nitrite on ethyl mucobromate, 1904, A., i, 797.

4-nitro-5-pyrazolone, 1905, A., i, 381.
 Hill, Henry Barker, and William Jay
 Hale, oximes of nitromalonaldehyde, 1903, A., i, 401.

condensation of nitromalonaldehyde with benzyl methyl ketone, 1905, A.,

i, 200.

Hill, Henry Barker, and F. W. Russe, optical isomerides of β-dihydrofuran-2:5-dicarboxylic acids, 1904, A., i, 681.

Hill, Henry Barker, and John Percival Sylvester, sulphonamido-derivatives of furan, 1904, A., i, 815.

Hill, Harry S. See Richard Sidney Curtiss.

Hill, Hibbert Winslow, strong sterilisable dialysing membrane, 1905, A., ii, 682.

Hill, J. Rutherford, igniting point of sulphur, 1907, A., ii, 341.

Hill, John Robertshaw, substituted bromoanilines, 1907, A., i, 692. orientation of a series of substituted

bromoanilines, 1908, A., i, 256.

Hill, John Robertshaw. See also Wyndham Rowland Dunstan, and Humphrey

Owen Jones. .
Hill, J. W. See William Allen

Drushel.

Hill, Lucian A., colorimetric estimation of small quantities of potassium, 1903, A., ii, 756.

Hill, Leonard Erskine, filtration in the living organism, 1906, A., ii, 242.

Hill, Leonard Erskine, and Martin Flack, body temperature, blood pressure, and alveolar tension in athletes, 1907, A., ii, 792.

effects of excess of carbon dioxide and want of oxygen on the respiration and circulation, 1908, A., ii, 706.

influence of oxygen on athletes, 1909,

A., ii, 249.

influence of oxygen inhalations on muscular work, 1910, A., ii, 724.

the physiological influence of ozone,

1912, A., ii, 187.

Hill, Leonard Erskine, and Marion Greenwood, influence of increased barometric pressure on man. III. The possibility of oxygen bubbles being set free in the body, 1907, A.,

Hill, Leonard Erskine, and James F. Mackenzie, effect of oxygen inhalation on muscular exertion, 1910, A., ii, 316.

Hill, Leonard Erskine, and John James Rickard Macleod, influence of high pressure of oxygen on the circulation of the blood, 1903, A., ii, 30.

the influence of an atmosphere of oxygen on the respiratory exchange,

1903, A., ii, 30.

influence of compressed air on respiratory exchange, 1903, A., ii, 492.

influence of compressed air and oxygen on the blood gases, 1903, A., ii, 493. caisson disease and diver's palsy, 1904, A., ii, 54.

Hill, Leonard Erskine, and Frederick Walker Mott, effect of cerebral anæmia

on nerve-cells, 1906, A., ii, 240. Hill, Leonard Erskine, Richard Alun Rowlands, and Harry Bertram Walker, relative influence of the heat and chemical impurity of close air, 1910, A., ii, 1079.

Hill, Leonard Erskine, John F. Twort, and Harry Bertram Walker, compressed-air illness. II. The desaturation of the arterial blood as measured · by the nitrogen dissolved in the urine,

1910, A., ii, 1079. Hill, Leonard Erskine, John F. Twort, Harry Bertram Walker, and Richard Alun Rowlands, effect of breathing

oxygen on the nitrogen and oxygen of the urine, 1910, A., ii, 1079.

Hill, Leonard Erskine. See also Israel Feldman, Charles Edward Ham, James F. Mackenzie, and John F. Twort.

Hill, Thomas Henry, properties of mixtures of ethyl alcohol, carbon tetrachloride and water, 1912, T., 2467; P., 290,

Hille, estimation of the oxidation numbers of urine with potassium permanganate, 1909, A., ii, 712.

Hille, Hermann. See Robert Stollé. Hille, Waldemar, estimation of quinine

in mixtures of cinchona alkaloids, in cinchona bark, and in galenical preparations obtained from these, 1903, A., ii, 396.

Hille, Waldemar. See also Julius Tröger. Hillebrand, Silvia, serpentine and heu-

landite, 1906, A., ii, 772.

Hillebrand, William Francis, emmonsite (?) from a new locality, 1905, A., ii, 97.

two tellurium minerals from Colorado.

1905, A., ii, 723.

vanadium sulphide (patronite) and associated minerals from Peru, 1907. A., ii, 788.

influence of fine grinding on the water and ferrous iron content of minerals and rocks, 1908, A., ii, 778.

William Hillebrand, Francis. William Blum, estimation of manganese by the sodium bismuthate method, 1912, A., ii, 207.

Hillebrand, William Francis, Charles Benjamin Dudley, Clifford Richardson, and Henry Newlin Stokes, cooperative analysis of an argillaceous limestone, 1906, A., ii, 307.

Hillebrand, William Francis, Charles Benjamin Dudley, Henry Newlin Stokes, and Clifford Richardson, report from committee on uniformity in

analysis. I., 1905, A., ii, 197.

Hillebrand, William Francis, and Waldemar Theodore Schaller, mercury minerals from Terlingua, Texas: kleinite, terlinguaite, etc., 1907, A., ii, 788.

the mercury minerals from Terlingua, Texas, 1910, A., ii, 306.

Hillebrand, William Francis, and Fred Eugene Wright, new occurrence of plumbojarosite, 1910, A., ii, 966.

Hillebrand, William Francis. See also Frederick A. Canfield, Waldemar Lindgren, and Waldemar Theodore Schaller.

Hillmann, Otto. See August Michaelis. Hills, James Stuart, and William Palmer Wynne, linin, 1905, T., 327; P., 74.

Hills, James Stuart. See also Arthur

William Crossley.

Hilpert, Siegfried, genetic and constitutive relations in the magnetic properties of ferrites and of iron oxides, 1909, A., ii. 672.

Hilpert, Siegfried, reduction of iron oxide by hydrogen and carbon monoxide, 1910, A., ii, 39.

oxygen evolved from ferric oxide at high temperatures, 1910, A., ii, 130. the magnetic properties of the modifications of iron, 1910, A., ii, 579.

Hilpert, Siegfried, and Johannes Beyer, ferroso-ferric oxide and ferrous oxide,

1911, A., ii, 729.

Hilpert, Siegfried, and Edward Colver-Glauert, sulphurous acid as an etching reagent for metallographic purposes, 1910, A., ii, 900.

Hilpert, Siegfried, and Theodor Dieckmann, arsenides. I. Iron and manganese arsenides, 1911, A., ii, 985.

the ferromagnetic compounds of manganese with phosphorus, arsenic, antimony, and bismuth, 1911, A., ii, 1090.

Hilpert, Siegfried, and Gerhard Grüttner, aluminium triphenyl, 1912, A., i,

Hilpert, Siegfried, and Ernst J. Kohlmeyer, calcium ferrites, 1910, A., ii, 35.

Hilpert, Siegfried, and Walter Mathesius, magnetic properties of manganese and nickel steels, 1912, A., ii, 229.

Hilpert, Siegfried, and Richard Nacken. crystallisation of fused lead silicates, 1910, A., ii, 955.

Hilpert, Siegfried, and Paul Weiller. lead silicates, 1909, A., ii, 890. Hilpert, Siegfried. See also! Edward

Colver-Glauert, Emil Fischer, and Franz Sachs.

Hilpert, Willis Stose, stereoisomeric chloroimino-acid esters, 1908, A., i,

Hilpert, Willis Stose. See also William August Puckner.

Hilscher, Friedrich. Arthur Hantzsch.

Hiltner, Lorenz, and L. Peters, seedling diseases of sugar-beet and mangolds, 1905, A., ii, 413.

action of straw manure on the fertility

of soils, 1907, A., ii, 296. Hiltner, Lorenz, and Richard Störmer, leguminous root-nodules, 1904, A., ii, 505.

Himmelbauer, Alfred, phenyl sulphide, 1909, A., i, 570.

method for the preparation of colloidal sulphur, 1909, A., ii, 566.

the scapolite group, 1911, A., ii, 297. Himmelmann, Alfred. See Carl Dietrich Harries.

Himstedt, Franz, and Hermann von Dechend, spectral analysis of the glow light in different gases, 1909, A., ii, 3.

Himstedt, Franz, and Georg Meyer, formation of helium from the radium emanation, 1904, A., ii,

spectrum analysis of the light emitted by crystals of radium bromide, 1906, A., ii, 62; 1907, A., ii, 321.

Hinard, Gustav, estimation of "dry extract" of milk, 1907, A., ii, 590. analysis of liquids containing a large quantity of tartaric acid and small amounts of glycerol and tannin,

Hinden, Fritz, condensers with mouth-piece, 1905, A., ii, 632.

decomposition of silicates with hydrofluoric and hydrochloric acids, 1906, A., ii, 579.

Hindrichs, G., zinc-cadmium alloys, 1907, A., ii, 953.

some alloys of chromium and man-

ganese, 1908, A., ii, 856.

1911, A., ii, 942.

Hinds, John Iredelle Dillard, a simple hydrogen sulphide generator, 1911, A., ii, 272.

sulphite method for separating and identifying calcium and strontium, 1911, A., ii, 440.

precipitation of the copper-arsenic group and the separation of its divisions, 1912, A., ii, 688. Hinds, John Iredelle Dillard, and

Myrtis Louise Cullum, photometric estimation of iron, 1903, A., ii, 45.

Hine, Thomas B. See Edward Curtis Franklin.

Hines, Murray Arnold. See Gregory Paul Baxter.

Hinkel, F. C., and Henry Clapp Sherman, Barfoed's acid cupric acetate solution as a means of distinguishing dextrose from maltose, lactose, and sucrose, 1908, A., ii, 235.

Hinkel, Leonhardt E., detection of small quantities of methyl alcohol in the presence of ethyl alcohol, 1908, A., ii,

1076.

Hinkins, James Edward, formation of acids by enzymes, 1905, A., ii, 183.

James Edward. Hinkins, See also Solomon Farley Acree.

Hinrichs, Carl G., detection of nitrates by diphenylamine, 1905, A., ii, 763.

Hinrichs, Gustav Dethlef, the true atomic weight of nitrogen, 1905, A., ii, 517.

boiling points of some secondary and tertiary alcohols, 1906, A., i, 723.

Hinrichs, Gustav Dethlef, determination of the absolute atomic weight of bismuth, 1906, A., ii, 367.

absolute atomic weight of terbium,

1906, A., ii, 450.

the atomic weights of all chemical elements are commensurable and matter is uniform, 1906, A., ii, 661.

the mechanism of ionisation by solu-

tion, 1906, A., ii, 839.

melting points and boiling points of aliphatic and aromatic hydrocarbons, 1907, A., i. 269.

absolute atomic weight of dysprosium,

1907, A., ii, 91.

absolute atomic weight of bromine,

1907, A., ii, 450.

apparatus for the continuous preparation of oxygen at constant pressure, 1907, A., ii, 539.

absolute atomic weight of manganese,

1907, A., ii, 622.

absolute atomic weight of chlorine,

1907, A., ii, 679.

new method of simultaneously determining the exact atomic weights of all the elements present in a single chemical reaction, 1907, A., ii, 945.

the so-called physico-chemical atomic weights and the calculation of the weight of a normal litre of gases, 1908, A., ii, 98.

commensurability of atomic weights,

1908, A., ii, 573.

atomic weights of sixteen chemical elements, 1908, A., ii, 574.

determination of the atomic weight of the simple ponderable substance, pantogen, 1908, A., ii, 1027. synthesis of silver nitrate and deter-

mination of the atomic weight of sulphur, 1909, A., ii, 140.

true atomic weight of silver, 1909,

A., ii, 140, 808.

atomic weight of potassium, 1909,

A., ii, 400.

practical method for the simultaneous calculation of atomic weights; general results, 1909, A., ii, 653.

calculation of atomic weights; solution of the equation of condition, 1909, A., ii, 723; 1910, A., ii, 26.

practical method for the calculation of atomic weights, results obtained by its use, and some deductions drawn from it, 1910, A., ii, 285.

exact atomic weights of oxygen and silver, 1910, A., ii, 844.

atomic weight of hydrogen, 1911, A., ii, 977.

Hinrichs, Gustav Dethlef, atomic weights of the dominant elements, 1911, A., ii. 1080.

the true atomic weight of silver, deduced from the laboratory determinations of a century, 1912, A., ii, 253.

systematic errors in the determination of atomic weights, 1912, A., ii,

Hinrichsen, Friedrich Willy, volumetric estimation of titanium, 1907, A., ii,

estimation of phosphorus in calcium

carbides, 1908, A., ii, 131. preparation of pure ammonium chlor-

ide, 1908, A., ii, 494. theory of the vulcanisation of caout-

chouc, 1911, A., i, 550. cold vulcanisation, 1911, A., i, 550.

Hinrichsen, Friedrich Willy, and Otto Bauer, micro-chemical detection of sulphur, selenium, and tellurium in copper, 1907, A., ii, 650.

Friedrich Willy, and Hinrichsen, Theodor Dieckmann, analysis chromium tungsten-steel, 1911, A., ii,

Hinrichsen, Friedrich Willy, and Erich Kedesdy, gall-iron inks, 1908, A., ii, 544.

Hinrichsen, Friedrich Willy, Erich Kedesdy, Victor Rodt, and Friedrich Thomas, estimation of alumina in silicates, 1907, A., ii, 506.

Hinrichsen, Friedrich Willy, and Richard Kempf, hydrogenation of

benzene, 1912, A., i, 686.

Hinrichsen, Friedrich Willy, and Erich Kindscher, theory of the cold vulcanisation of rubber, 1910, A., i, 330.

molecular complexity of caoutchouc in the milk, 1910, A., ii, 62.

direct estimation of caoutchouc as tetrabromide, 1911, A., ii, 445. the desulphurisation of vulcanised

caoutchouc, 1912, A., i, 706.

theory of the vulcanisation caoutchouc, 1912, A., i, 1007.

Hübener's method of estimating caoutchouc as its bromide, 1912, A., ii, 397.

Hinrichsen, Friedrich Willy, Oscar Lohse, and Marie Reimer, unsaturated compounds. II., 1905, A., i, 132.

Hinrichsen, Friedrich Willy, Marie Reimer, and Wilhelm Triepel, additive reactions in compounds with conjugated carbon linkings, 1904, A., i, 415, 1012,

Hinrichsen, Friedrich Willy, and Eugen Sachsel, formation and solubility of double chlorides of iron and the alkali metals, 1905, A., ii, 92.

Hinrichsen, Friedrich Willy, and (Miss) Naima Sahlbom, atomic weight of tantalum, 1906, A., ii, 763.

Hinrichsen, Friedrich Willy, and Tosio Watanabe, separation of silver from silver sulphide in the presence of mercury, 1906, A., ii, 85.

Hinrichson, Friedrich Willy, and Ludvoig Wolter, estimation of chromium and tungsten in steel, 1908, A., ii,

900.

Hinrichsen, Friedrich Willy. See also Richard Abegg, Jacobus Henricus van't Hoff, Ewald Rasch, and (Miss) Naima Sahlbom.

Hinsberg, Oscar [Heinrich Daniel], action of benzenesulphinic acid on phenols and aromatic amines, 1903, A., i; 251.

strain-laws of ring-systems, 1904, A.,

i, 200.

methylation of dibenzenesulphonebenzidine, 1905, A., i, 241.

action of sulphur on aniline and aniline hydrochloride, 1905, A., i, 339.

[thioanilines], 1905, A., i, 518. dihydroazines, 1905, A., i, 840; 1909,

A., i, 845. isomerism of ar-thio-compounds, 1906,

A., i, 654. decomposition of dinitrophenyl thio-

cyanate, 1907, A., i, 124. isomerism of disulphides, 1908, A., i,

257.

glycine and indole derivatives, 1908, A., i, 453.

hydroxyquinoxalines, 1908, A., i, 694. preparation and constitution of sulphoxides and disulphoxides, 1908, A., i, 875.

constitution of disulphoxides. II., 1909, A., i, 6.

a- and B-acetanilide disulphoxide, 1909, A., i, 374.

behaviour of phenyl sulphide towards hydrogen peroxide, 1910, A., i, 164.

colourless and yellow thiosalicylic [o-thiolbenzoic] acids, 1910, A., i, 260. synthetical experiments with esters of thiodiglycollic acid, 1910, A., i,

334. synthetical experiments with o-xylylene cyanide, 1910, A., i, 486.

behaviour of aromatic disulphides at high temperatures, 1910, A., i, 553. ionogenic atomic groups and atoms, 1911, A., ii, 873. Hinsberg, Oscar [Heinrich Daniel], sulphoxide and sulphone groups, 1912, A., i, 546.

the action of light on sulphoxides and sulphides, 1912, A., i, 852.

thiophen and furan derivatives, 1912, A., i, 894.

Hinsberg, Oscar, and Johannes Kessler, separation of primary and secondary amines, 1905, A., i, 338.

action of alkylene haloids on m- and pdibenzenesulphophenylenediamines,

1905, A., i, 722.

Hinsberg, Oscar, and Ernst Roos, some constituents of yeast, 1903, A., ii, 565; 1904, A., ii, 760.

Hinsberg, Oscar, and Erhard Schwantes, compounds with two and three azine

rings, 1904, A., i, 198.

Hinselmann, Hans, degradation of glycogen and formation of sugar in the liver of normal dogs, and of those deprived of their pancreas, 1904, A., ii, 818.

Hinterlach, Ernst. See Hans Rupe. Hinterskirch, Wilhelm, estimation of total sulphur in ichthyol preparations by means of sodium peroxide, 1907, A., ii, 393.

Hintikka, S. V., and Gustav Komppa, the camphenilone group. II. iso-Camphenilone and constitution of camphenilene and of apobornylene, 1912, A., i, 278.

Hintikka, S. V. See also Gustav Komppa.

Hintz, Ernst [J.], the arsenic content of the Max spring at Dürkheim a.d. Haardt, 1910, A., ii, 510.

Hints, Ernst, and Leo Grünhut, physicochemical analysis of mineral water,

1908, A., ii, 1075.

improved method for analysis of gases from mineral springs, 1910, A., ii, 356, 1111.

Hinz, Friedrich, electrolytic preparation of magnesium and zinc peroxides, 1904, A., ii, 562.

Hiorns, Arthur H., alloys of copper and bismuth, 1905, A., ii, 461.

effect of certain elements on the structure of cast iron, 1906, A., ii, 169.

effect of certain elements on the structure and properties of copper, 1906, A., ii, 613.

Hiorns, Arthur H., and Samuel Lamb, influence of small quantities of arsenic and antimony on copper, 1909, A., ii, 578.

Hirata, D., ferment concentration in pure pancreatic juice, 1910, A., ii, 423. Hirata, Goichi, the relationship between the anti-trypsin of the blood and that of the urine, 1910, A., ii, 971.

the quantitative relations of diastase in different organs of different animals, 1910, A., ii, 979.

diastase in the blood and urine of rab-

bits, 1910, A., ii, 981. Hirata, Toshio, viscosity of dilute alcoholic solutions, 1908, A., ii, 930.

Hirayama, K., some picryl derivatives of protein fission products, 1909, A., i, 341.

action of some acid chlorides on prot-

amines, 1909, A., i, 344.

proteolytic ferments, 1910, A., i, 449. Hird, James Morton. See Gilbert Thomas

Morgan. Hirn, Tavi. See Gustav Komppa.

Hirniak, Julius, periodic reactions,

1911, A., ii, 196.

Hirobe, H., the fusion surfaces of the system naphthalene-chlorobenzenephenol, and the molecular association

of phenol, 1908, A., ii, 928. Hirokawa, Waichi, the influence long-continued ingestion of nucleic acid on the purine metabolism and the excretion of allantoin in the dog, 1910, A., ii, 787.

Hirosé, Vasusabro, reduction of some hydroxyanthraquinones, 1912, A., i, 875.

Hirsch, Alcan, preparation and properties of metallic cerium, 1912, A., ii, 258.

Hirsch, Alcan. See also Eugene Paul Schoch.

Hirsch, Carl, and Ed. Stadler, macroscopic detection of leucocytosis, 1904, A., ii, 304.

Hirsch, Julius, influence of formaldehyde on the energy of increase, the fermentation energy, and the duration of generation of different varieties of yeast, 1906, A., ii, 42.

Hirsch, Paul. See Emil Abderhalden,

and Oscar Piloty.

Hirsch, Rahel, glycolytic action of the liver, 1904, A., ii, 60.

Hirsch. Rahel. See also Theodor

Brugsch.

Hirsch, Robert, constitution of the nitrophenols and nitroanilines, 1903, A., i, 623.

Hirsch, Rudolf (Freiherr) von, formation of gas in discharge tubes, 1908, A., ii, 925.

Hirsch, Rudolf (Freiherr) von, and Frederick Soddy, a gas generated from aluminium electrodes, 1908, A., ii, 12. Hirschberg, Else. See Carl Neuberg. Hirschberg, Leon. See Reinhold von Walther.

Hirschberg, Zacharias. See Pavel Iw. Petrenko-Kritschenko, and

Hirschel, Wilhelm, safety pipette, 1904,

A., ii, 439.

Hirehfeld, Ludwig, hæmagglutination and its physical basis, 1908, A., ii, 402.

Hirschkind, Wilhelm, the reversible action of oxygen on magnesium chlor-

ide, 1910, A., ii, 613. Hirschsohn, Eduard, 1903, A., i, 355. Mecca balsam,

Hirschstein, Ludwig, the origin of glycine from uric acid, 1909, A., ii, 77.

Hirszowski, Alfred. See Emil Abderhalden.

Hirt, W. See Karl Auwers.

Hirt, W. B., and Frederick William Steel, a rapid volumetric method for the estimation of phosphoric acid, 1905, A., ii, 857.

Hirtz, Heinrich. See Ludwig Mond. Hissink, David Jacobus, estimation of fat and sugar in molasses foods

1904, A., ii, 523.

Deli tobacco, 1905, A., ii, 414. estimation of calcium in soil, 1906,

A., ii, 396. chemical and physical action of brine on soils, 1906, A., ii, 701.

effect of solutions of various salts on the permeability of the soil, 1907, A., ii, 984.

Mitscherlich's method for estimating very small quantities of nitrogen,

1909, A., ii, 435.

estimation of phosphoric acid in manures by Pemberton's modified process and by von Lorentz's method, 1909, A., ii, 437.

the colloidal substances in the soil and their estimation, 1911, A., ii,

443.

chemical and physical nature of red soils, 1912, A., ii, 981.

Hissink, David Jacobus, and H. van der Waerden, Pemberton's method for the estimation of phosphoric acid, 1905, A., ii, 419.

Hittorf, [Johann] Wilhelm, behaviour of diaphragms in the electrolysis of salt solutions. II., 1903, A., ii, 406.

Hladík, Jaroslav, crotonaldazine and its conversion into 5-methylpyrazoline, 1903, A., i, 740.

vaporisation in vacuum, 1910, A., ii, 930.

Hlavnička, Ottokar Josef, titration of phosphoric acid, 1905, A., ii, 419.

Hlawatsch, Carl, amphibole from Cevadaes, Portugal, 1906, A., ii, 775. crystal measurements, 1907, A., ii, 101.

Hoagland, D. R. See Carl L. A. Schmidt.

Hoagland, Ralph, estimation of gliadin or alcohol-soluble protein in wheat flour, 1912, A., ii, 706.

Hobein, Richard. See Max Busch. Hoben, F. M. See Charles James.

Hober, Rudolf, and Felix Sperling, the division of the blood sugar between the corpuscles and plasma, 1912, A., ii, 1064.

Hocheder, Ferdinand. See Richard Willstätter.

Willstatte

Hochheim, Ernst, determination of the dielectric constant of helium, 1908, A., ii, 654.

Hochstetter, Armin, action of water on pentamethylene bromide, 1903, A., i, 305.

Hochstetter, Armin, and Moritz Kohn, action of methylamine and dimethylamine on mesityl oxide, 1904, A., i, 18.

Hochstetter, Armin. See also Wilhelm Froebe.

Hock, Heinrich. See Karl Andreas

Hock, Karl, bases derived from hexamethylenetetramine, 1903, A., i, 465.Hock, Karl. See also Max Conrad.

Hock, Theodor. See Herman Decker, and Alfred Schmid.

Hocson, Felix. See Hans Aron.

Hodge, Willard Wellington. See Treat Baldwin Johnson.

Hodges, E. Rattenbury, an organo-metallic compound of the aniline series, 1911, A., i, 191.

a simple hydrogen sulphide apparatus,

1911, A., ii, 1084.

Hodgkinson, William Richard Eaton, and Arthur Herbert Coote, apparatus for heating substances in a vacuum at constant temperatures, 1905, A., ii, 488.

Hodgson, B., absorption in Geissler tubes and allied phenomena, 1912, A.,

ii, 725.

Hodgson, Herbert Henry, some reactions of phenyl iodochloride and iodosobenzene acetate, 1909, A., i, 18.

the action of sulphur on amines. Part I. o-Toluidine, 1912, T., 1693; P., 222.

Hodgson, Herbert Henry. See also Walter Myers Gardner, and Julius Schmidlin.

Hodgson, Thomas Reginald, a comparison and criticism of the methods for the detection and estimation of cocoanut oil in butter, 1907, A., ii, 315.

separation of mixtures of some aliphatic acids by means of benzene and toluene, 1909, A., ii, 947.

Hodsman, Henry James. See Julius Berend Cohen, and Fritz Haber.

Hodurek, Rudolph, detection of small quantities of colophony in naphthalene, 1903, A., ii, 336.

Hoebel, Otto, alkyl derivatives of methyluracil, 1907, A., i, 557.

Höber, Rudolf [Otto Anselm], intestinal absorption, 1903, A., ii, 309.

acidity of urine, 1903, A., ii, 441. hydroxyl ions of the blood. II., 1904, A., ii, 55.

permeability to ions of blood-corpuscles, 1904, A., ii, 352.

absorption and kataphoresis, 1904

influence of salts on the resting current of frog's muscle, 1905, A., ii, 270.

action of normal salts, 1908, A., ii, 28. physical chemistry of excitation (of muscle) and of narcosis, 1908, A., ii, 121.

the influence of normal salts or hæmolysis, 1909, A., ii, 70.

the significance of the cataphoresis of blood-corpuscles, 1909, A., ii, 903. the permeability of cells for dyes,

1909, A., ii, 912.

action of normal salts in physiological processes, 1910, A., ii, 330.

action of some organic salts of the alkalis on muscle, blood-corpuscles, protein, and lecithin, 1910, A., ii, 878.

Höber, Rudolf, and S. Chassin, colloid nature of pigments in relation to their behaviour in the frog's kidney, 1908, A., ii, 875.

Höber, Rudolf, and Dora Gordon, the physiological significance of colloids, 1904, A., ii, 830.

Höber, Rudolf, and M. Iwaschkiewitsch, action of alkali salts on ciliated epithelium, 1909, A., ii, 598.

Höber, Rudolf, and Felicja Kempner, excretion of pigments by the urine, 1908, A., ii, 716.

Höber, Rudolf, and Heinrich Walden-

berg, the influence of salts of strong organic bases on the resting current and excitability of frog's muscle, 1909, A., ii, 251.

Höbold, Kurt. See Karl Andreas Hofmann. Höchtlen, Friedrich. See Karl Andreas Hofmann.

Höckendorf, Paul, the influence of certain alcohols, hydroxy- and aminoacids of the aliphatic series on the sugar and nitrogen excretion in phloridzin diabetes of the dog. I., 1910, A., ii, 146.

Hödtke, Otto. See Heinrich Biltz.

Höfchen, C. See Eduard Vongerichten. Höfker, Johannes. See August Michaelis. Höfle, J., and Gottfried Vervuert, potas-

sium mercuri-iodide, 1909, A., i, 1014.

Höglund, Axel Th., estimation of sugar in sugar-beets, 1906, A., ii, 130.

Höhn, Fritz, and Ignaz Bloch, dithioacids (carbithionic acids), 1911, A., i, 48.

Höhn, Fritz. See also Ignaz Bloch.

Hoehn, Karl. See Rudolf Friedrich Weinland.

Höing, A. See Kurt Brand.

Hoelken, August. See August Michaelis. Höller, Hermann. See Emil Fromm.

Hoeller, Victor, the long wave-length portion of the barium spectrum, 1908, A., ii, 546.

Hölter, Lothar. See Hermann Grossmann.

Hönel, Herbert. See Robert Kremann. Hoenen, Petrus Hubertus Jacobus. See Frans Antoon Hubert Schreinemakers.

Hönig, Max, estimation of perchlorates, 1903, A., ii, 237.

Hönig, Samuel, estimation of hydrofluosilicic acid, 1908, A., ii, 65.

Hönigsberger, Fritz. See Paul Jacobson. Hönigschmid, Otto, phenyl naphthyl ethers and hydroxyphenylnaphthalenes, 1903, A., i, 165.

reduction of diphenylene oxide and the dinaphthylene oxides, 1903,

A., i, 165.

thorium-aluminium alloy, 1906, A., ii, 173.

a silicide of thorium, 1906, A., ii, 173. zirconium silicide, ZrSi₂, and titanium silicide, TiSi₂, 1906, A., ii, 678.

artificial corundum, 1907, A., ii, 873. molybdenum silicide, MoSi₂, tungsten silicide, WSi₂, and tantalum silicide, TaSi₂, 1907, A., ii, 877.

silicone, 1909, A., ii, 805.

silicides of the metals of the alkaline earths, 1909, A., ii, 808.

calcium silicides, 1910, A., ii, 503.
revision of the atomic weight of
radium and the preparation of
standards of radium, 1912, A., ii,
523.

Hönigschmid, Otto. See also Guido Goldschmiedt, Hans Meyer, Henri Moissan, and Theodore William Richards.

Hoepner, C. See Wilhelm Traube.

Hörhammer, Clemens, the calcium content of the cell-nucleus, 1912, A., ii, 459.

Hoering, Paul, anethole, 1904, A., i, 577. oxides of propenylphenol ethers and their conversion into the isomeric ketones, 1905, A., i, 592.

dibromides of aromatic propenyl compounds. III. Behaviour of anethole dibromide and isosafrole dibromide on oxidation, 1905, A., i, 902.

dibromides of aromatic propenyl compounds. IV. Substitution in, and elimination of bromine atoms from, dibromides, 1905, A., i, 903.

dibromides of aromatic propenyl compounds. V. Oxides of propenyl compounds and their reactions, 1905, A., i, 903.

preparation of anethole and isosafrole

oxides, 1906, A., i, 951.

dibromides of aromatic propenyl compounds. VI. Tribromoisosafrole dibromide, 1907, A., i, 411.

piperonylacrylic acid dibromide and its ethyl ester, 1907, A., i, 624.

preparation of dialkylbromoacetamides from dialkylcyanoacetic acids, 1907, A., i, 1017.

alkylene glycol-chlorohydrin ethers and their transformations, 1908, A., i, 119.

alkylene glycol-chlorohydrin ethers and Tiffeneau's wandering of phenyl, 1908, A., i, 497.

methylenedioxyhydratropic acid; Tiffeneau's migration of the phenyl group, 1908, A., i, 895.

alkylated halohydrin and vinyl ethers,

1909, A., i, 81.

Hoering, Paul, and Fritz Baum, chlorinating action of phosphorus pentachloride and the action of thionyl chloride on carbonyl compounds, 1908, A., i, 527.

a method of applying the Grignard reaction to hydroxyaldehydes and alkyl hydroxycarboxylates, 1909, A., i, 570.

preparation of tertiary aromatic alcohols, 1909, A., i, 571.

preparation of alkoxymethyl ethers of aromatic hydroxy-compounds, 1909, A., i, 572.

stereochemistry of ethylene derivatives: two stereoisomeric isosafroles, 1909, A., i, 788. Hoering, Paul, and Karl Paul Grälert, so-called photoanethole; a contribution to the chemical action of light, 1909, A., i, 378.

Hörlein, Heinrich, and Rudolf Kneisel, formation of an octacyclic polymeride from γ-chloropropylpiperidine, 1906, A., i, 458.

Hörlein, Heinrich. See also Fritz Ach, and Ludwig Knorr.

Hörmann, Paul. See Josef König. Hoernes, Philipp. See Alex. Adensamer, and Zdenko Hanns Skraup.

Hörnstein, Franz. See Carl Paal. Hörth, Franz. See Reginald Oliver

Herzog.

Hoesch, Alfred. See Theodor Curtius.

Hoesch, Kurt. See Emil Fischer.

Hoessli, Hans. See Emu Fischer. Hoessli, Hans. See Franz Knoop.

Hoesslin, Heinrich von, the fate of choline in the animal body, 1906, A., ii, 294.

chemical changes in the blood after bleeding, 1906, A., ii, 776.

physiology and pathology of sodium chloride metabolism, 1910, A., ii, 424.

digestion of cellulose. II. The ingestion of cellulose by the dog, 1910, A., ii, 877.

Hoesslin, Heinrich von, and E. J.
Lesser, the decomposition of cellulose in the horse's cæcum, 1910, A., ii, 626.

velocity of decomposition of foodprotein and body-protein, 1911, A., ii, 904.

Höyrup, Margrethe. See Sören Peter Lauritz Sörensen.

Hof, Hans, magnesium oxychloride formed by electrolysis of the residual solutions from the manufacture of potassium chloride, and its importance for the preparation of bromine by Kossuth and Mehns's method, 1908, A., ii, 946.

magnesium oxychlorides, 1909, A., ii,

action of lead oxide and some lead salts on concentrated solutions of magnesium chloride and a new process for making white lead, 1909, A., ii, 889.

Hofbauer, J., uptake of iron by the human placenta from the maternal blood. I., 1904, A., ii, 185.

blood. I., 1904, A., ii, 185. the occurrence of glyoxylic acid in the puerperal period, 1907, A., ii, 901.

Hofbauer, P. H., new formulæ for representing the vapour pressure of water vapour, 1912, A., ii, 735.

Hofer, Huns, and Fritz Jakob, partial electrolytic reaction of polynitro-compounds in the presence of vanadium compounds, 1908, A., i, 869.

Hofer, Hans, and Martin Moest, [electrolysis of potassium acetate], 1905,

A., i, 8.

Hofer, Hans. See also Wilhelm Muthmann.

Hoff, Agnes. See Einar Billmann.

Hoff, Jacobus Henricus van't, phase rule, 1903, A., ii, 135.

formation of oceanic salt deposits, particularly of the Stassfurt beds. XXVIII. Artificial preparation of kaliborite, 1903, A., ii, 143.

molecular rise of the critical temper-

ature, 1904, A., ii, 237.

influence of the change of specific heat on the work done in a transition, 1904, A., ii, 381.

oceanic salt deposits. XLII. Formation of glauberite, 1905, A., ii, 464.

formation of oceanic salt deposits; the occurrence of calcium compounds up to 25°, 1906, A., ii, 36.

geological thermometer, 1906, A., ii, 36.

formation of oceanic salt deposits. XLVIII. Limit of existence and decomposition of boronatrocalcite; tricalcium pentaborate and the artificial production of pandermite, 1906, A., ii, 619.

formation of oceanic salt deposits. XLIX. Artificial production of cole-

manite, 1906, A., ii, 863.

formation of oceanic salt deposits. L. Franklandite, and a new compound related to boronatrocalcite, 1907, A., ii, 363.

formation of oceanic salt 'deposits. LI. Borocalcite and the artificial preparation of ascharite, 1907, A.,

ii, 702.

synthetical enzyme action, 1909, A., ii, 988; 1911, A., i, 99.

apparatus for testing gypsum, 1910, A., ii, 348.

Hoff, Jacobus Henricus van't, Edward Frankland Armstrong, Friedrich Willy Hinrichsen, Fritz Weigert, and Gerhard Just, gypsum and anhydrite, 1904, A., ii, 35.

Hoff, Jacobus Henricus van't, and Hermann Barschall, formation of oceanic salt deposits, particularly of the Stassfurt beds. XXX. The isomorphous mixtures glaserite, arkanite, aphtalose, and sodium potassium simonyite, 1903, A., ii, 434.

Hoff, Jacobus Henricus van't, and Hermann Barschall, mutual relationship of potassium and sodium sulphates, 1906, A., ii, 666.

Hoff, Jacobus Henricus van't, and Ulrich Behn, reciprocal transformation of calcium monoborates, 1906, A., ii,

668.

Hoff, Jacobus Henricus van't, and Walter Charles Blasdale, formation of oceanic salt deposits. XLIII. Calcium content of the constant solutions at 25°, 1905, A., ii, 641. formation of oceanic salt deposits.

formation of oceanic salt deposits. XLV. Formation of tineal and octahedral borax, 1906, A., ii, 177.

Hoff, Jacobus Henricus van't, and Johannes D'Ans, formation of oceanic salt deposits. XLIV. Limit of existence of tachhydrite at 88°, 1906, A., ii, 36.

formation of oceanic salt deposits.

XLVII., 1906, A., ii, 456.

Hoff, Jacobus Henricus van't, and Peder
Farup, formation of oceanic salt deposits. XXXIII. Deposition of the calcium salts anhydrite, glauberite, syngenite, and polyhalite at 25°, 1904, A., ii, 34.

Hoff, Jacobus Henricus van't, Peder Farup, and Johannes D'Ans, formation of oceanic salt deposits. XLVI. Anhydrite, syngenite, glauberite, and penta-salt at 83°, and the formation of calcium chloride and tachhydrite,

1906, A., ii, 236.

Hoff, Jacobus Henricus van't, Arthur Geiger, and Ludwig Anton Lichtenstein, formation of oceanic salt deposits. XXXVII. Potassium pentacalcium sulphate and a double compound analogous to kaliborite, 1904, A., ii, 561.

Hoff, Jacobus Henricus van't, Ugo Grassi, and Robert Beckett Denison, formation of oceanic salt deposits. XXXIV. Maximal tension of constant solutions

at 83°, 1904, A., ii, 417.

Hoff, Jacobus Henricus van't, and Gerhard Just, hydraulic or so-called Estrich gypsum, 1903, A., ii, 368.

studies on the formation of oceanic salt deposits. XXXI. The lower temperature limit of formation of vanthoffite at 46°, 1903, A., ii, 555.

Hoff, Jacobus Henricus van't, and Ludvig Anton Lichtenstein, formation of oceanic salt deposits. XL. Limits of existence of tachhydrite, 1905, A., ii, 262. Hoff, Jacobus Henricus van't, and Wilhelm Meyerhoffer, formation of oceanic salt deposits. XXIX. The temperature of formation of "Hartsalz," 1903, A., ii, 144.

formation of oceanic salt deposits.

XXXII., 1903, A., ii, 555.

formation of oceanic salt deposits. XXXVI. Combination of minerals from 25° to 83°, 1904, A., ii, 492.

formation of oceanic salt deposits. XXXIX. Temperatures of transformation below 25°, 1905, A., ii, 175.

Hoff, Jacobus Henricus van't, Hans
Sachs, and Otto Biach, formation of oceanic salt deposits. XXXV. Composition of the constant solutions at 83°, 1904, A., ii, 417.
Hoff, Jacobus Henricus van't, and Ge-

Hoff, Jacobus Henricus van't, and Gerardus Leonardus Voerman, identity of mamanite with polyhalite, 1904,

A., ii, 570.

Hoff, Jacobus Henricus van't, Gerardus Leonardus Voerman, and Walter Charles Blasdale, formation of oceanic salt deposits. XLI. Temperature of formation of potassium pentacalcium sulphate, 1905, A., ii, 319.

Hoff, Jacobus Henricus van't. See also

Wilhelm Meyerhoffer.

Hoffbauer, O. See Alexander Tschirch. Hoffheinz, Martha. See Jakob Meisenheimer.

Hoffman, Alfred, condensation of acetone by calcium oxide, 1909, A., i, 553.

preparation of diacetone alcohol from acetone, 1911, A., i, 415.

Hoffman, Alfred. See also Marston Taylor Bogert, and Friedrich Wilhelm Semmler.

Hoffman, Charles. See Treat Baldwin Johnson, and Henry Lord Wheeler.

Hoffman, Ernest Jenkins. See Harmon Northrop Morse.

Hoffman, William Edwin, jun. See John Bishop Tingle.

Hoffmann, Berthold. See Alfred Stock. Hoffmann, Conrad, the relation of soil bacteria to the decomposition of nitrogenous organic matter, 1908, A., ii, 414.

Hoffmann, Conrad, and B. W. Hammer, some factors concerned in the fixation of nitrogen by azotobacter, 1910, A., ii. 988.

Hoffmann, La Roche & Co., F., chloralacetonechloroform, 1904, A., i, 650. benzoylsalicylic [o-benzoyloxybenzoic] acid, 1906, A., i, 669. Hoffmann, La Roche & Co., F., preparation of sodium theobromine formate, 1906, A., i, 881.

preparation of double salts from caffeine and alkali metaphosphates,

1908, A., i, 825.

preparation of cotarnine cholate, 1909, A., i, 253,

preparation of guaiacol-5-sulphonic acid and its salts, 1909, A., i, 789.

preparation of carbonatoguaiacol-5sulphonic acid and its salts, 1910, A., i, 167.

preparation of hexamethylenetetraminetriguaiacol, 1910, A., i, 378.

a solid molecular compound of hexamethylenetetramine and guaiacol, 1911, A., i, 127.

preparation of unsaturated dihalogenated aliphatic acid chlorides, 1911,

A., i, 601.

separation of m- and p-cresols, 1912,

A., i, 549.

preparation of pure m-cresol, 1912,

A., i, 849.

preparation of sulphuric acid esters of alkylamine hydroxy-acid esters, 1912, A., i, 896.

preparation of sulphuric acid esters of alkylammonium salts of hydroxyacid esters of alkylamines, 1912, A., i, 897.

preparation of aposcopolamine, 1912, A., i, 1014.

Hoffmann, Felix. See Otto Stark.

Hoffmann, Friedrich, and Kurt Langbeck, influence of one substance on the solubility of another substance, 1905, A., ii, 374.

Hoffmann, Friedrich, and Rudolf Rothe, change of state of liquid sulphur, 1906, A., ii, 279; 1907, A., ii,

539

expansion of commercial pentane and the scale of the pentane thermo-

meter, 1908, A., ii, 152.

Hoffmann, Fritz, the conversion of percentages by weight into atomic or molecular percentages in ternary and quaternary systems, 1912, A., ii, 340.

Hoffmann, Gerhard, diffusion of thorium-

X, 1907, A., ii, 4.

Hoffmann, George Christian, souesite, a native iron-nickel alloy from British Columbia, 1905, A., ii, 328.

Hoffmann, Hugo. See Carl Adam

Bischoff.

Hoffmann, Josef, Knapp's boron-ultramarine, 1906, A., ii, 545.

preparation of boron sulphide from ferroboron, 1906, A., ii, 745.

Hoffmann, Josef, preparation of boron sulphide from manganese boride, 1907, A., ii, 82.

synthesis of boron sulphide from ferroboron and manganoboron, 1908, A...

ii, 687.

action of chlorine on ferroboride and manganese boride at high tempera-

ture, 1909, A., ii, 48.

the behaviour of Goldschmidt's ferroboron and manganese-boron on heating in chlorine and hydrogen sulphide, and the probable chemical nature of borides, 1910, A., ii, 508.

Goldschmidt's ferroboron and manganese-boron, and the residue obtained on heating ferroboron in hydrogen sulphide, 1910, A., ii,

solid solutions of iron and manganese borides, 1911, A., ii, 116.

two new methods for the preparation of hydrogen borides, 1911, A., ii, 279.

preparation of selenium boride from iron and manganese borides, 1911, A., ii, 721.

colours due to sulphur, 1912, A., ii, 752.

Hoffmann, Joh. Friedrich, dampness of grain, 1905, A., ii, 753. two catalyses which can be represented

by equations, 1907, A., ii, 18. Hoffmann, Karl. See Henri Moissan.

Hoffmann, Martin, condensation of omethylquinaldine [2:8-dimethylquinoline] with aldehydes, 1906, A., i, 40.

Hoffmann, Martin. See also Carl Renz.
Hoffmann, Max, manurial experiments with lime, 1906, A., ii, 193.

Hoffmann, Max. See also Carl Bloch, and Friedrich Kretschmer.

Hoffmann, Max Konrad, formulation and nomenclature of inorganic compounds, 1910, A., ii, 196.

Hoffmann, Paul, quillajic acid, 1903, A., i, 846.

the action currents of muscle poisoned with veratrine, 1912, A., ii, 374.

Hoffmann, Robert. See Eduard Buchner.

Hoffmann, Wilhelm, influence of carbon dioxide under high pressure on the bacteria in water and in milk, 1906, A., ii, 695.

solubility of iron in vinegar, 1907, A.,

ii, 54. Hoffmann, Wilhelm. See also Fritz Rothenbach.

Hoffmeister, Camill, wax of flax, 1903, A., ii, 448.

Hoffmeister, Camill, presence of a gaseous hydride of calcium in technical acetyl-

ene, 1906, A., ii, 162.

Hoffmeister, Wilhelm, behaviour of "soluble" phosphoric acid and its behaviour of movements in the soil, 1906, A., ii,

Hofmann, Adolf, hydrazones of sugars and their acetates, 1909, A., i, 519.

Hofmann, Adolf, and František Slavík, manganese minerals from Veitsch, Styria, 1910, A., ii, 314.

Hofmann, Alexander. See Carl Hell.

Hofmann, Br. See Josef Herzig.

Hofmann, Franz, harmfulness of boric acid, 1903, A., ii, 317.

Friedrich. Hofmann, See Arthur Hantzsch.

Hofmann, Fritz, synthetic caoutchouc,

1912, A., i, 706.

Hofmann, F. B., chemical excitation and paralysis of non-medullated nerves and smooth muscle in invertebrates: investigations on the chromatophores of cephalopods, 1910, A., ii, 523.

Hofmann, H. O., and W. Mostowisch. the reduction of calcium sulphate by carbon monoxide and by carbon, and the oxidation of calcium sulphide, 1912, A., ii, 159.

Hofmann, J. A. See Torald Sollmann. Hofmann, Kurt. See Robert Stollé.

Hofmann, Karl Andreas, the characterisation of lead: reply to Clemens Winkler, 1904, A., ii, 485.

action of acetylene on mercuric chloride solution, 1905, A., i, 2, 268.

action of sulphur on aniline and aniline hydrochloride, 1905, A., i, 427.

explosive mercury compounds, 1905, A., i, 513.

compounds of chromium tetroxide with ethylenediamine and hexamethylenetetramine, 1906, A., i, 805. Prussian blue and Turnbull's blue,

1909, A., i, 637.

zirconia and erbia from titanium minerals, 1910, A., ii, 1073.

Hofmann, Karl Andreas, and H. Arnoldi, remarkable difference in the behaviour of homologous molecules towards ammonio-nickel cyanide, 1906, A., i, 153.

decomposition of hydroxylamine in presence of hydrogen ferrocyanide: formation of crystalline ferrocyanideviolet and nitroprusside, 1906, A., i,

diazonium perchlorates 1906, A., i, 907.

Hofmann, Karl Andreas, H. Arnoldi, and Heinrich Hiendlmaier, iron-cyanogen compounds. IV., 1907, A., i, 196.

Hofmann, Karl Andreas, and Ernst Biesalski, amidosulphonic acid, 1912,

A., i, 444.

Hofmann, Karl Andreas, Ernst Biesalski, and Ella Söderlund, sulphonated metalamides of mercury, silver, and gold, obtained from amidosulphonic acid, 1912, A., ii, 765.

Hofmann, Karl Andreas, and Karl Buchner, compounds of cobaltinitrites with p-toluidine, diazoaminotoluene, hydrazine, and nitrosohydrazine, 1908, A., i, 875.

guanidine perchromate, 1909, A.,i, 636. action of guanidine carbonate on sodium cobaltinitrite: trihydroxotrinitrocobaltiate, 1909, A., i, 775. nitritoplato-acids, 1909, A., i, 783.

Hofmann, Karl Andreas, and Günther Bugge, comparisons of nitriles and isonitriles in their behaviour towards metallic salts: constitution of double cyanides, 1907, A., i, 489.

crystalline iron methoxides, 1907, A.,

i. 887.

compounds of ethylcarbylamine with cobaltous, ferrous, and chlorides, 1907, A., i, 904.

platinum-blue, 1908, A., i, 141. spectrum of neo-erbium oxide and Kirchhoff's law, 1908, A., ii, 1002.

Hofmann, Karl Andreas, and Oskar Krafft Heinrich Burger, cobalti-nitrates, 1907, A., i, 751.

neo-erbium, 1908, A., ii, 189. Hofmann, Karl Andreas, and Wilhelm Ducca, phosphorescent substances, 1904, A., ii, 690.

Hofmann, Karl Andreas, and Oskar Ehrhart, melamazine from hydrazine salt and dicyanodiamide, 1911, A., i, 843.

action of hydrazine on dicyanodiamide,

1912, A., i, 919.

Hofmann, Karl Andreas, and Heinrich Feigel, decompositions of ethanemercarbide with alkali sulphites and sulphur chloride, 1905, A., i, 867.

Hofmann, Karl Andreas, and Karl Ludwig Gonder, compounds of bismuth salts with thiocarbamide, 1904, A., i,

Hofmann, Karl Andreas, Karl Ludwig Gonder, and Valentin Wolfl, induced radioactivity, 1905, A., ii, 71.

Hofmann, Karl Andreas, Otto Heine, and Friedrich Höchtlen, blue iron-cyanogen compounds, 1905, A., i, 38.

Hofmann, Karl Andreas, and Heinrich Hiendlmaier, ammonium salt of chromatodiperacid, 1904, A., ii, 410.

ammonium hydrogen salt of chromatodiperacid, 1904, A., ii, 737.

simple method for the preparation of pyridine perchromate for demonstration purposes, 1905, A., i, 821.

perchromates, 1905, A., ii, 716.

oxidation by burning potassium, 1906, A., ii, 747.

Hofmann, Karl Andreas, and Heinrich Hock, diazoaminotetrazolic acid, 1910, A., i, 547.

nitrogen chains: diazohydrazides from diazotetrazole, 1911, A., i, 1047.

Hofmann, Karl Andreas, Heinrich Hock, and Heinrich Kirmreuther, action of nitrous acid on aminoguanidine and on semicarbazide; difference between the tetrazen, C₂H₈ON₂, and azoimides in their behaviour towards hydriodic acid, 1911, A., i, 359.

Hofmann, Karl Andreas, Heinrich Hock, and Rudolf Roth, diazohydrazo-compounds (tetrazens); diazo-compounds from aminoguanidine, 1910, A., i,

446.

Hofmann, Karl Andreas, and Kurt Höbold, perchlorates of the choline and neurine group; detection of choline and neurine, 1911, A., i, 608.

Hofmann, Karl Andreas, Kurt Höbold, August Metzler, and Rudolf Roth, ammonium and oxonium perchlorates; relationship between constitution and behaviour towards water, 1910, A., i, 818.

Hofmann, Karl Andreas, Kurt Höbold, and Fritz Quoos, ammonium and sulphonium perchlorates; relations between solubility and constitution, 1912, A., i, 164.

Höfmann, Karl Andreas, and Friedrich Höchtlen, abnormal compounds of nickel, 1903, A., i, 469.

thiocarbonates of heavy metals, 1903,

A., ii, 428.

crystallised polysulphides of the heavy metals, 1903, A., ii, 728; 1904, A., ii, 179.

Hofmann, Karl Andreas, and Heinrich Kirmreuther, action of alkaline mercuric cyanide on halogen derivatives of ethylene and acetylene, 1908, A., i, 145.

chloroethylenes, 1910, A., i, 3.

metallic derivatives of chloro- and bromo-acetylene, 1910, A., i, 16.

Hofmann, Karl Andreas, and Heinrich Kirmreuther, compounds of trinitrobenzene with hydrazine, phenylhydrazine, and azobenzene: the side valency of the nitro-group, 1910, A., i, 548.

spectra of the erbium compounds and Stark's valency hypothesis, 1910,

A., ii, 171.

Hofmann, Karl Andreas, Heinrich Kirmreuther, and Hans Lecher, carbonium

perchlorates, 1910, A., i, 105. Hofmann, Karl Andreas, Heinrich Kirm-

reuther, and A. Thal, quinocarbonium perchlorates (II) and the solvent action of chlorinated ethanes, 1910, A., i, 168.

Hofmann, Karl Andreas, and Walther Metzener, ultramarine, 1905, A., ii, 589.

Hofmann, Karl Andreas, August Metzler, and Kurt Höbold, perchloric acid as a reagent in organic chemistry, 1910, A., i, 370.

Hofmann, Karl Andreas, August Metzler, and Hans Lecher, oxonium per-

chlorates, 1910, A., i, 187.

Hofmann, Karl Andreas, and J. von Narbutt, compounds of platinous chloride with dicyclopentadiene, 1908, A., i, 519.

Hofmann, Karl Andreas, and Karl Ott, sulphoxides and sulphines, 1908,

A., i, 84.

Hofmann, Karl Andreas, and Friedrich Resenscheck, blue iron-cyanogen compounds and the cause of their colour. III., 1905, A., i, 756; 1906, A., i, 75.

Hofmann, Karl Andreas, and Rudolf Roth, aliphatic diazo-salts, 1910, A., i, 232.

Hofmann, Karl Andreas, and Emil Seiler, preparation of hexachloroethane, 1905, A., i, 730.

compounds of mercuric chloride and alcohols with dicyclopentadiene,

1906, A., i, 786.

Hofmann, Karl Andreas, and Douglas Storm, tetraformaltrisazine from formaldehyde and hydrazine hydrate, a new reducing, agent for analytical chemistry, 1912, A., i, 665.

Hofmann, Karl Andreas, and Heinrich Wagner, reactivity of mercuric

cyanide, 1908, A., i, 143.

compounds of mercuric cyanide with alkalis and nitric acid, 1908, A., i, 514.

application of the theory of complex ions to the reactions of mercury cyanide with silver salts and alkali hydroxides, 1909, A., i, 559. Hofmann, Karl Andreas, and Valentin Wölfl, radioactive lead as a primary active substance, 1903, A., ii, 402.

lead salt solutions sensitive to light,

1904, A., ii, 172.

radioactive lead and Grignard's reaction as an analytical agent, 1907, A., ii, 521.

Hofmann, Karl Andreas, and (Graf) Armin Zedtwitz, nitrosyl perchlorate, the anhydride of nitrous and perchloric acids, 1909, A., ii, 568.

Hofmann, Karl Andreas, (Graf) Armin Zedtwitz, and Heinrich Wagner, esters of perchloric acid, 1910, A., i, 3.

Karl Andreas, and Fritz Zerban, radioactive thorium, 1903, A., ii, 732.

Hofmann, Karl Andreas. See also

Alexander Eibner.

Hofmann, Karl Berthold, knowledge of the ancients regarding vitriols and stypteria, 1912, A., ii, 931.

Hofmann, Karl Berthold, and Fritz Pregl, koilin, 1907, A., i, 884.

Hofmann, Oswald Kurt. See Arthur Hantzsch.

Hofmann, Robert, can the formation of complexes be deduced from the electrolytic conductivity of mixtures of acids? 1904, A., ii, 10.

proof of the formation of complexes between acids with the help of the laws of isohydric solutions, 1905, A.,

ii, 235.

Hofmann, Robert. See also Robert Pschorr.

Robert von. Hofmann, See Robert Kremann.

Hofmeier, Fritz. See Robert Kremann. Hofmeier, Gustav. See Alexander Gut-

Hofmeister, Franz, constitution of the albumin molecule, 1903, A., i, 214. catabolism of proteins, 1908, A., i, 1026.

Hofwimmer, Franz, the testing of dynamite glycerol, 1912, A., ii, 302.

Hogan, James J., and Martin Henry Fischer, theory and practice of transfusion, 1912, A., ii, 953.

Hogarth, J. W., combined wash-bottle and pipette, 1908, A., ii, 981.

Hogg, J. L., friction in gases at low pressures, 1910, A., ii, 271.

Hogley, C. F., secondary spectrum of hydrogen, 1909, A., ii, 359.

search for the heavier gases of the helium groups in minerals, 1909, A., ii, 884.

Hohenegger, Christian. See Carl Paal.

Hobenemser, Paul. See Carl Dietrich Harries.

Hohensee, a new apparatus for gas analysis, 1912, A., ii, 297.

Hohlweg, Hermann, urochrome. 1908, A., i, 1027.

the influence of muscular work on the decomposition of subcutaneouslyadministered sugar, 1911, A., ii, 127.

Hohlweg, Hermann, and Hans Meyer, the residual nitrogen of the blood,

1908, A., ii, 707.

Hohlweg, Hermann, and Fritz Voit, influence of high body-temperature on the decomposition of sugar in the animal body, 1909, A., ii, 162.

Hohmann, Karl, automatic gas analysis

apparatus, 1910, A., ii, 237.

Hohorst, Conrad von. See Theodor Zincke.

Hoitsema, Copius, Volhard's silver esti-

mation, 1904, A., ii, 517. densities of alloys of gold and copper and of gold and silver, 1904, A., ii,

742.

assay of silver coins in bulk, 1906, A., ii. 197.

Hoke, Eduard, the uptake of carbon monoxide by the nervous system, 1907, A., ii, 379. Holborn, Ludwig [Friedrich Christian],

and Louis Austin, specific heat of gases at high temperatures, 1905, A., ii, 228.

Holborn, Ludwig, and Fritz Henning, expansion of fused quartz, 1903, A., ii, 272.

specific heat of superheated steam, 1906, A., ii, 147.

specific heat of nitrogen, carbon dioxide, and water vapour up to 1400°,

1907, A., ii, 844.

comparison of platinum thermometers with the nitrogen-, hydrogen-, and helium-thermometer, and the determination of certain fixed points between 200° and 450°, 1911, A., ii, 852.

Holdcroft, A. D., solubility of zinc oxide in fused lead silicate and borate, 1911, A., ii, 983.

Holdcroft, A. D. See also Joseph William Mellor.

Holde, David, mixed glycerides in olive oils. III., 1903, A., i, 140.

datura oil, 1903, A., i, 140.

experiments with new apparatus for elementary analysis (Dennstedt and Heraeus furnaces), 1906, A., ii, 398.

determination of the saponification number [of fats], 1907, A., ii, 514.

Holde, David, Hans Döscher, and G. Meyerheim, hydrolytic decomposition of aqueous alcoholic solutions of alkali

soaps, 1910, A., i, 538. Holde, David, and Julius Marcusson, oxidation of oleic acid by potassium permanganate in presence of small quantities of alkali, 1903, A., i, 789. estimation of free fatty acids in fats in

the presence of soap and alkalineearth soaps, 1911, A., ii, 1037. Holde. David, and F. Schwarz, hydrolysis

of sodium palmitate, 1907, A., i, 176; ii, 590.

Holde, David, Leo Ubbelohde, and Julius Marcusson, natural heptadecoic acid,

1905, A., i, 318.

Holde, David, and G. Winterfeld, detection and estimation of small quantities of benzene in alcohol, 1908, A., ii, 435.

Holdefleiss, Paul. See Georg Baumert. Holden, Thomas Halstead. See Arthur

Walsh Titherley.

Holderer, Maurice, influence of the reaction of the medium on the filtration of diastases, 1910, A., i, 212.

influence of the reaction of the medium on the filtration of malt enzymes, 1910, A., i, 212.

filtration of diastases, 1910, A., i, 345. mechanism of the arrest of diastases by filtration, 1912, A., ii, 903.

Holderer, Maurice. See also Gabriel

Bertrand.

Holdermann, Karl, hydrargyrum oxycyanatum, 1904, A., i, 301.

zincum boricum or oxyboricum, 1905, A., ii, 34.

mercuric oxycyanide, 1906, A., i, 75,

411. the influence of catalysts on substitu-

tion in the aromatic nucleus, 1906, A., i, 439.

Holdermann, Karl, and Roland Scholl, indanthren and flavanthren. Products of the action of nitric acid on flavanthren; elementary analysis of difficultly combustible substances rich in carbon, 1910, A., i, 285.

Holdermann, Karl. See also Roland

Scholl.

Holland, Carl, dissociation of gaseous acetic acid and phosphorus pentachloride, 1912, A., ii, 436.

Holland, E. B., the estimation of arsenic in insecticides, 1912, A., ii, 91. Holland, Hazel. See Charles Baskerville.

Holland, Philip, estimation of small amounts of manganese in natural silicates, 1907, A., ii, 654.

Holland, Thomas Henry, constitution, origin, and dehydration of laterite, 1904, A., ii, 181.

Holland, William West. See Harmon Northrop Morse.

Hollander, Charles. See Richard Willstätter.

Hollard, Auguste, existence of electrolytic peroxides of lead, nickel, and bismuth, 1903, A., ii, 294.

application of the theory of galvanic cells to the quantitative separation of metals, 1903, A., ii, 335.

influence of the nature of the cathode on the quantitative electrolytic separation of metals, 1903, A., ii, 391.

separation and estimation of zinc by electrolysis, 1903, A., ii, 453.

separation and estimation of antimony by electrolysis, 1903, A., ii, 455.

analysis of commercial nickel, 1904, A., ii, 90.

influence of the physical nature of the anode on the constitution of lead peroxide deposited by electrolysis, 1904, A., ii, 172.

iodometric estimation of ferric iron,

1904, A., ii, 592.

conductivities of mixtures of sulphuric acid with sulphates: formation of complex salts of hydrogen, 1907, A., ii, 83.

Hollard, Auguste, and L. Bertiaux, electrolytic separation (1) of manganese and iron, (2) of aluminium and iron or nickel, and (3) of zine and iron, 1903, A., ii, 513.

electrolytic separation of nickel and zinc, 1904, A., ii, 92, 683.

use of complex salts in electrolytic analysis; separation of copper from arsenic and antimony, nickel from zinc, and zinc from iron, 1904, A., ii, 682.

electrolytic estimation of bismuth,

1904, A., ii, 684. assay of platinum, gold, and silver alloys, 1904, A., ii, 685.

[analysis of] commercial lead, 1905, A., ii, 63.

analysis of commercial tin and its alloys, 1905, A., ii, 67.

Holle, Hermann. See Arnold Reissert. Holle, Walter. See Alfred Stock.

Hollely, William Francis. See Raphael Meldola.

Arnold Frederik, Holleman, Arnold Frederik, simultaneous formation of isomeric substitution derivatives of benzene. VII. Nitration of the nitroanisoles, 1903, A., i, 623.

Holleman, Arnold Frederik, evelohexanol, 1904, A., i, 40.

action of hydrogen peroxide on 1:2-diketones and on a-ketonic acids, 1904, A., i, 474.

nitration of fluorobenzene, 1904, A., i, 486; 1905, A., i, 515.

preparation of silicon and its chloride,

1904, A., ii, 813. simultaneous formation of isomeric substitution derivatives of benzene. X. Nitration of dichlorobenzenes. 1905, A., i, 41.

nitration of disubstituted benzenes,

1905, A., i, 42.

preparation of pure o-toluidine and a method for ascertaining its purity, 1905, A., i, 272.

nitration of o- and m-dibromobenzenes,

1906, A., i, 345. influence of the added substance on substitution in aromatic nuclei, 1906, A., i, 412.

problem of substitution in the benz-

ene ring, 1906, A., i, 489.

preparation of pinacone, 1906, A., i, 619.

explanation of the substitution of aromatic compounds, 1906, A., i,

fluoro-aromatic compounds, 1906, A.,

i. 941.

simultaneous formation of isomeric substitution products of benzene, 1908, A., i, 985.

nitration of toluene, 1909, A., i, 17. nitration of p-chlorotoluene, 1909, A.,

i, 18.

quantitative estimation of the products of nitration of m-chloro- and m-bromo-benzoic acid, 1909, A., i,

preparation of 2-chloro-3-nitrotoluene,

1909, A., i, 93.

estimation of small quantities of impurities in o-toluidine and o-nitrotoluene, 1909, A., ii, 192.

the rules of substitution in the benzene

nucleus, 1911, A., i, 713.

two methods of treating the problem of substitution in the benzene nucleus, 1912, A., i, 20.

Holleman, Arnold Frederik, and Johannes Willem Beekman, fluorobenzene and some of its derivatives, 1904, A., i, 232; 1905, A., i, 41.

Holleman, Arnold Frederik, P. Caland, T. van der Linden, and Johan Pieter Wibaut, quantitative investigation of the sulphonation of toluene, 1911, A., i. 849.

Holleman, Arnold Frederik, and Pieter Christiaan Jan Euwes, 1:2-dibromo-3-nitrobenzene and the nitration of o-dibromobenzene, 1908, A., i, 521.

Holleman, Arnold Frederik, J. C. Hartogs, and T. van der Linden. quantitative investigations on the nitration of aniline, 1911, A., i, 364.

Holleman, Arnold Frederik and Jan Huisinga, nitration of phthalic acid and of isophthalic acid, 1907, A., i,

Holleman, Arnold Frederik, and Coenraad Lodewyk Jungius, examination of o-nitrotoluene for the presence of small quantities of p-nitrotoluene, 1905, A., ii, 864.

Holleman. Arnold Frederik, and Foeko Hendrik van der Laan, bromination of

toluene, 1906, A., i, 154.

Holleman, Arnold Frederik, Foeko Hendrik van der Laan, and Hessel Johannes Slyper, preparation of cyclohexanol, cyclohexanone, and derivatives, 1905, A., i, 443.

Holleman, Arnold Frederik, and T. van der Linden, simultaneous formation of isomeric substitution products of benzene, XVI. The introduction of a second halogen atom into monohalogenated benzenes, 1912, A., i, 20. olleman, Arnold Frederik, and

Johannes Potter van Loon, transformation of benzidine, 1904, A., i, 193.

Holleman, Arnold Frederik, Josef Polak, Foeko Hendrik van der Laan, and Picter Christiaan Jan Euwes, bromination of toluene. II., 1909, A., i, 93.

Holleman, Arnold Frederik, and I. J. Rinkes, quantitative examination of the introduction of one atom of a halogen into phenol, 1911, A., i, 535.

Holleman, Arnold Frederik, and Hendrik Adrianus Sirks, the six isomeric dinitrobenzoic acids, 1907, A., i, 131.

Holleman, Arnold Frederik, and Carel Herman Sluiter, nitration of acet-

anilide, 1906, A., i, 649.

Arnold Holleman, Frederik, Gerardus Leonardus Voerman, von Baeyer's tension theory, 1904, A.,

thiophen-2- and -3-carboxylic acids,

1907, A., i, 334.

Holleman, Arnold Frederik, and Gerrit Wilhelmy, preparation of the dinitrophenols and dinitroanisoles, and certain of their physical properties, 1903, A., i, 336.

Holleman, Arnold Frederik. See also Johan Theodorus Bornwater.

Holleman, Marius, action of potassium cvanide on w-nitrostyrolene [B-nitrostyrene], 1905, A., i, 42.

secondary phenylnitroethanol, 1905, A., i, 58.

o-fluoronitrobenzene and other aromatic fluoro-derivatives, 1905,

action of potassium cyanide on potasm-nitrobenzenesulphonate,

1905, A., i, 595.

Holley, Clifford Dyer, [estimation of] sodium sulphite in foods, 1906, A., ii,

Holley, Clifford Dyer, and J. T. Weaver, liquid mixtures of minimum boiling point, 1905, A., ii, 675.

Holliday, Margaret. See Henry Winston

Harper.

Holliger, M., estimation of sulphur in coals and cokes, 1909, A., ii, 343, 699.

volumetric estimation of sulphuric acid by the barium chromate

method, 1910, A., ii, 239.

Hollinger, Adolf, the partition of the sugar in blood, 1909, A., ii, 496.

Hollis, Frederick Stearns, alleged formation of bile pigments and bile acids by the action of trypsin on hæmoglobin, 1908, A., ii, 408.

Hollis, Wm. Winslie, pulverisation of "nickel grains" in fuming nitric acid,

1904, A., ii, 178.

Hollmann, Martin. See Georg Frerichs. Hollmann, Reinhard Friedrich, maxima and minima of the decomposition curves for hydrated mixed crystals,

1903, A., ii, 279. physical and natural equilibrium between the modifications of acetaldehyde. I., 1903, A., ii, 414.

decomposition of hydrated mixed crystals. II., 1905, A., ii, 154.

Hollnagel, Herbert. See Heinrich Rubens.

Thomas, George simple Holloway, arrangement of lenses for reading the graduations of chemical and assay balances, 1906, A., ii, 221. assay of mercury ores, 1906, A., ii,

308. Holm, Felix Harold, B-alanine, 1905,

A., i, 29.

B-alacreatine (B-guanidopropionic acid), 1905, A., i, 29.

Holm, R., experimental investigation of the stratified positive glow, 1903, A., ii, 799.

Holmberg, Bror, ester-acids of sulphursubstituted carbonic acids aliphatic hydroxy-acids, 1905, A., i, 323; 1907, A., i, 383; 1909, A., i, 286; 1912, A., i, 130.

thiocarbonates, 1906, A., i, 330. dithiocarbamoglycollic acid (carboxymethyldithiourethane), 1906, A., i, 811.

esters of orthotrithioformic acid. 1907. A., i, 474.

methenyltrithiolacetic acid, 1907, A., i, 475.

antimony and tin compounds of thioglycollic acids, 1908, A., i, 130.

organic polysulphides, 1908, A., i, 308.

formation of esters by mass action of anions, 1908, A., i, 387.

amphoteric electrolytes, 1908, A., ii, 560.

action of sulphur and ammonia on organic sulphides and disulphides, 1910, A., i, 150.

p-tolyl trisulphide, 1910, A., i, 165. amphoteric nature of cacodylic acid,

1910, A., i, 234.

ester acids of thiocarboxylic acids with aliphatic alcohol acids. IV. Preparation of rhodanins, 1910, A., i,

stereoisomeric dihalogen-succinic acids, 1911, A., i, 767.

the optically active dibromosuccinic acid, 1912, A., i, 4.

ethyl orthotrithioformate, 1912, A., i,

161. optically active phenylmethylcarbinols, 1912, A., i, 448.

the Walden rearrangement, 1912, A., i, 603.

hydrolysis of l-acetylmalic acid, 1912, A., i, 943.

catalysis by cations. I. and II., 1912, A., ii, 443, 1048.

Holmberg, Bror, and Karl Mattisson, mercaptal acids, 1907, A., i, 475.

Holmberg, Bror, and B. Psilanderhielm, some amide derivatives of thiocarboglycollic acid, 1910, A., i, 834.

physico-chemical Knut, properties of aqueous solutions of salts of lanthanum, cerium, and thorium, 1904, A., ii, 157.

Holmberg, Otto, new method for the separation of rare earths. I. Preparation of pure neodymium oxide, 1904, A., ii, 174.

preparation of pure neodymium oxide and two new methods of separation of rare earths, 1907, A., ii, 90.

Holmberg, Otto, holmium, 1911, A., ii,

atomic weight of holmium, 1912, A., ii. 163.

Holmberg, O. J. See Efim Semen London.

Holmes, Arthur, the association of lead with uranium in rock minerals, and its application to the measurement of geological time, 1911, A., ii, 570.

See Martin Onslow Holmes, Henry. Forster.

Holmes, Harmon N. See Joseph Christic Whitney Frazer.

Holmes, Harry N., atmospheric ozone,

1912, A., ii, 636.

Holmes, John, contributions to the theory of solutions. I. The nature of the molecular arrangement in aqueous mixtures of the lower alcohols and acids of the paraffin series. II. Molecular complexity in the liquid state. III. Theory of the intermiscibility of liquids, 1906, T., 1774; P., 272.

Holmes, John, and Philip John Sageman, molecular aggregation in solution as exemplified in aqueous mixtures of sulphuric acid with inorganic sulphates, 1907, T., 1606; P., 210. contributions to the theory of solutions,

1909, T., 1919; P., 231.

Holmes, John. See also (Sir) Thomas

Edward Thorpe.

Holmes, (Miss) Mary E., the use of the rotating anode in electrolytic separa-

tions, 1909, A., ii, 184.

Holmes, (Miss) Mary E., and (Miss) Mary Violet Dover, use of organic electrolytes in cadmium separations, 1910, A., ii, 1111.

Holmes, Willis Boit, action of hydro-

chloric acid on manganese dioxide,

1907, A., ii, 873.

Holmes, Willis Boit, and E. V. Manuel, action of hydrochloric acid on manganese dioxide, 1908, A., ii, 765.

Holmes, Willis Boit. See also Ira Remsen, and Alexander Smith.

Holmes, Walter Chapin, formation of alkaloidal periodides, 1911, A., i, 907. Holmes, Walter Chapin. See also

Gregory Paul Baxter. Holmes, William Ewart. See Henry

Richardson Procter.

Holmgren, I., studies on capillarity and adsorption; method for determining the concentration of dilute solutions of mineral acids, 1909, A., ii, 25.

Holobut, Theophil, Arnold's urinary reaction with sodium nitroprusside,

1908, A., ii, 716.

Holroyd, George William Fraser, on a magnesium oxybromide, 1904, P., 38.

Holsboer, Max. See Adolf Kaufmann. Holst, Gustaf von, serosamucin, 1904,

A., ii, 830.

Holste, Arnold, the relation of members of the digitalin group towards enzymes, 1912, A., i, 575.

Holsti, Östen, phosphorus metabolism in

man, 1910, A., ii, 519.

Holt, Alfred, jun., the action of hydrogen on sodium, 1903, P., 187; 1909, A., ii, 807.

decomposition of water vapour in contact with hot platinum wire, 1907,

A., ii, 450.

the decomposition of carbon dioxide by the silent electric discharge, 1908, P., 271; 1909, T., 30.

dissociation of water vapour, 1909,

A., ii, 468.

the boric acids, 1911, A., ii, 720.

Holt, Alfred, jun., and Edwin Hopkinson, decomposition of water vapour by electric sparks, 1909, A., ii, 682.

Holt, Alfred, jun., and James Eckersley Myers, the phosphoric acids, 1911,

T., 384; P., 21.

Holt, Alfred, jun. See also Charles Hutchens Burgess, David Leonard Chapman, and Henri Moissan.

Holterman, K. W., a new vacuum

regulator, 1908, A., ii, 99.

Holtkamp, Heinrich. See Iwan Koppel. Holtschmidt, Wilhelm, estimation of carbonic acid, 1906, A., ii, 580.

Holty, Joseph Gerard, solubility and specific rotatory power of carbohydrates and certain organic acids and bases in pyridine and other solvents, 1906, A., ii, 61.

Holtz, Wilhelm, very unequal electrodes; valve cells; metal vegetation,

1905, A., ii, 670.

Holwech, Wilhelm, interaction of nitric oxide and oxygen, 1908, A., ii, 941.

the relation between the formation of nitric oxide and the electrical and thermal properties of short direct current arcs with a cooled anode, 1910, A., ii, 578.

Holwech, Wilhelm, and Adolf Koenig, yield of nitric oxide in the combustion of air in the cooled, direct-current

arc, 1910, A., ii, 1058.

Holwech, Wilhelm. See also Fritz Haber. See Emil Fischer, Holzapfel, Julius. and Robert Stolle.

Holzbach, Ernst, the treatment of peritonitic fall of blood-pressure, 1912, A., ii, 1195.

Holzmann, Siegmund, estimation of lead in lead-tin alloys, 1908, A., ii, 633.

Holzweissig, Ernst. See Heinrich Ley. See Francis Gano Homans. John. Benedict.

Homberger, Alfred. See Otto Wallach. Homberger, Alfred W. See Victor Lenher, and William Albert Noves.

Homer, (Miss) Annie, the action of aluminium chloride on naphthalene, 1907, T., 1103; P., 88.

resolution of salts of asymmetric nitrogen compounds and weak organic acids, 1907, A., i, 692.

the Friedel-Crafts' reaction applied to naphthalene; the action of di-, tri-, and tetra-alkyl haloids; preparation of aba'b'-dinaphthanthracene, 1910, T., 1141; P., 11.

action of aluminium chloride on

benzene, 1911, A., i, 276. ndensation of tryptophan condensation with certain aldehydes, 1912, A., i, 401.

Homer, (Miss) Annie, and John Edward Purvis, the study of the absorption spectra of the hydrocarbons isolated from the products of the action of aluminium chloride on naphthalene, 1908, T., 1319; P., 147.

the absorption spectra of naphthalene and of tetramethylnaphthalene,

1910, T., 280; P., 5.

the absorption spectra of dinaphthanthracene and its hydro-derivative compared with the absorption spectra of its isomerides, 1910, T., 1155; P., 25.

Homer, (Miss) Annie. See also John

Edward Purvis.

Homfray, (Miss) Ida Frances, molecular refractions of some liquid mixtures of constant boiling point, 1905, T., 1430; P., 225.

molecular refractions of dimethylpyrone and its allies and the quadrivalency of oxygen, 1905, T., 1443;

P., 226.

the relation between solubility and the physical state of the solvent in the case of the absorption of carbon dioxide in p-azoxyphenetole, 1910, T., 1669; P., 197.

absorption of gases by charcoal, 1910,

A., ii, 771, 1041.

Homfray, (Miss) Ida Frances, and Philippe Auguste Guye, surface tension and molecular complexity of active homologous compounds, 1904, A., ii,

Homma, E. See Josef Habermann. Hommel, W., Indian and Chinese zinc, 1912, A., ii, 255.

Hommel, W., the history of zinc, 1912, A., ii, 942.

Honcamp, Franz, food value and digestibility of oat, lentil, and pea husks, 1906, A., ii, 701.

composition, digestibility and food value of sugar beet sections, 1907, A., ii, 293.

Honcamp, Franz. See also Oskar Kellner, and Albin Köhler.

Honda, J., saponin substances of Dioscorea tokoro makino, 1904, A., i,

skimmianine, an alkaloid from Skimmia japonica, 1905, A., i, 152.

the alkaloids of the toadstool and "artificial" muscarine, 1911, A., i, 807.

Honda, Kōtarō, magnetisation of certain alloys as a function of the composition and the temperature, 1910. A., ii, 686.

thermo-magnetic properties elements, 1910, A., ii, 686.

Honda, Kötarö, and Sumu Shimizu. Villari's critical point in the case of nickel, 1905, A., ii, 76.

magnetisation and magnetic change of length in ferro-magnetic metals and alloys at temperatures ranging from -186° to $+1200^{\circ}$, 1906, A., ii, 69.

Honda, Kōtarō. See also Henri E. J. G. Du Bois, and Woldemar Voigt.

Honda, Seiroku. See Oscar Loew. Hoogenhuyze, C. J. C. van, the formation of creatine in the muscles at the tonus and in the development of rigidity, 1910, A., ii, 428.

Hoogenhuyze, C. J. C. van, and H. Verploegh, excretion of creatinine in man, 1906, A., ii, 186; 1908,

A., ii, 971.

oxygen and creatinine excretion, 1909, A., ii, 331.

Hoogenhuyze, C. J. C. van. Cornelis Adrianus Pekelharing.

Hoogewerff, Sebastiaan, and Willem Anne van Dorp, additive products of various acids, 1903, A., i, 170.

the a-phenylphthalimide of Kuhara and Fukui, 1903, A., i, 174.

Hooker, Donald Russell, the isolated kidney; the influence of pulse pressure upon renal function, 1910, A., ii, 1087.

the chemical regulation of vascular tone as studied on the perfused blood vessels of the frog, 1911, A., ii, 904.

effect of carbon dioxide and oxygen on muscular tone in the blood vessels and alimentary canal, 1912, A., ii, 1185, Hooker, Donald Russell. See also Joseph Erlanger, and C. S. Ketcham.

Hooker, Marion O., and Martin Henry Fischer, absorption of water by nerve tissue, 1912, A., ii, 784.

Hooper, David, "silajit," an ancient Eastern medicine, 1904, A., ii, 570. melanterite [and alunogen]

Baluchistan, 1904, A., ii, 571. secretion of Phromnia marginella,

1910, A., ii, 429.

Hooton, William Marrs, the decomposition of ammonium dichromate by

heat, 1908, P., 27.

Hope, Edward, the condensation of ethyl citraconate with ethyl sodiomalonate; formation of cyclopentanone-4-carboxylic acid; preliminary note, 1911, P., 281.

the condensation of ethyl sodiomalonate with ethyl citraconate and the synthesis of \(\beta\)-methyltricarballylic acid, 1912, T., 892; P., 93.

the addition of hydrocyanic acid to derivatives of glutaconic acid and itaconic acid; preliminary note,

1912, P., 192.

Hope, Edward, and William Henry Perkin, jun., the action of bromocyclohexane and of 4-bromo-1methylcyclohexane on the sodium derivative of ethyl malonate, 1909, T., 1360; P., 207.

ethyl benzoylacetate, 1909, T., 2042;

P., 296.

pentane- and isopentane-ass-tricarboxylic acids, 1910, P., 178.

the condensation of ethyl crotonate and ethyl methylacrylate with ethyl cyanoacetate and ethyl bromo-acetate; synthesis of γ -methylbutane-aβδ-tricarboxylic acid and pentane-aβδ-tricarboxylic acid,1911, T., 762; P., 95. Hope, Edward, and Robert Robinson,

the synthesis of nitrognoscopine and allied substances; preliminary

note, 1910, P., 228.

synthetical experiments in the group of the isoquinoline alkaloids. Part I. Anhydrocotarninephthalide, 1911,

T., 1153; P., 125.

synthetical experiments in the group of the isoquinoline alkaloids. Part II. The constitution of the condensation products of cotarnine and the condensation of cotarnine with aliphatic and aromatic nitro-compounds, 1911, T., 2114; P., 265.

B-gnoscopine, 1912, P., 16.

anhydrohydrastininemeconine; preliminary note, 1912, P., 17.

Hope, Geoffrey Dodleston. See Frederick George Donnan.

Hopfgartner, Karl, standardisation of potassium permanganate solutions by means of silver, 1905, A., ii, 484. salicylic acid-iron reaction, 1908, A., i, 891.

electrolysis of solutions of salts of fatty acids in the corresponding anhydrous acids, 1911, A., ii, 849.

the electrical conductivity of solutions of alkali acetates in acetic acid, 1912, A., ii, 320.

Hopius, E. A., relation between the conductivity of selenium and the intensity of the incident light, 1904,

A., ii, 156.

Hopkins, Arthur John, the specific gravities of the elements considered in their relation to the periodic system, 1911, A., ii, 698.

Smith. Hopkins, B. See Harmon

Northrop Morse.

Hopkins, Cyril George, fixation of atmospheric nitrogen by alfalfa on ordinary prairie soil under various treatments, 1903, A., ii, 324.

Hopkins, Cyril George, L. H. Smith, and Edward Murray East, composition of different parts of the maize kernel,

1904, A., ii, 200.

Hopkins, Frederick Gowland, the vesicular fluid of the hedgehog, 1912, A.,

feeding experiments illustrating the importance of accessory factors in normal dietaries, 1912, A., ii, 779. Hopkins, Frederick Gowland, and Sydney

William Cole, constitution of tryp-

tophan, 1903, A., i, 590.

Hopkins, Frederick Gowland, Horace Savory, Bence-Jones protein. and the metabolism in three cases of Bence-Jones proteinuria, 1911, A., ii,

Hopkins, Frederick Gowland. See also " Walter Morley Fletcher, and (Miss)

Edith Gertrude Willcock.

Hopkins, Ralph, and Willey Denis, inter-relation of the ammonia and carbon dioxide of the blood, 1912, A., ii, 58.

Hopkinson, Bertram, explosions of coal-

gas and air, 1906, A., ii, 440.

Hopkinson, Edwin. See Alfred Holt.

Hoppe, Eduard, preparation of hydrogen chloride and bromide from their constituent elements, 1906, A., ii, 605.

Hoppe, Gerhard. See Robert Pschorr. Hoppe, Johannes. See Walter Dieckmann.

Hoppe, Joseph. See Theophile Fischer.

Ropwood, Arthur, and Charles Weizmann, synthesis of dipeptides of lauric and n-nonoic acids. Products of the condensation of lauric and n-nonoic acids with glycine, alanine and leucine; preliminary note, 1910, P., 69.

synthesis of dipeptides of a-aminolauric acid with glycine, alanine, valine, leucine, and asparagine, 1911, T.,

571; P., 55.

synthesis of polypeptides of α-aminon-nonoic acid with glycine, alanine, valine, leucine, asparagine, and aspartic acid, 1911, T., 1577, P., 214.

condensation of bromoacyl haloids with glucosamine; preliminary

note, 1912, P., 261.

Hora, Joseph E. See Warren Rufus
Smith.

Horatiis, Cesare de. See Gino Abati.

Horiba, Shinkichi, equilibrium in the system: water, ethyl alcohol and ethyl ether, 1911, A., ii, 592.

Horkheimer, Paul. See Martin Freund,

and Hans Geisow.

Hormuth, Ludwig, high temperature gas burner, 1904, A., ii, 383. ring burner, 1904, A., ii, 384.

Horn, David Wilbur, cuprammonium salts, 1906, A., ii, 231; 1907, A., i, 595; 1908, A., i, 121.

variable sensitiveness in the colorimetry of chromium, 1906, A., ii, 253.

determination of transition temperatures, 1907, A., ii, 532.

euprammonium salts. IV. Cuprammonium sulphate, 1907, A., ii, 871. is there caramelisation in Rivas' test? 1910, A., ii, 668.

Horn, David Wilbur, and Sue A. Blake, variable sensitiveness in colorimetry,

1906, A., ii, 703, 893.

Horn, David Wilbur, and Minnie A. Graham, some cuprammonium salts. VI., 1908, A., i, 392.

Horn, David Wilbur, and Edytha E.
Taylor, cuprammonium sulphates,
1904, A., ii, 662.
Horn, David Wilbur, and Elizabeth M.

Horn, David Wilbur, and Elizabeth M. van Wagener, a method for calibrating burettes, 1903, A., ii, 683. solubility curve of sodium tetraborate,

1903, A., ii, 725.

Horn, Frank R. van, proustite and argentite from Colorado, 1908, A., ii, 603.

formula of pearceite and of polybasite, 1911, A., ii, 807.

Horn, Frank R. van, and C. W. Cook, new occurrence of pearceite, 1911, A., ii, 614.

Horn, Hans. See August Michaelis. Horn, Max. See Erwin Rupp.

Horn, Otto. See Hans Stobbe.

Horn van den Bos, J. L. M. van der, quantitative separation of barium, strontium, and calcium, 1911, A., ii, 228.

Horn van der Bos, J. L. M. van der. See also Frans Antoon Hubert Schreinemakers.

Hornberger, Richard, litter and nitrogen [fixation], 1906, A., ii, 47.

humic acids of grey sand and brown sandstone, 1910, A., ii, 745.

Horne, William Dodge, dry defecation in optical sugar analysis, 1904, A., ii. 451.

influence of the lead precipitate on the polarisation of sugar, 1906, A., ii, 400. dry lead defecation in raw sugar analysis, 1907, A., ii, 721.

Horner, Oskar, behaviour of phytin in the organism, 1907, A., ii, 118.

Hornstein, E. See Josef Herzig. Hornung, Th. See Louis Duparc.

Hornung, Victor. See Julius Tröger.
Horoszkiewicz, Stefan von, and Hugo
Marx, action of quinine on the colouring matter of blood and a simple
method for the detection of carbon

monoxide in blood, 1907, A., ii, 415. Horowitz, L. M., chemistry of digestion in animals. IX. Bacteria of the digestive tract in the dog, 1907, A., ii, 635.

Horowitz, Stefanie. See Bruno Böttcher. Horrmann, Paul, action of phosphorus pentachloride on picrotin, 1910, A., i, 577.

the composition of picrotoxinin, 1912, A., i, 709.

Horrmann, Paul, and Karl Seydel, picrotin, 1912, A., i, 1008.

Horrmann, Paul. See also Heinrich Biltz, and Otto Stark.

Horsfall, Ronald Smith. See Arthur George Green.

Horsley, Victor, and others, chloroform anæsthesia, 1904, A., ii, 756.

Horst, C. See Edgar Wedekind.

Horton, Edward. See Henry Edward Armstrong.

Horton, Elmer G., the colon bacillus in ground waters, 1903, A., ii, 455.

Horton, Frank, electrical conductivity of metallic oxides, 1906, A., ii, 260. spectrum of the discharge from a glowing lime cathode in mercury vapour, 1908, A., ii, 745. Horton, Frank, the emission of positive rays from heated phosphorus com-

pounds, 1910, A., ii, 176.

a spectroscopic investigation of the nature of the carriers of positive electricity from heated aluminium phosphate, 1911, A., ii, 90.

the discharge of positive electricity from sodium phosphate heated in different gases, 1911, A., ii, 246.

vacuum tube spectra of mercury, 1911, A., ii, 559.

the origin of spectra, 1911, A., ii,

the positive ionisation produced by phosphates when heated, 1912, A., ii, 8.

Hortvet, Julius, composition and analysis of maple syrup and maple sugar,

1905, A., ii, 122.

Horváth, Béla von, tellurium. I. Action of sulphuryl and thionyl chlorides on tellurium, 1911, A., ii, 598.

Horvath, Béla von. See also Stefan Bugarszky, and Paul Friedländer.

Hosford, Henry H., and Harry Clary Jones, conductivities; temperature-coefficients of conductivity and dissociation of certain electrolytes, 1911, A., ii, 960.

Hoshiai, Zin-nosuke, behaviour of pyridine in the hen's organism, 1909, A.,

ii, 919. Hoshiai, Zin-nosuke. See also Ginzaburo

Totani.

Hosking, Richard, viscosity of water, 1910, A., ii, 20.

Hoskins, Roy Graham, the effect of adrenaline on the intestine, 1912, A., ii, 189.

Hoskins, Roy Graham, and C. W. McClure, the relation of the adrenal glands to blood pressure, 1912, A., ii, 579.

the comparative sensitiveness of bloodpressure and intestinal peristalsis to adrenaline, 1912, A., ii, 1196.

Hoskins, Roy Graham. See also Walter Bradford Cannon.

Hostelet, G., experimental study of the three parts of an electrolytic cell and their relationships, 1906, A., ii, 67.
 Hostetter, J. Clyde. See John R. Cain.

Hoton, L., solubility of glycerides in acetic acid and its application to the analysis of butter, 1905, A., ii, 426.

detection of cocoanut oil in lard, 1905, A., ii, 870.

Hottenroth, Valentin. See Richard Willstätter. Hotter, Eduard, chemical composition of Styrian fruits, 1906, A., ii, 796. Hottinger, R., weighing hygroscopic

Hottinger, R., weighing hygroscopic substances in the open, 1909, A., ii, 262.

Hotz, Gerhard, metabolism of phosphoric acid and calcium in osteomalacia under the influence of phosphorus treatment, 1907. A., ii, 285.

Hotz, Walter. See Hans Rupe.

Houben, H., the solubility of metallic oxides and sulphides in fused sodium chloride, 1912, A., ii, 1056.

Houben, [Heinrich Hubert Maria] Josef, German oil of rue and the transformation of methylnonylketoxime,

1903, A., i, 47. action of magnesium and carbon dioxide on allyl bromide; a new synthesis of vinylacetic acid, 1903,

A., i, 789.

synthesis of hydrocarbons by the aid of organo-magnesium compounds, 1903, A., i, 805.

action of ethyl chlorocarbonate on magnesium alkyl haloids, 1903, A.,

i, 825.

synthesis of hydrocarbons by organomagnesium compounds and methyl sulphate, 1904, A., i, 302.

action of organo-magnesium compounds on lactones. I., 1904, A., i, 334.

application of Kolbe's salicylic acid synthesis to benzene compounds containing nitrogen, 1904, A., i, 1014.

transformation of $\beta\gamma$ -unsaturated a-hydroxy-acids into the isomeric γ -ketonic acids, 1904, A., i, 1014.

a new dephlegmator for fractional distillation and for reflux distillation, 1904, A., ii, 468.

synthesis of aldehydes by means of formic acid, 1905, A., i, 600.

action of magnesium alkyl haloids on amines and on ammonium, amine, and hydrazine salts, and a new method of formation of hydrocarbons, 1905, A., i, 873.

syntheses of carboxylic acids. II.,

1906, A., i, 21.

preparation of borneol and bornyl acetate from pinene hydrochloride, 1906, A., i, 440.

esterification of alcohols and phenols, 1906, A., i, 520.

action of alkalis on alkylene glycolchlorohydrin ethers, 1908, A., i, 307.

alkylated halohydrin and vinylethyl ethers, 1908, A., i, 935.

Houben, [Heinrich Hubert Maria] Josef. action of nitrous acid on methyl dimethylanthranilate, 1911, A., i, 293.

condensation of mercaptans with formic acid to esters of orthotrithioformic

acid, 1912, A., i, 941.

Houben, Josef, Theodor Arendt, and Leo Ettinger, secondary anthranilic acids and the transformation of their nitrosoderivatives into a peculiar class of intensely red substances, soluble in water, 1911, A., i, 128.

Houben, Josef, and Hans Richard Arnold, chloromethyl sulphate, 1907, A., i,

1000.

chloromethyl sulphate. II. Action on amino-groups, 1908, A., i, 533.

Houben, Josef, and Walter Brassert, alkylation and arylation of anthranilic acid, 1906, A., i, 845.

benzoquinoneoximecarboxylic acid.

1908, A., i, 27.

action of alcoholic hydrogen chloride m-methylnitrosoaminobenzoic

acid, 1910, A., i, 170.

Houben, Josef, Walter Brassert, Leo Ettinger, Robert Freund, and Erich Kellner, introduction of the enitrosogroup into the nucleus of N-alkylated esters of anthranilic acid, 1909, A., i,

Houben, Josef, Walter Brassert, Leo Ettinger, and Erich Kellner, aromatic nitroso-compounds, azomethinecarboxylic acids, and the preparation of benzoquinoneoximecarboxylic acid, 1909, A., i, 645.

Houben, Josef, and Hans Doescher, dihydropinenesulphinic acid, dihydropinenecarbithionic acid, thioborneol, and thiocamphor, 1906,

A., i, 970.

hydropinenealdehyde, 1908, A., i, 27. and hydropinenealdehyde pinenecarboxylic acid, 1911, A., i, 61.

Houben, Josef, and Robert Freund, synthesis of aromatic amino-acids. IV. Direct carboxylation of dimethylaniline in the nucleus; rearrangement of alkylphenylcarbonates into p- and oalkylaminobenzoates, 1910, A., i, 110.

Houben, Josef, and Karl Führer, alkylene glycol-chlorohydrin ethers and their changes, 1908, A., i, 73.

Houben, Josef, and Arnold Hahn, reactions of dicarboxylic anhydrides with magnesium organic compounds, 1908, A., i, 539.

Houben, Josef, and Ludwig Kesselkaul, syntheses by means of organo-magnesium compounds, 1903, A., i, 42.

Houben, Josef, and Heinrich Pohl, carbithionic acids. I. Arylearbithionic acids, 1906, A., i, 847.

carbithionic acids. II. Dithioacetic

acid, 1907, A., i, 382.

carbithionic acids. III. The dithiopropionic, -butyric, -isovaleric, and -isohexoic acids, 1907, A., i, 474.

Houben, Josef, Arnold Schottmüller, and Walter Brassert, synthesis of aromatic amino-acids by rearrangement.

II., 1909, A., i, 921.

Houben, Josef, Arnold Schottmüller, and Robert Freund, synthesis of aromatic amino-acids by rearrangements. III. Alkylaminotoluic acids, 1910, A., i, 34.

Houben, Josef, and Karl M. L. Schultze, carbithionic acids. Esters of perthio-acetic, -propionic, and -phenylacetic acids, 1910, A., i, 711.

preparation of esters of orthotrithio-

formic acid, 1912, A., i, 5.
rbithionic acids. V. Preparation of carbithionic acids. new esters of carbithionic acid and of ethyl chlorocarbithionate, 1912, A., i, 5.

Houdard, Marcel, solubility of carbon in manganese sulphide, 1907, A.,

ii, 92.

aluminium sulphide and its compounds with manganese and iron sulphides, 1907, A., ii, 468...

double compounds of aluminium sulphide with chromium, nickel, cobalt, and magnesium sulphides, 1907, A., ii, 550.

solubility of alumina in aluminium sulphide and of magnesia in magnesium sulphide, 1907, A., ii, 621.

Houdas, Jules. See L. Guignard.

Hougardy, Antoine, effect of sodium hydroxide solutions injected intravascularly, and the cause of apnœa, 1904, A., ii, 429.

existence of a kinase in cow's milk,

1907, A., ii, 374.

Hough, George J., titration of ferrous salts in the presence of hydrochloric and phosphoric acids, 1910, A., ii,

Hough, Theodore, the influence of increase of alveolar tension of oxygen on the respiratory rate and the volume of air respired while breathing a confined volume of air, 1910, A., ii, 511.

variations in the response of healthy men to dyspnœic conditions produced by breathing a confined volume of air, 1911, A., ii, 993.

Hough, Theodore, the influence of muscular activity on the alveolar tensions of oxygen and carbon dioxide, 1912, A., ii, 457.

Houghton, Alexis Charles. See Alphonso

Morton Clover.

Houghton, Elijah Mark, pharmacology of ethyl salicylate, 1905, A., ii, 409. p-ethoxyphenylcamphorylimide (cam-

phenal) as an antipyretic, 1906, A.,

ii, 188, 379.

Houghton, Elijah Mark, and Thomas Bailey Aldrich, tribromotert.-butyl

alcohol, 1903, A., ii, 315.

Houghton, H. W., effect of colouring matters on some of the digestive enzymes, 1907, A., i, 996.

Houillon, L. See Edmond Emile Blaise. Houlehan, A. E. See Arthur Wesley

Browne.

Houllevigue, [Aimé Charles] Louis, action of iodine on the copper pellicles obtained by ionoplastics, 1903, A., ii, 597.

ionisation of air by high tension electric

cables, 1909, A., ii, 639.

House, H. D., and William John Gies, influence of aluminium ions on lupine seedlings, 1906, A., ii, 191.

Houseman, Percy Alfred. See Julius

Tafel.

Houston, Alexander Cruikshank, absence of Bacillus coli in unpolluted water, 1904, A., ii, 633.

Houston, Robert S., rare Renfrewshire

minerals, 1909, A., ii, 63.

Houstoun, Robert Alexander, the absorption of light by inorganic salts. Aqueous solutions of cobalt salts in the infra-red, 1911, A., ii, 785.

the absorption of light by inorganic salts. III. Aqueous solutions of nickel salts in the visible spectrum and the infra-red, 1911, A., ii, 785.

the absorption of light by inorganic V. Copper and the alkali

metals, 1912, A., ii, 507.

Houstoun, Robert Alexander, and John Spence Anderson, the absorption of light by inorganic salts. IV. Aqueous solutions of nickel and cobalt salts in the ultra-violet, 1911, A., ii, 786.

Houstoun, Robert Alexander, and Alexander Russell Brown, the absorption of light by inorganic salts. II. Aqueous solutions of cobalt salts in the visible spectrum, 1911, A., ii, 785.

Houstoun, Robert Alexander, and Alexander Smith Russell, question in absorption spectroscopy, 1909, A., ii, Housum, Charles Robert. See Isaac King Phelps.

Hove, Théodore van, preparation of alkyl ethers, 1907, A., i, 173.

new method of preparing some simple ethers. II., 1908, A., i, 827.

dynamical study of two alkyl derivatives of phosphoric acid, 1909, A.,

etherifying action of organic bases,

1909, A., i, 701.

Howard, Bernard Farmborough, rapid estimation of mercury by means of hypophosphorous acid, 1904, A., ii,

Howard, Bernard Farmborough, and Oliver Chick, cinchonamine and certain other rare alkaloids, 1909, A., i,

Howard, Bernard Farmborough, and Frank Perry, salts of the alkaloid cinchonamine, 1906, A., i, 102.

Howard, Burton J. See Willard Dell

Bigelow.

Howard, David, cinchona barks and their cultivation, 1906, A., ii, 248.

Howard, David Lloyd, separation of strychnine and brucine, 1905, A., ii, 779.

Howard, George M., estimation of arsenic in lead-antimony alloys, 1908, A.,

estimation of antimony and arsenic in lead-antimony alloys, 1909, A., ii,

Howard, Henry, the heat of chemical reactions as a basis for a new analytical method, 1910, A., ii, 239.

Howard, Hubert Arthur Harry, and Frank George Pope, indicators of the methyl-red type, 1911, T., 1333; P., 206.

Howard, Hubert Arthur Harry. also Martin Onslow Forster, and Frank George Pope.

Howard, Kenneth S., and John M. Davison, the Estacado aerolite, 1906, A., ii, 685.

Howard, Newman, atomic weight accurately a function of the volution of ideal space-symmetry ratios, 1910, A., ii, 490, 600.

Howden, R. See Frederick Ibbotson.

Howe, James Lewis, chromomalonates,

1903, A., i, 459. ruthenium. V. Ruthenium chlorides, 1904, A., ii, 490.

ruthenium. VI. The bromides, 1904,

A., ii, 665. Howe, James Lewis. See also Henry Donald Campbell.

Howe, Paul Edward, and Philip Bouvier Hawk, Spiro's and Folin's methods for urea and ammonia estimations, 1908, A., ii, 426.

estimation of ammonia and urea in urine, 1909, A., ii, 449.

repeated fasting, 1910, A., ii, 728. fasting studies. I. Nitrogen partition and physiological resistance as influenced by repeated fasting, 1911, A., ii, 304.

data from two fasts each exceeding one hundred days in length in the same dog, 1912, A., ii, 273.

studies in water-drinking. XIII. (Fasting-studies. VIII.) Hydrogen ion concentration of fæces, 1912, A., ii. 369.

fasting studies. IX. Differential leucocyte count during prolonged fasting, 1912, A., ii, 576.

Howe, Paul Edward, Henry Albright Mattill, and Philip Bouvier Hawk, fasting studies on men and dogs,

1910, A., ii, 728.

fasting studies. III. Nitrogen partition of two men through seven-day fasts following the prolonged ingestion of a low protein diet; supplemented by comparative data from the subsequent feeding period, 1911, A., ii, 412.

fasting studies. V. Studies on water drinking. XI. The influence of excessive water ingestion on a dog after a prolonged fast, 1912, A., ii,65.

VI. Distribution of fasting studies. nitrogen during a fast of one hundred and seventeen days, 1912, A., ii, 369.

Howe, Paul Edward. See also Azariah Thomas Lincoln.

Howell, Edwin Eugene, the Williamstown meteorite, 1908, A., ii, 203. the Ainsworth meteorite, 1908, A., ii,

Howell, William Henry, vagus inhibition and salts of the blood, 1906, A., ii, 179.

amino-acids in blood and lymph, 1906, A., ii, 868.

non-coagulable protein in blood, 1906, A., ii, 868.

thrombin, antithrombin, and prothrombin, 1910, A., i, 793.

the rôle of antithrombin and thromboplastin in the coagulation of blood, 1912, A., ii, 60.

the nature and action of the thromboplastic (zymoplastic) substance of the tissues, 1912, A., ii, 1078.

Howell, William Henry, and W. W. Duke, action of inorganic salts on the nerves of the isolated mammalian heart, 1907, A., ii, 110.

vagus inhibition and the output of potassium from the heart, 1908. A...

ii, 209.

effect of stimulation of the accelerator nerve on the saline metabolism of the isolated heart, 1909, A., ii, 72.

Howitz, Johann, and Max Barlocher, 6alkyloxy- and 6-hydroxy-quinolones, 1903, A., i, 279.

6-hydroxyquinolones and some alkyl haloid derivatives of 5-bromo 6hydroxyquinoline, 1905, A., i, 375.

Howitz, Johann, and Paul Nöther, halogen derivatives of 8-methylquinoline and nitro-8-quinolinealdehyde, 1906, A., i, 885.

Howitz, Johann, and Wilhelm Schwenk. derivatives of 8-quinolinealdehyde,

1905, A., i, 471.

Howitz, Johann, and Kurt Witte, replacement of bromine by chlorine in quinoline derivatives and halogenated 8-hydroxyquinolones, 1905, A., 469.

Howland, John, the chemistry and energy dissipation in sleeping children,

1911, A., ii, 1005.

Howwjanz, Simon. See Max Siegfried. Hoyer, Emil, fermentative fat-hydrolysis, 1904, A., ii, 433. fermentative fat-splitting, 1907, A.,

ii, 192.

See also Wilhelm Conn-Hoyer, Emil. stein.

Hoyt, D. M. See Leo Loeb.

Hoz, Heinrich. See Fritz Unince.

Hoz, Heinrich. See Fritz Unince.

Howntschak, Theodor, estimation of

hippuric acid in urine, 1912, A., ii, 1007.

Hub, Alfred. See Hans Meyer.

Hubbard, J. C., physical properties of binary mixtures of liquids, 1910, A., ii, 809.

Hubbard, James Lanman. See Isaac King Phelps.

Hubbard, Prevost. See Allerton Seward

Hubbard, Robert Arnold. See Gregory

Paul Baxter.

Hubbard, W. S., tryptic digestion of silk. I., 1912, A., i, 60.

Huber, Emil. See Hans Telle.

Huber, Hermann von, pyrophthalone and its derivatives, 1903, A., i, 576.

Huber, L. See Paul Jacobson. Huber, Ludwig. See Max Scholtz. Huber, Max. See Julius Schmidlin.

Huber, Otto, volumetric estimation of sulphates with benzidine hydrochloride in presence of thiosulphates, sulphites, and sulphides, 1906, A., ii. 48.

Huber, P. See Edouard Bourgeois.

Huber, Paul, amounts of substances yielding hydrogen cyanide in some fruit seeds, 1911, A., ii, 1022. composition of pear and apple seeds,

1911, A., ii, 1024.

Huber, Paul. See also W. T. Baragiola, and Ernst Winterstein.

Huber, Robert. See Alfred Werner.

Hubert, A., estimation of the free and combined tartaric acid in wine, 1906, A., ii. 204.

estimation of volatile acidity in wines,

1906, A., ii, 635.

estimation of manganese in wine, 1907, A., ii, 720.

citric acid in wines, 1908, A., ii, 544.

disappearance of sulphur dioxide, 1910, A., ii, 152.

detection of formaldehyde in wines,

1910, A., ii, 465.

Hubert, A., and F. Alba, estimation of arsenic, copper, lead, and zinc in wines, 1907, A., ii, 299.

detection of sulphuric and phosphoric acids in wines, 1910, A., ii, 651.

Hudig, J_{\cdot} , an apparatus for decanting and filtering, 1909, A., ii, 307.

Hudig, J., and Marinus Johannes van't Kruys, apparatus for measuring known quantities of liquids, 1910, A., ii, 995.

Hudig, J., and H. Welt, [amount of nitrogen as ammonia and as nitrates in rain-water collected at Uithuizermeeden], 1911, A., ii, 1128.

Hudson, Claude S., multirotation of lactose, 1903, A., ii, 623.

mutual solubility of nicotine and water, 1904, A., i, 446.

hydration of lactose in solution, 1904,

A., i, 974.

catalysis by acids and bases of the mutarotation of dextrose, 1907, A., ii, 942.

inversion of sucrose by invertase, 1908, A., i, 605, 856; 1909, A., i, 554. forms of lactose, 1908, A., i, 952.

certain numerical relations in the sugar group, 1909, A., i, 135.

hydration in solution as the cause of certain solubility influences, 1909, A., ii, 131,

new method for measuring the electrolytic dissociation of water, 1909,

A., ii, 855.

Hudson, Claude S., relation between the chemical constitution and the optical rotatory power of the sugar lactones, 1910, A., i, 220.

inversion of sucrose by invertase. Theory of the influence of acids and alkalis on the activity of

invertase, 1910, A., i, 797.

is the hydrolysis of cane sugar by acids a unimolecular reaction when observed with a polariscope? 1910, A., ii, 702.

stereochemical configuration of the sugars fucose and rhodeose, 1911,

A., i, 355.

Hudson, Claude S., and F. C. Brown; heats of solution of three forms of lactose, 1908, A., ii, 665.

Hudson, Claude S., and H. S. Paine, hydrolysis of salicin by the enzyme

emulsin, 1910, A., i, 83.

inversion of sucrose by invertase. IV. Influence of acids and alkalis on the activity of invertase, 1910, A., i,

inversion of sucrose by invertase. Destruction of invertase by acids, alkalis, and hot water, 1910, A., i, 797.

inversion of sucrose by invertase. VII. Effect of alcohol on invertase,

1910, A., i, 798.

Hudson, Claude S., and William Salant, the use of invertase in the determination of the alkalinity or acidity of biological fluids, 1910, A., ii, 764. Hudson, Oswald Freeman. See

See Guy

Dunstan Bengough.

Hudson-Cox, Frederick, and William Herbert Simmons, iodine absorption as a factor in the examination of otto of roses, 1904, A., ii, 519.

Hübbenet, Elise. See S. Kostytscheff,

and Wladimir I. Palladin.

Hübener, Gerhard, assay of sodium thiosulphate, 1906, A., ii, 196. phenolsulphonic acid and its salts,

1908, A., ii, 640.

direct estimation of caoutchouc in vulcanised rubber materials, 1911, A., ii, 231.

Hübener's caoutchouc tetrabromide,

1911, A., ii, 1036.

Hübener's method of estimating caoutchouc as its bromide, 1912, A., ii, 1102, 1103.

bituminous lignite Hübner, Curt, "schweelkohle"), 1906, A., ii, 552. Hübner, Carl W., bimolecular nitriles,

1909, A., i, 141. Hübner, Eduard. See Karl Fries.

543

Hübner, Hugo, 3-phenylcinchonic acid, 1906, A., i, 383.

derivatives of 3-phenylquinoline, 1908,

A., i, 288.

Hübner, Julius, experimental investigation into the process of dyeing, 1907, T., 1057; P., 144; discussion, P., 145.

the characterisation of mercerised cotton; preliminary note, 1907, P.,

304.

Hübner, Otto. See Carl Mannich, and Eduard Vongerichten.

Hübner, Rudolf. See Eugen Bamberger.

Hübner, Wilhelm. See Alfred Partheil.

Hueck, Werner. See Oskar Langendorff.

Hüfner, [Carl] Gustav von, absorption and hydrogen by of nitrogen aqueous solutions, 1907, A., ii, 165. absorption of nitric oxide by solutions of ferrous, nickelous, cobaltous, and manganous salts, 1907, A., ii, 552.

behaviour of oxyhæmoglobin towards reducing agents, 1908, A., i, 486.

Hüfner, Gustav von, and Emil Gansser. molecular weight of oxyhæmoglobin, 1907, A., i, 1097.

Hüfner, Gustav von, and William Küster, hæmochromogen and carbon mon-

oxide, 1905, A., i, 252.

Hüfner, Gustav von, and Béla Reinbold, absorptiometric estimation of the amount of nitric oxide combined by unit weight of methæmoglobin, 1905, A., i, 252.

Hühn, Fr. See Josef König.

Hüllweck. Gustav. See Wilhelm Schneider.

Hülsberg, Robert. See August Michaelis. Hültenschmidt. Alex. See Hermann Pauly.

Hüni, Ernst. See Richard Willstätter. Hünseler, Fritz. See Hermann Grossmann.

Huerre, R., gum of the almond tree, 1908, A., i, 606.

influence of reaction of the medium on the activity of maltases from maize, 1909, A., i, 543.

maltase of buckwheat, 1909, A., i, 621. maltase of maize, 1909, A., ii, 258, 338. cochineal fat, 1911, A., i, 766.

Hürt, H. See Hans von Liebig. Hüssy, Hans. See Adolf Kaufmann.

Hüssy, Richard. See Adolf Kaufmann. Hüssy, Werner. See Fritz Straus.

Hüthig, O. See Heinrich Walbaum. Hüttinger, Karl. See Robert Kremann.

See Alexander Hüttlinger, Alfred. Gutbier.

Hüttner, Karl, gases dissolved in minerals, 1905, A., ii, 172.

action of phosphoric acid on silicic acid and silicate glass, 1908, A., ii.

Hüttner, Karl, and Gustav Tammann. melting points and transition points of some salts, 1905, A., ii, 229.

alloys of antimony and bismuth, 1905, A., ii, 327.

Hüttner, Karl. See also Franz Mylius.

and Otto Wallach. Hütz, Hugo. See Alfred Einhorn.

Huff, William B., typical cases of secondary emanations produced by uranium-X, 1911, A., ii, 569.

Hufschmidt, Carl. See Robert Behrend. Hug, Ernst, the action of scopolamine, 1912, A., ii, 790.

Hug, Ernst. See also Richard Will-

stätter.

Hugershoff, Alfred, formation and decomposition of thiocarbamides, 1903, A., i, 477.

action of bromine on aromatic thiocarbamides, 1903, A., i, 865.

identity of the thiocarbazines and thiazoles, 1903, A., i, 866.

Hugershoff, Alfred. See also Paul Jacobson.

Huggins, (Lady). See (Sir) William Huggins.

Huggins, (Sir) William, and (Lady) Huggins, further observations on the spectrum of the spontaneous luminous radiation of radium at ordinary temperatures, 1904, A., ii, 4.

Hughes, A. Ll., velocities of the electrons produced by ultra-violet light,

1911, A., ii, 572.

photo-electric effects of certain compounds, 1912, A., ii, 5, 880.

emission velocities of photo-electrons, 1912, A., ii, 883.

Hughes, A. Ll. See also Gwilym Owen. Hughes, Ernest Chislett, and Arthur Walsh Titherley, 6-bromo-2-phenyldihydro-1:3-benzoxazine-4-one and related derivatives, 1910, P., 344; 1911, T., 23.

the action of ammonia on 6-chloro-2phenyl-1:3-benzoxazine-4-one, 1912,

T., 219; P., 6.

Hughes, Ernest Chislett. See also Arthur

Walsh Titherley. Hughes, Josiah Simpson, and James Renwick Withrow, character of silver deposits from various electrolytes, 1911, A., ii, 154.

Hughes, William Earl. See Frederick

Mollwo Perkin.

Hughes, W. T., and Anton Julius Carlson, relative hamolytic power of serum and lymph under various conditions of lymph formation, 1908, A., ii, 304.

Hugot, Charles, action of gaseous ammonia on arsenic trichloride, tribromide, or tri-iodide, 1904, A., ii,

action of gaseous ammonia on phosphorus tribromide or tri-iodide,

1906, A., ii, 83.

Hugot, Charles. See also Emile Vigour-

oux.

Hugounenq, Louis [Marie Joseph], albumin of fishes' eggs, compared with that in the sperm in the same species, 1904, A., i, 496.

ovo-vitellin, 1906, A., i, 324.

albumin extracted from fishes' eggs, and a comparison of it with the vitellin of hens'eggs, 1907, A., i, 167.

Hugounenq, Louis, and J. Galimard, diamino-acids derived from eggalbumin, 1906, A., i, 776.

Hugouneng, Louis, and Albert Morel, condensation of natural leucine and carbamic acid, 1905, A., i, 178.

the carbimide of natural (1) leucine, 1905, A., i, 264.

carbamide derivatives of natural (1) leucine, 1905, A., i, 332.

hæmatogen, 1905, A., i, 556.

synthesis of amino-acids of protein origin, 1906, A., i, 85. hæmatogen and the formation of

hæmoglobin, 1906, A., i, 468.

the true nature of the "leucines" and "glucoproteins" obtained Schützenberger in the decomposition of protein matter, 1906, A., i,719.

formation of hæmoglobin in embryo, 1906, A., ii, 95.

protein constitution; new method of hydrolysis by means of hydrofluoric acid, 1908, A., i, 706.

constitution of nucleoproteins; the constituents of pepsin, 1908, A., i,

744.

study of the constitution of proteins by the hydrolytic action of hydrogen fluoride; preparation of definite natural peptides, 1909, A., i, 195.

hydrolysis of proteins by hydrogen fluoride; new results, 1909, A., i,

685.

compounds of chromic hydroxide with amino-acids derived from proteins, 1912, A., i, 168.

Hugouneng, Louis. See also Lortet.

Huguet, estimation of total nitrogen in urine, 1910, A., ii, 155. Huhn, W. See Wladimir N. Ipatieff.

Huish, Horace C. See Henry Droop Richmond.

Huisinga, Jan, nitration of phthalic and isophthalic acids. XI., 1908, A., i,

985. Huisinga, Jan. See also Arnold Frederik Holleman.

Huiskamp, Willem, nucleohiston of the thymus, 1903, A., i, 779.

presence of fibrinoglobulin in fibrinogen

solutions, 1905, A., i, 499. fibrinoglobulin, 1906, A., i, 54.

precipitation of serum-globulin from blood-serum by means of acetic acid, 1906, A., i, 224.

Huiskamp, Willem. See also Cornelis

Adrianus Pekelharing.

Huizinga, (Miss) Alida, estimation of nitrogen in drainage water and rain water by Schloesing's method, 1912, A., ii, 89.

Hulbirt, E. R. See Owen Willans Richardson.

Huldschinsky, Kurt, action of digitalin,

1908, A., ii, 520.

Hulett, George Augustus, relation between negative pressure and osmotic pressure, 1903, A., ii, 133.

saturated gypsum solutions as a basis for conductivity, 1903, A., ii, 260. solubility and size of grain, 1904, A.,

ii, 321.

mercury sulphate and standard cells, 1904, A., ii, 695.

solubility of gypsum as affected by size of particles and by different crystallographic surfaces, 1905, A., ii, 247.

preparation of nitrogen from the atmosphere, 1906, A., ii, 18.

mercurous sulphate as depolariser in normal elements, 1911, A., ii, 848. Hulett, George Augustus, and H. W.

Berger, volatilisation of platinum, 1905, A., ii, 42.

Hulett, George Augustus, and W. D. Bonner, preparation of standard hydrochloric acid, 1909, A., ii, 342.

Hulett, George Augustus, and Ralph E. DeLury, reduction of cadmium by mercury and the E. M. F. of cad-mium amalgams, 1909, A., ii, 11.

Hulett, George Augustus, and Lionel Herman Duschak, the presence of chlorine in barium sulphate, precipitated by barium chloride, 1904, A., ii, 616.

Hulett, George Augustus. See also W. L. Perdue.

Hull, Thomas Ernest, estimation of carbon in iron and steel and in iron alloys by direct combustion, 1910,

Hull, Thomas Ernest. See also John Albert Newton Friend.

Hulsebosch. See Ledden-Hulsebosch. . Hulton, Henry Francis Everard. See

Julian Levett Baker.

Alfred, and Hugo Weil, Human, m-azoxybenzaldehyde and its analogues. I. and II., 1904, A., i, 115.

Alfred. See also Rudolf Human. Nietzki.

See Wilhelm Humbert. Maurice. Prandtl.

Humfrey, John Charles Willis, effects of strain on the crystalline structure of lead, 1903, A., ii, 137.

the intercrystalline fracture of iron and

steel, 1912, A., ii, 1058.

Humfrey, John Charles Willis. See also Walter Rosenhain.

Hummel, John James, obituary notice of, 1903, T., 652.

Hummel, John James, and Arthur George Perkin, butein, 1903, P., 134.

Hummel, John James. See also Arthur George Perkin.

Hummelberger, F. See Zdenko Hanns

Humnicki, Vincenty, condensation of acetoguanamine with aromatic aldehydes, 1907, A., i, 655.

Humnicki, Vincenty. See also Stanislaus Bondzyński.

Humphrey, George C. See Edwin Bret Humphreys, Robert Edmund. See Ira

Remsen. Thomas Clement. Humphreys, See

Thomas Slater Price. Humphries, Herbert Brooke Perren. See Alexander McKenzie.

Hundeshagen, Franz, behaviour of vanadium compounds towards metallic gold and gold solutions, 1905, A., ii, 639.

assay of commercial magnesite; estimation of small quantities of calcium in presence of much magnesium,

1909, A., ii, 439.

the alkalimetry of magnesium ammonium phosphate and acidimetry of phosphomolybdate, ammonium 1911, A., ii, 931.

a flat filter, 1912, A., ii, 484.

Hunke, Leopold. See Theodor Zincke. Hunnius, Theodor. See Paul Rabe.

Hunt, Franklin L., conductivity and ionisation of certain salts of 18° and 25°, 1911, A., ii, 688.

Hunt, Franklin L. See also William Crowell Bray.

Hunt, John Samuel. See Albert Ernest Dunstan.

Hunt. Reid, influence of thyroid feeding on poisoning by acetonitrile, 1905, A., ii, 847.

the effect of inanition and of various diets on the resistance of animals to certain poisons, 1910, A., ii, 736.

Hunt. W. F. See Edward Henry Kraus.

Hunter, Andrew, precipitins, 1903, A., ii, 663.

specificity of precipitins, 1905, A., ii, 539.

precipitins for snake venoms and snake sera, 1905, A., ii, 539.

precipitins of snake antivenoms and antisera, 1906, A., ii, 113.

compounds of protamines with other proteins, 1908, A., i, 71.

protamine as a means of distinguishing primary from secondary proteoses, 1908, A., i, 488.

the occurrence of urocanic acid in a pancreatic digest, 1908, A., ii, 710.

estimation of small quantities of iodine, with special reference to the iodine content of the thyroid gland, 1910, A., ii, 650.

urocanic acid, 1912, A., i, 584.

Hunter, Andrew, and Maurice Hope Givens, allantoin-purine excretion of the monkey, 1911, A., ii, 218.

nitrogenous metabolism of the coyote (Canis latrans), 1911, A., ii, 303.

Andrew. See also Hunter. Abderhalden, Sutherland Simpson, and Chalmers Watson.

Hunter, Albert Edward, and Frederic Stanley Kipping, some salts of d- and l-α-phenylethylamines, 1903, T., 1147; P., 203.

Albert Edward. See also Hunter, Frederic Stanley Kipping.

See . Samuel Lawrence Hunter, F. W. Bigelow.

Hunter, George William, jun., heart action of Molgula manhattensis, 1903, A., ii, 663.

Hunter, Matthew A., velocity of decomposition of nitrous oxide, 1905, A., ii, 805.

molecular aggregation of liquefied gases, 1906, A., ii, 524.

titanium, 1910, A., ii, 302.

Hunter, William Hammett, See Henry

Augustus Torrey.

Huntington, Alfred Kirby, and Cecil Henry Desch, planimetric analysis of alloys and the structure of phosphorcopper, 1908, A., ii, 846.

Hupfel, O. G. See Horace Lemuel Wells. Hupfer, Frz., influence of quinic acid on hippuric acid excretion, 1903, A.,

ii, 442.

Hupka, Hans. See Georg Frerichs. Huppert, Oskar. See Rudolf Wegscheider.

Hurley, William B. See Edward

DeMille Campbell.

Hurmuzescu, Dragomir, specific action of metals in electric discharge by X-rays and secondary rays; rôle of the metal in the transformation of X-rays into secondary rays, 1906, A., ii, 259.

radioactivity of Roumanian petro-

leums, 1908, A., ii, 453.

Hurmuzescu, Dragomir, and N. Patriciu. radioactivity of Roumanian mineral waters, 1909, A., ii, 110.

Hurmuzescu, Dragomir. See also Emile

Severin.

Hurst, H. E., genesis of ions by collision and sparking-potentials in carbon dioxide and nitrogen, 1906, A., ii, 262.

See also John Sealy Hurst, H. E.

Edward Townsend.

Hurst, L. A. See Frank Kenneth Cameron.

Hurt, Hugo, the aluminium reaction of mercury salts insoluble in water, 1910, A., ii, 805.

Hurt, Hugo. See also Hans von Liebig,

and Carl Mai.

See Fletcher Pearre Hurt, H. H. Veitch

Hurtley, William Holdsworth, and Kennedy Joseph Previté Orton, estimation of potassium and sodium in the urine, 1903, A., ii, 695.

Hurtley, William Holdsworth, and William Ord Wootton, the interaction of alloxan and glycine, 1911, T., 288;

P., 2.

William Holdsworth. Hurtley, See also Kenneth Somerville Caldwell. Thomas Wood Clarke, and Archibald Edward Garrod.

Husek, Bedřich. See Otto Lemmer-

mann, and Franz Plzák.

Husler, Joseph. See Paul Grosser. Husmann, J. See Adolf Grün.

Hussak, Eugen, [nephrite from Brazil], 1904, A., ii, 746.

Hussak, Eugen, atopite from Brazil, 1905, A., ii. 398.

occurrence of palladium and platinum in Brazil, 1905, A., ii, 598.

composition of chalmersite, 1906, A., ii, 553.

gyrolite and other zeolites from Brazil. 1906, A., ii, 555.

"phosphate favas" from the diamantiferous sands of Brazil, 1906, A., ii, 767.

phenacite from Brazil, 1909, A., ii, 492. Hussak, Eugen, and Josef Reitinger. monazite, xenotime, senaite, and native zirconia from Brazil, 1903, A.,

ii, 553. Hussakof, Louis, and William H. Welker, the egg-cases of sharks, 1908, A., ii, 406.

egg capsules of two species of shark

1912, A., ii, 369. Hussey, Arthur Vivian.

See Henry Edward Armstrong. Hussong, Ludwig. See Theodor Curtius.

Huston, R. C. See William Jay Karslake.

Hutchin, H. W., assay of wolfram concentrate, 1911, A., ii, 940. Hutchins, Edgar Burton, jun., chemistry

of the tellurates, 1905, A., ii, 701. Hutchins, Edgar Burton, jun., and Victor Lenher, quinquevalent bismuth, 1907, A., ii, 274.
Hutchinson, Arthur, Meigen's method

of discriminating calcite and ara-

gonite, 1903, A., ii, 379. composition and optical characters of chalybite from Cornwall, 1903, A., ii, 380.

composition of lengenbachite, 1907,

A., ii, 277.

composition and optical characters of dolomite from Algeria, 1910, A., ii,

identity of neocolemanite with colemanite, 1912, A., ii, 565.

Hutchinson, George Adrian. See Harold Brewer Hartley.

Hutchinson, Henry Brougham, formation of crystals in cultures of denitrifying bacteria, 1906, A., ii, 477.

a simple valve for filter-pumps, 1912,

A., ii, 933.

Hutchinson, Henry Brougham, and Francis S. Marr, changes induced by the addition of carbohydrates to soils, 1911, A., ii, 430.

Henry Brougham, and Hutchinson, Norman Harry John Miller, direct assimilation of ammonium salts by plants, 1909, A., ii, 923.

Hutchinson, Henry Brougham, and Norman Harry John Miller, direct assimilation of inorganic and organic forms of nitrogen by higher plants, 1911, A., ii, 920.

Hutchinson, Lancelot. See Hugh Mac-Lean, and Benjamin Moore.

Hutchison, Archibald Moritz, and Samuel Smiles, syntheses of 3-oxy-(1)-thionaphthen, 1912, T., 570; P. 62.

Huth, M. E. See Hugo Stoltzenberg, and Daniel Vorländer.

Huttner, Friedrich. See Wilhelm Manchot.

Hutton, Robert Salmon, melting of quartz in the electric furnace, 1903,

A., ii, 289.

Hutton, Robert Salmon, and John Ernest Petavel, electric furnace reactions under high gaseous pressure, 1907, A., ii, 432.

Hutton, Robert Salmon. See also John

Norman Pring.

Huybrechts, Maurice, influence of iron and manganese on the estimation of zinc by Schaffner's process, 1907, A., ii, 397.

ionic velocities; magnesium sulphate and sulphuric acid in dilute aqueous

solution, 1907, A., ii, 430.

estimation of sulphuric acid and of sulphur in pyrites, 1910, A., ii, 544. estimation of barium, 1910, A., ii, 898.

Hyde, A. L., unusual case of specific

gravity, 1912, A., ii, 1138.

Hyde, Alfred William Tovey. Thomas Slater Price.

Hyde, Frederic Sackett, graphitic acid or

oxide, 1904, A., ii, 397.

Hyde, Ida Henrietta, differences in electrical potential in developing eggs, 1904, A., ii, 826.

effect of salt solutions on the heart and respiration of the skate, 1909, A.,

Hynd, Alexander. See James Colquhoun Irvine.

I.

Ibbotson, Frederick, estimation of nickel [in German silver], 1911, A., ii, 1139.

Ibbotson, Frederick, and S. G. Clarke, volumetric estimation of uranium, 1911, A., ii, 448.

Ibbotson, Frederick, and R. Howden, estimation of chromium in steel, 1905, A., ii, 119, 120.

Ibele, Josef. See Emil Besthorn, and

Wilhelm Koenigs.

Ibrahim, Jussuf, trypsinogen and enterokinase in the new-born child and in the human embryo, 1909, A., ii, 1034.

physiology of digestion in new-born infants, 1910, A., ii, 320.

the enzymes which act on disaccharides

in the human embryo and new-born child. I., 1910, A., ii, 629.

Ibrahim, Jussuf, and L. Kaumheimer, the question of pancreas lactase (investigations on human new-born children and sucklings), 1909, A., ii, 907.

the enzymes which act on disaccharides in the human embryo and new-born child. II., 1910, A., ii, 629.

Ibrahim, Jussuf, and T. Kopec, gastric lipase. I. Gastric lipase in human embryo and new-born child, 1910, A., ii. 422.

Ichenhaeuser, Ernst. See Gustav Schultz.

Icole, the thermal conductivity of graphite and copper sulphide at various temperatures, 1912, A., ii, 231.

Idaszewski, Kasimir S. See Guido

Bodländer.

Igersheimer, Josef, action of atoxyl on the animal body, 1908, A., ii, 1061.

Igersheimer, Josef, and A. Rothmann, behaviour of atoxyl in the organism, 1909, A., ii, 420.

Iglesias, Enrique, experiments serving to explain the parallelism between the glycogenic function and the antitoxic function of the liver, 1911, A., ii,

Ignatowski, Alexander, occurrence of amino-acids in urine, especially in cases of gout, 1904, A., ii, 674. Iguchi, Risaburo. See T. Kikkoji.

Ihering, Albrecht von, Siepermann-Fudickar water pump, 1906, A., ii,

433.

Hildrich, isoquinolinequinoline-betaines, 1903, A., i, 116. oximes of quinoline- and isoquinolinebromoacetophenones, 1903, A., i, 365.

Ikawa, Kozo, kinetics of the hydrolytic decomposition of methyl acetate by the catalytic action of acetic acid, 1909, A., ii, 559.

kinetics of two simultaneous reactions in a system, 1909, A., ii, 560.

Ikeda, Kikunaye, the chemical theory of solutions. I., 1908, A., ii, 932. Ikeda, Kikunaye. See also Jōji Sakurai.

Iklé, Max, ultra-red absorption spectra of organic liquids, 1904, A., ii, 601

Iliovici, George, filter stand, 1904, A., ii, 840.

Iliovici, George. See also Franz Fischer. Iljin, Leo F., composition of taunin, 1909, A., i, 503; 1912, A., i, 43.

action of phenylhydrazine on formaldehyde, 1909, A., i, 675.

action of zinc dust on tannin, 1909, A., i, 821.

the action of zinc oxide on tannin, 1910, A., i, 331.

molecular weight of tannin, 1910, A. i. 762.

action of arsenic acid on gallic acid,

1910, A., i, 908. Iljin, Nikolaus. See Rudolf Ruer.

Iljinsky, M., preparation of isomeric sulphonic acids by means of catalytic agents, 1904, A., i, 176.

Ilsky, Longinus, combination of hydrogen bromide with itaconic anhydride, 1905,

A., i, 323.

Ilyin, B., proof of the applicability of Boyle's and Gay-Lussac's laws to

emulsions, 1911, A., ii, 861. Imabuchi, T., estimation of urinary indican, 1909, A., ii, 772.

nutritive value of blood proteins, 1910,

A., ii, 322.

the iron-content of the liver after feeding on ferratin, 1910, A., ii,

Imadsu, Akira, the solubility of sodium dihydrogen phosphate and the transition points of the hydrates, 1912, A., ii, 348.

Imasehki, Tsunejirō. See Gintarō Daikuhara.

Imbert, Georges, and Consortium für Elektrochemische Industrie, [preparation of triaminotriphenylethylene], 1907, A., i, 977.

preparation of ethyl phenylglycinate,

1908, A., i, 625.

preparation of aromatic glycines, 1908, A., i, 975.

production of alkyl chloroacetates from dihalogenated vinyl ethers, 1909, A., i, 453, 694, 873.

acids hydroxyaliphatie from products of the interaction of hypochlorous acid or chlorine and the glycerides of aliphatic acids of animal or vegetable origin, 1910, A., i, 7.

Imbert, Georges. See also Consortium für Elektrochemische Industrie.

Imbert, Henri, rotatory power of cocaine hydrochloride, 1903, A., i, 50. Imhof, Albert. See Karl Bernhard

Lehmann.

Imhoff, Karl. See Oscar Spitta.

Imhoff, Max. See Felix Kaufler.
Immendorff, Heinrich, preservation of farm-yard manure, 1906, A., ii, 487. Immisch, Kurt Benno. See Emil Abder-

halden.

Impens, Émile, local anæsthesia produced by alypin, 1905, A., ii, 842.

absorption through the skin of esters of salicylic acid, 1907, A., ii, 977.

Inaba, Ryotaro, estimation of fat in samples of fæces and food-stuffs by the Kumagawa-Sutō method, 1908, A., ii,

Inaba, Ryotaro. See also E. Gatz.

Inada, Ryokichi, the occurrence of glyoxylic acid in urine, 1906, A., ii, 109. Inagaki. Ch., the mechanism of protein

assimilation, 1907, A., ii, 186. Inagaki, Ch. See also Friedrich Alfred

Schwenkenbecher.

Inamura, R., efficacy of calcium cyanamide under different conditions, 1906, A., ii, 891.

Ince. Walter Holinshed. See Edward Alexander Mann.

Inchley, Orlando, specific gravity of blood, 1904, A., ii, 622.

pilocarpine and other reagents in relation to precipitin immunity, 1905, A., ii, 601.

Inchley, Orlando. See also Walter Ernest Dixon.

Inclán, Aurelio Suárez, variation of electrical conductivity with change of temperature in solutions of sodium and potassium chlorides, 1907, A., ii, 66.

Indra, A. See Edouard Donath, and Richard Ehrenfeld.

Indrickson, F. N., experiments with radium bromide, 1903, A., ii, 346.

Ingebrechtsen, Kristian. See Heinrich Goldschmidt.

Ingerman, D., bog-iron ore, 1904, A., ii, 744.

Ingersoll, L. R. See Charles Elwood Mendenhall.

Ingham, Harry. See Ernest Francis Joseph Atkinson.

Ingham, Leslie Howard, electrolytic estimation of nitric acid with a rotating anode, 1905, A., ii, 61.

use of a rotating anode in the electrolytic estimation of zinc, 1905, A., ii, 63.

Inghilleri, Giuseppe, new method of preparing ammonium thiocyanate and thiocarbamide, 1909, A., i, 637.

photochemical synthesis of carbohydrates. I. Sorbose, 1911, A., i, 354.

Inghilleri, Giuseppe, chemical action of light, 1911, A., i, 709.

action of aniline on uranyl salts. II.,

1912, A., i, 620.

influence of sunlight on the synthesis of alkaloid bases by the action of alcoholic ammonia on aldehydes. IV., 1912, A., i, 831.

Inghilleri, Giuseppe, and G. Gori, complex salts of quinoline with uranyl

salts, 1912, A., i, 650.

Inghilleri, Giuseppe. See also Arrigo

Mazzucchelli.

Ingle, Harry, iodine value of unsaturated organic compounds, 1904, A., ii, 456.

Ingle, Harry. See also Ernest Wake.

Ingle, Herbert, the available plant food in soils, 1904, P., 194; discussion, P., 194; 1905, T., 43.

[amount of nitrogen as ammonia and nitrates in rain-water collected at Pretoria], 1906, A., ii, 302.

Inglis, John Kenneth Harold, notes on ozone: estimation, solubility, and interaction with hydrogen peroxide, 1903, T., 1010; P., 197.

electrochemistry of permanganic acid,

1903, A., ii, 352.

loss of nitre in the chamber process, 1906, A., ii, 226; 1907, A., ii, 613.

isothermal distillation of nitrogen and oxygen and of argon and oxygen,

1906, A., ii, 332.

the optical properties of compounds containing an asymmetric "quaternary" carbon atom. Part i. The synthesis of \$\beta\$-phenyl-\$\beta\$-methyl-valeric acid and of \$as\$-methylethyl-succinic acid, 1911, T., 538; P., 46.

Inglis, John Kenneth Harold, and Joseph Edward Coates, the densities of liquid nitrogen and liquid oxygen and their mixtures, 1906, T., 886; P., 146.

Inglis, John Kenneth Harold, and (Miss) Lottie Emily Knight, the purification of acetic ester, 1907, P., 198.

the conductivities of the a-oximinofatty acids, 1908, T., 1595; P., 191.

Inglis, John Kenneth Harold, and Alfred Sidell Mason, action of Grignard's reagent on ethyl oxalate, 1909, P., 195.

Inglis, John Kenneth Harold, and Fred Wootton, the electrolytic chlorination of the salts of organic acids, 1908, T., 1592; P., 174.

Inglis, John Kenneth Harold. See also Robert Luther, and William White Taylor.

Innes, A. G. See Ernst Berl.

Inostzanzeff, A. A., native iron from Russian Island, Vladivostok, 1912, A., ii, 170.

Inouye, Katsuji, presence in nucleic acids of a radicle which yields lævulic acid, 1904, A., i, 837.

the nucleic acid from the spermatozoa of Muraenesox cinereus, 1906, A., i,

775.

action of ammonia-zinc hydroxide on d-galactose and l-arabinose, 1907, A., i, 482.

formation of thymine by heating intestinal nucleic acid, 1908, A., i, 931.

the xanthoproteic reaction, 1912, A., i, 922.

the origin of creatine in the body, 1912, A., ii, 1079.

Inouye, Katsuji, and Hiizu Ito, a colour reaction of bile acids with vanillin and sulphuric acid, 1908, A., ii, 999.

Inouye, Katsuji, and K. Kondo, formation of dextrorotatory lactic acid in autolysis. III. In muscle, 1908, A., ii, 209.

Inouye, Katsuji, and Yashiro Kotake, nucleic acid of the intestine, 1906, A., i. 55.

Inouye, Katsuji, and Tadasu Saiki, abnormal constituents of the urine in epileptic fits, 1903, A., ii, 317.

Inouye, Katsuji. See also Ernst Cohen,

and Theodor Svedberg.

Inouye, Ryngo, application of dicyanodiamide as a nitrogenous manure, 1909, A., ii, 929.

Inouye, Ryngo. See also Emil Abderhalden, Umetaro Suzuki, and Tokusaburo Takeuchi.

Inouye, Tatsune, See Risaku Ischidzu.
Ipatieff, Wladimir N., catalytic decomposition of ethyl alcohol, 1903,
A., i, 453.

pyrogenetic contact reactions of organic compounds. IV. A new method of preparing olefines, 1903, A., i, 593.

pyrogenetic contact reactions of organic compounds. V. Contact isomerism, 1903, A., i, 594.

catalytic reactions at high temperatures and pressures. VIII. and IX., 1904, A., ii, 644, 645.

catalytic reactions at high temperatures and pressures. X. Influence

of pressure, 1907, A., i, 5.

catalytic reactions at high temperatures and pressures. XI. and XIII. Reducing catalysts, 1907, A., i, 5, 827. Inatieff, Wladimir N., catalytic reactions at high temperatures and pressures. XII. Dehydration under the influence of alumina, 1907, A., i, 6.

catalytic reactions at high tempera-XIV. Retures and pressures. ducing catalysts in the presence of metallic oxides, 1907, A., i,

catalytic reactions at high temperatures and pressures. XIII. Reduction of aromatic amines and quinoline in presence of nickel oxide, 1908, A., i, 332.

catalytic reactions at high temperatures and pressures. XIV. Reduction of benzaldehyde and benzyl alcohol in presence of iron, 1908,

A., i, 347.

catalytic reactions at high temperatures and pressures. XXII. Catalytic decomposition of acids, 1908,

A., i, 386.

catalytic reactions at high temperatures and pressures. XVI. Function of oxides in catalysis, 1908, A.,

ii, 266.

catalytic reactions at high tempera-XXI. tures and pressures. decomposition of alcohols in presence of metallic oxides, 1908, A., ii, 472.

reduction and oxidation of nickel oxide under the ordinary and high

pressures, 1908, A., ii, 594.

catalytic reactions at high temperatures and pressures. XVII. Reduction of fatty compounds with an ethylene linking in presence of cupric oxide, 1909, A., i, 449.

catalytic reactions at high temperatures and pressures. XVIII. Reduction of fluorene, acenaphthene, and retene in presence of nickel oxide, 1909, A., i, 466.

catalytic reactions at high temperatures and pressures. XIX. Reduction of aromatic acids in presence of nickel oxide and cupric oxide, 1909, A., i, 472.

catalytic reactions at high temperatures and pressures. XX. Dehydration of cyclic alcohols, 1911, A., i,

25.

catalytic reactions at high temperatures. XXI. Influence of foreign substances on the activity of catalysts, 1911, A., i, 31.

polymerisation of ethylene hydrocarbons at high temperatures and pressures, 1911, A., i, 937.

Ipatieff, Wladimir N., the replacement of metals from aqueous solutions of their salts by hydrogen at high temperatures and pressures, 1912, A., ii, 50.

origin of naphtha, 1912, A., ii, 171. Ipatieff, Wladimir N., and G. Balatschinsky, catalytic reactions at high

pressures and temperatures. XXIII. Hydrogenation of acetone in the presence of copper oxide and zinc dust, 1912, A., i, 7.

catalytic reactions at high pressures and temperatures. XXIV. Hydrogenation of the terpenes, 1912, A.,

i. 37.

Wladimir N., and W. N. Inatieff. Dechanoff, addition of hydrogen haloids to olefines in acetic acid and aqueous solutions. II., 1904, A., i, 705.

Ipatieff, Wladimir N., and N. Dowgelewitsch, catalytic reactions at high temperatures and pressures. XXII. Decomposition of hexane and cyclohexane; isomerisation of cyclohexane,

1911, A., i, 937.

Ipatieff, Wladimir N., and Drachussoff, catalytic reactions at high temperatures and pressures. XXII. Reduction of terpenes, 1911, A., i, 137.

Ipatieff, Wladimir N., and W. Huhn, pyrogenetic contact reactions of or-VI. Contact ganic compounds.

isomerism, 1903, A., i, 595.

Inatieff. Wladimir N., W. Jakowleff, and L. Rakitin, catalytic reactions at high temperatures and pressures. XV. Reduction of anthracene and phenanthrene in presence of nickel oxide, 1908, A., i, 330.

Ipatieff, Wladimir N., and W. Leontowitsch, pyrogenetic contact actions of organic compounds. VII. Contact metamerism, 1903, A., i, 598.

Ipatieff, Wladimir N., and B. Ogonowsky, addition of halogen hydrides to ethylenoid hydrocarbons in acetic acid solution, 1903, A., i, 595.

Ipatieff, Wladimir N., and O. Philipoff, catalytic reactions at high temperatures and pressures. XVI. Reduction of aromatic ethers, esters, and acids in presence of nickel oxide, 1908, A., i, 342. Ipatieff, Wladimir N., and W. Sdzito-

wecky, catalytic reactions at high temperatures and pressures. XII. Catalytic isomerisation of butylene,

1907, A., i, 457.

Ipatieff, Wladimir N., and W. Werchowsky, the precipitation of metals from aqueous solutions of their salts by hydrogen at high temperatures and pressures, 1909, A., ii, 564; 1911, A., ii, 716.

Ipsen, Richard. See Otto Ruff. Irie. I. See Umetaro Suzuki.

Irmscher, Camillo. See Ernst von Meyer.

Irvine, James Colquhoun, resolution of lactic acid by morphine, 1906, T., 935; P., 159.

a polarimetric method of identifying chitin, 1909, T., 564; P., 89.

Irvine, James Colquhoun, and Adam Cameron, the alkylation of galactose, 1904, T., 1071; P., 174.

a contribution to the study of alkylated glucosides, 1905, T., 900; P., 191.

Irvine, James Colquhown, and Charles Scott Garrett, acetone derivatives of d-fructose, 1910, T., 1277; P., 143.

Irvine, James Colquhoun, and Robert Gilmour, the constitution of glucose Part I. Glucose-anilderivatives. ide, -oxime, and -hydrazone, 1908, T., 1429; P., 186.

the constitution of glucose derivatives. Part II. Condensation derivatives of glucose with aromatic aminocompounds, 1909, T., 1545; P.,

218.

Irvine, James Colguhoun, and Alex ander Hynd, monomethyl lævulose and its derivatives: constitution of lævulosediacetone, 1909, T., 1220; P., 176.

o-carboxyanilides of the sugars, 1911,

T., 161; P., 9.

the conversion of d-glucosamine into d-glucose, 1912, T., 1128; P., 54,

synthetic aminoglucosides derived d-glucosamine, 1912, P., from

Irvine, James Colquhoun, and David McNicoll, the condensation benzoin with methyl alcohol, 1908, T., 950; P., 119.

the formation of ethers from compounds of the benzoin type, 1908, T., 1601; P., 191.

the constitution and mutarotation of sugar anilides, 1910, T., 1449; P., 195.

Irvine. James Colquhoun, David McNicoll, and Alexander Hynd, new derivatives of d-glucosamine, 1911, T., 250 ; P.: 23.

Irvine, James Colquhoun, and (Miss) Agnes Marion Moodie, the alkylation of mannose, 1905, T., 1462; P., 227.

the addition of alkyl haloids alkylated sugars and glucosides, 1906, T., 1578; P., 204.

the reduction products of o- and pdimethoxybenzoin, 1907, T., 536;

P., 62. derivatives of tetramethyl glucose, 1907, P., 303; 1908, T., 95.

Irvine, James Colquhoun, and Robert Evstafieff Rose, the constitution of salicin synthesis of pentamethyl salicin, 1906, T., 814; P., 113.

Irvine, James Colquhoun, and John Weir, the application of Baeyer's reduction to benzoin and its derivatives, 1907, T., 1384: P., 205.

Irvine, James Colquhoun. See also David Fraser Harris, Thomas Purdie, and Robert Alexander Robertson.

Irving, Annie A., and Rita Hankinson, nitrate-reducing enzyme in green plants, 1908, A., ii, 218.

Irving, John Duer, wolframite from the Black Hills, South Dakota, 1904, A.,

ii, 418.

Isaac, Eduard, and Gustav Tammann, alloys of iron with tin and gold. 1907, A., ii, 469.

behaviour of iron towards lead. bismuth, thallium, and cadmium, 1907, A., ii, 777.

alloys of iron and platinum, 1907, A., ii, 786.

Isaac, Eduard. See also Arthur Binz, and Otto Wallach.

Isaac, (Miss) Florence, the temperatures of spontaneous crystallisation of mixed solutions and their determination by means of the index of refraction; mixtures of sodium nitrate and lead nitrate, 1908, T., 384; P., 30.

the spontaneous crystallisation and melting- and freezing-point the curves of mixtures of two substances which form mixed crystals and possess a minimum or entectic freezing point; mixtures of azobenzene and benzylaniline, 1910, A., ii, 1034.

Isaac, (Miss) Florence. See also Henry Alexander Miers.

Isaac, Salo, purine bases of herring brine, 1904, A., ii, 628.

See also Erich Frank, and Isaac, Salo. Ulrich Friedemann.

Isakoff, L., anomalous dispersion of light in an aqueous solution of neodymium nitrate, 1910, A., ii, 1013,

Isay, Oskar, synthesis of purine, 1906, A., i. 218.

Ischidzu, Risaku, and Tatsune Inouye, decomposition of urotropine (hexamethylenetetramine), 1906, A., i, 402.

Iscovesco, Henri, influence of cholesterol on hæmolysis by soaps, 1909, A., ii,

cataphoresis of ferments and colloids, 1910, A., i, 290.

Isenburg, A. See Fritz Glaser.

Isert. Fritz. See August Michaelis. Isgarischeff, N., normal and liquid

potentials of non-aqueous solutions, 1912, A., ii, 729.

Isgarischeff, N. See also Alexander Moser, and Nicolai D. Zelinsky.

Isham, Helen, the loss of carbon during solution of steel in potassium cupric chloride, 1912, A., ii, 387.

Isham, Helen, and Joseph Aumer, direct

combustion of steel for carbon and sulphur, 1908, A., ii, 898.

Isham, Helen. See also Louis Monroe

Dennis.

Isham, Robert M. See O. L. Barnebey. Isherwood, Percy Claude Cameron, the coloured salts and derivatives of the -thiovioluric acid group; preliminary note, 1909, P., 120.

Isherwood, Percy Claude Cameron.

also Arthur Hantzsch.

Ishida, Migaku, and Bernhard Tollens, estimation of pentosans and methylpentosans in cereals and in wood fungi, 1911, A., ii, 645.

Ishida, Migaku. See also Carl Neuberg. Ishihara, Hiromu, nitrogen distribution in the urine of dogs in cases of subacute phosphorus poisoning, 1912, A., ii, 792.

Ishihara, Hiromu. See also Otto von

Ishizaka, Tomatoro, artificial melanins, and the natural melanin of the cockchafer, 1908, A., i, 280.

Iskull, Wold., rhodusite from Asskys River, Siberia, 1908, A., ii, 401.

Isler, Max. See Richard Willstätter. Isler, Max H., side-chain halogen substituted methylanthraquinone,

1909, A., i, 811. Ismailsky, von, new synthesis of benzylidine-2-methylquinoline, 1912, A., i, 128.

Isnard, E., some reactions of terpin, 1908, A., ii, 908.

Israel, Arthur. See Emil Abderhalden. Israilsky, W. See W. Zaleski.

Issaew, Wladimir, yeast catalase, 1904, A., i, 959; 1905, A., ii, 547.

Issaew, Wladimir, yeast oxydase, 1904, A., i, 959.

malt oxydase, 1905, A., ii, 646.

Issaias, Basile. See Arthur Hantzsch. Issekutz, Béla von, the action of morphine, codeine, dionine, and heroine

on breathing, 1911, A., ii, 1017. the synergic action of local anæs-

thetics, 1912, A., ii, 666.

the synergic action of the opium

alkaloids, 1912, A., ii, 667.

the antagonism between the opium alkaloids and apomorphine, 1912, A., ii, 667.

Issler, Gotthold. See Carl Bülow.

Issoglio, Giovanni, condensation products of the three nitrobenzaldehydes with ethyl cyanoacetate in presence of ammonia], 1904, A., i, 525.

isomeric oxypyridines from β -ketones,

1905, A., i, 609.

derivatives of benzoylacetone, 1906, A., i, 862.

new isomeride of conjine from 5-cvano-2:2:4-trimethyldihydro-6-pyridone, 1908, A., i, 1009.

Issoglio, Giovanni. See also Icilio

Guareschi.

Istomin, A. W., addition of iodine chloride to isobutylene, 1905, A., i, 165.

Istrati, Constantin I., some products of the oxidation of aniline by atmospheric oxygen, 1903, A., i, 82.

remarks on the nomenclature of organic chemistry, 1912, A., i, 597.

Istrati, Constantin I., and M. Mihailescu,

albanite, 1912, A., ii, 773.

Istscherekoff, W., volumetric estimation of humus in soil by means of potassium permanganate, 1904, A., ii, 796.

Itallie, Emile Isidore van, distinction between boiled and unboiled milk, 1904, A., ii, 299.

some citrates, 1908, A., i, 854.

Itallie, Leopold van, evaluation of aloes, 1905, A., ii, 779.

the existence of a cyanogenetic compound in Thalictrum aquilegifolium, 1905, A., ii, 852.

catalases of blood, 1906, A., ii, 238,

differentiation of body fluids containing protein, 1906, A., ii, 316.

examination of body juices, 1906, A., ii, 461.

presence of hydrocyanic acid in the order Thalictrum, 1910, A., ii, 534. dipterocarpol, 1912, A., i, 352.

Itallie, Leopold van, and Max Kerbosch, components of opium, 1911, A., i, 76. minjak lagam, 1912, A., i, 372.

Itallie, Leopold van, and C. H. Nieuwland, copaiba balsam from Surinam, 1904, A., i, 1037; 1906, A., i, 596.

seeds and oil of Morynga pterygosperma, 1906, A., ii, 386.

the seeds and oil of mountain ash berries, 1906, A., ii, 573.

Iterson, Gerrit van, jun., the decomposition of cellulose by aerobic micro-organisms, 1903, A., ii, 503.

deduction of several common formulæ from a general equation of state, 1906, A., ii, 11.

Iterson, Gerrit van, jun. See also (Miss) J. van Amstel.

Ito, Eizaburo, the Japanese dyewood "doss," 1908, A., i, 441.

Ito, Hiizu. See Katsuji Inouye.

Iwakawa, K., "tagayasan," a Japanese wood the dust of which causes inflammation, 1911, A., i, 793.

pharmacological investigations on dicentrine, the alkaloid of Dicentra pusilla, 1911, A., ii, 420.

cynanchotoxin, the poisonous constituent of Cynanchum caudatum maxim., and phytolaccotoxin, 1912, A., ii, 282.

Iwanoff, A., di-p-hydroxydiphenylisopentane, 1912, A., i, 761.

Iwanoff, A. A., qualitative analysis of complex mixtures by boiling with sodium carbonate, 1912, A., ii, 199.

Iwanoff, Konstantin, emission of the Dlines by different sodium compounds, 1912, A., ii, 1113.

determination of the optical parameters of the D_1 -line, 1912, A., ii, 1114.

Iwanoff, K. S., action of some salts and monatomic alcohols on the development of moulds, 1904, A., ii, 836. sugar formation in the isolated liver,

1906, A., ii, 466. Iwanoff, Leonid, changes in phosphorus in the germination of vetches, 1903, A., ii, 94.

fermentative decomposition of thymonucleic acid by fungi, 1903, A., ii,

behaviour of proteins during alcoholic fermentation, 1904, A., ii, 834.

the synthesis of organic phosphorus compounds in killed yeast cells, 1907, A., ii, 191.

formation of organic phosphorus compounds and their function in zymase fermentation, 1909, A., i, 752.

the question of the oxidation of the products of zymin fermentation during respiration, 1911, A., ii, 48.

Iwanoff, Leonid, the action of oxygen on the alcoholic fermentation of peas. 1912, A., ii, 197.

Iwanoff, L. L., muscovite from Kossoi-Brod, Urals, 1904, A., ii, 667.

tale from Kossoi-Brod, Urals, 1909.

A., ii, 324.

Iwanoff, Nicolaus N., influence of phosphates on the respiration of plants, 1910, A., ii, 438.

action of useful and injurious stimulants on the respiration of plants.

1910, A., ii, 532.

influence of the vapours of formaldehyde, acetaldehyde, and acraldehyde on the organism, 1911, A., ii, 419.

the action of useful and harmful stimulators on the respiration of living and killed plants, 1911, A., ii, 522.

Iwanoff, Nicolaus N. See also Wladimir I. Palladin.

Iwanoff, Sergius, carbohydrates of Coelococcus and Phytelephas, 1908, A., ii, 1064.

Iwanoff, W. N., new burette for volumetric analyses, 1905, A., ii, 349.

thiocyanoselenious acid: new method for estimating selenium, 1908, A., i, 513; ii, 530.

a new method for determining copper in pyrites or burnt pyrites, 1911, A., ii, 660.

a simple apparatus for the estimation of small quantities of arsenic, 1912, A., ii, 296.

explosibility of uranium nitrate, 1912, A., ii, 455.

the detection of nitric acid in sulphur trioxide, 1912, A., ii, 1093.

Iwanowski, D., development of yeast in sugar solutions without fermentation, 1903, A., ii, 319, 386.

causes of the displacement of absorption bands in the leaf, 1908, A., ii,

Iwanowsky, Watzlaff, apparatus for reversed filtration and its application to the estimation of fibre, 1909, A., ii,

Iwaschkiewitsch, M. See Rudolf Hober. Izar, Guido, influence of silver hydrosols and salts on nitrogen metabolism, 1909, A., ii, 905.

action of arsenic on autolysis, 1909, A., ii, 907.

action of silver salts on the autolysis of liver, 1909, A., ii, 907.

the influence of certain mercury compounds on metabolism, 1910, A., ii, 53.

Izar, Guido, uric acid formation. V. and VI., 1910, A., ii, 325, 427.

uric acid formation. VII. (1) Failure of regeneration of uric acid in hunger; (2) destruction and formation of uric acid in birds: (3) uric acid synthesis in mammals and birds, 1911, A., ii, 907.

lipolysis, 1912, A., ii, 655.

Izar, Guido. See also Marcel Ascoli, and Carlo Bezzola.

Izbekoff, W. A., and Wladimir A. Plotnikoff, aluminium bromide as solvent, 1911, A., ii, 493.

Izgaryscheff. See Isgarischeff.

J.

Jabłczynski. Kasimir, catalysis heterogeneous systems; decomposition of chromous chloride by means of platinum, 1908, A., ii, 680.

kinetics of successive reactions; reduction of chromic acid by oxalic acid,

1908, A., ii, 935.

relation between the velocity of reaction and the velocity of stirring in non-homogeneous systems, A., ii, 1020.

diffusion through membranes, 1909,

A., ii, 300.

lead chromate and its change of colour,

1909, A., ii, 313.

Jablczyński, Kasimir, and St. Jabłoński, reactions in heterogeneous systems; the influence of alcohol, 1911, A., ii, 27.

Jabłczyński, Kasimir, and S. Przemyski, reactions in heterogeneous systems. I. The rate of evaporation of water and aqueous solutions, 1912, A., ii, 908.

reactions in heterogeneous systems. II. Rate of absorption by potassium hydroxide of carbon dioxide mixed with a current of air, 1912, A., ii,

Jablin-Gonnet, Charles J. A., salicylic acid a normal constituent of wild

cherries, 1904, A., ii, 71.

Jabroński, St. See Kasimir Jabłczynski. Jaboin, A., units of measurement of radium and of radioactivity, 1911, A., ii, 8.

Jaboin, A., and G. Beaudoin, elimination of radium bromide [in the organism], 1909, A., ii, 165.

French and German units of measurement for radioactive emanation, 1910, A., ii, 675.

Jaboin, A. See also H. Dominici, and Haret.

Jaboulay, Emile, estimation of carbon in iron-alloys, 1906, A., ii, 802.

estimation of sulphur in steel and iron. 1908, A., ii, 223; 1911, A., ii, 654. the estimation of vanadium in steel. 1909, A., ii, 705.

Jabs, Asmus. See Richard Lorenz.

Jack, Robert, dissymmetrical separations in the Zeeman effect in tungsten and molybdenum, 1909, A., ii, 280. magnetic resolution of the spectrum

lines of niobium, 1912, A.,

Jackson, Colin Gyrth, the dissociation of cupric bromide and some forms of glass manometer, 1911, T., 1066; P., 45.

Jackson, Colin Gyrth. See also Harry

Medforth Dawson.

Jackson, Charles Loring, and Harold Eugene Bigelow, 5-bromo-2:4:6-triiodo-1:3-dinitrobenzene and some of its derivatives, 1909, A., i, 465; 1912, A., i, 101.

Jackson, Charles Loring, and Elmer Keiser Bolton, octaiodoquinhydrone,

1912, A., i, 476.

Jackson, Charles Loring, and Maitland Crease Boswell, action of iodine chloride on catechol, 1906, A., i, 496.

Jackson. Charles Loring, and Daniel Francis Calhane, dibromodinitrobenzenes derived from p-dibromobenzene, 1903, A., i, 159.

Jackson, Charles Loring, and Paul Whittier Carleton, some derivatives of tetrachloro-o-benzoquinone, 1908, A.,

i. 427.

Jackson, Charles Loring, and Henry Avery Carlton, tetrachlorodinitrobenzene, 1903, A., i, 79; 1904, A., i. 485.

certain derivatives of tetrabromo-obenzoquinone, 1905, A., i, 907.

Jackson, Charles Loring, and Latham Clarke, additive compounds with dimethylaniline, 1904, A., i, 155.

action of bromine on dimethylaniline, 1905, A., i, 768; 1906, A., i, 828.

curcumin, 1905, A., i, 804; 1906, A., i, 596; 1911, A, i, 218.

rosocyanin, 1905, A., i, 804.

additive compounds of quinones and tertiary amines, 1905, A., i, 908.

additive compounds of arylamines and aromatic nitro-derivatives, 1906, P., 83.

modification of Scheibler's extractor for use with large quantities of a solid, 1909, A., ii, 826.

- Jackson, Charles Loring, and Raymond Bartlett Earle, coloured substances derived from nitro-compounds, 1903, A., i, 339.
 - certain derivatives of picric acid, 1903, A., i, 406.
 - 3:5-dinitrobenzenesulphonicacid, 1903, A., i, 407.
- Jackson, Charles Loring, and Augustus Henry Fiske, certain nitro-derivatives of vicinal tribromobenzene, 1903, A., i, 688.
 - action of sodium hydroxide on tetrabromo-o-benzoquinone, 1909, A., i,
 - a method for purifying and drying organic liquids by wiping, 1910, A., ii, 1110.
- Jackson, Charles Loring, and Harley A. Flint, tribromomethoxy-o-benzoquinone methylhemiacetal, 1908, A., i, 191.
 - action of acetic anhydride on octabromo-1'-hvdroxy-1-methoxy-o-
 - quino-1-monoxide, 1910, A., i, 121. tetrabromodiketocyclopentene, 1910, A., i, 177.
- Jackson, Charles Loring, and George Leslie Kelley, hemi-ether of hexachloroethoxy-o-quinocatechol, 1909, A., i, 495.
 - certain derivatives of tetrachloro-obenzoquinone, 1912, A., i, 275.
- Jackson, Charles Loring, and John Frank Langmaid, certain derivatives of 1:3:5-tri-iodi-2:4-dinitrobenzene, 1904, A., i, 861.
- Jackson, Charles Loring, and Robert Dawson MacLaurin, derivatives of tetrachloro-o-benzoquinone, 1906, A., i, 97; 1907, A., i, 856.
 - constitution of the a- and B-additive compounds of alcohols and tetrabromo-o-benzoquinone, 1907, A., i, 223.
- Jackson, Charles Loring, and Ralph Ware Peakes, mercury salts of the three nitroanilines, 1908, A., i, 523.
- Jackson, Charles Loring, and Horace Chamberlain Porter, action of aniline on tetrabromo-o-benzoquinone, 1903, A., i, 102; 1904, A., i, 174.
 - additive compounds of tetrabromo-obenzoquinone, 1903, A., i, 266. additive compounds derived from
- o-benzoquinone, 1904, A., i, 254. Jackson, Charles Loring, and Frederick William Russe, behaviour of tetrabromo-o-benzoquinone towards ketones and aldehydes, 1905, A., i, 217.

- Jackson, Charles Loring, and Frederick William Russe, certain derivatives of tetrabromo-o-benzoquinone, 1906. A., i, 288.
 - 4:6-dibromo-o-phenylenediamine, 1906. A., i, 307.
- Jackson, Charles Loring, and Philip Anderson Shaffer, action of methyl alcohol on hexabromo-o-quinocatechol ether, 1905, A., i, 888.
- Jackson, Charles Loring, and Paul Short Smith, derivatives of trichlorobenzene. 1904, A., i, 802.
- Jackson, Charles Loring, and Joaquin Enrique Zanetti, extractor for use with small quantities of material, 1907, A., ii, 859.
- Jackson, Charles Loring. See also Latham Clarke.
- Jackson, Dennis Emerson, prolonged existence of adrenaline in blood, 1909, A., ii, 159.
 - the pharmacological action of uranium, 1910, A., ii, 983.
 - pharmacological action of vanadium, 1912, A., ii, 278.
- Jackson, Dennis Emerson, and Frank C. Mann, pharmacological action of uranium, 1911, A., ii, 633.
- Jackson, Dennis Emerson, and Samuel A. Matthews, the sensory nerves of the heart and vessels as a factor in determining the action of drugs, 1908, A., ii, 313.
- Jackson, Dennis Emerson. Samuel A. Matthews.
- Jackson, Frederick Gray, specific heats of crystallised salts, 1912, A., ii, 1134.
- Jackson, Frederick Gray. Theodore William Richards.
- Jackson, Herbert, and Dudley Northall-Laurie, the action of carbon monoxide on ammonia, 1905, T., 433; P., 118; discussion, P., 118.
 - the behaviour of vapours of methyl alcohol and acetaldehyde electric discharges of high frequency, 1906, T., 1190; P., 156; discussion,
 - P., 156. the behaviour of acetylene with electrical discharges of high frequency, 1906, P., 155.
- Jackson, Holmes Condict, influence of camphor upon the excretion of dextrose in phloridzin diabetes, 1903, A., ii, 316.
 - post-mortem autolysis, 1908, A., ii,
 - changes in blood and muscle following bilateral nephrectomy and double ureteral ligation, 1911, A., ii, 409.

Jackson, Holmes Condict. See also John Alfred Mandel, and George Barclay Wallace.

Jackson, H. Louis. See Richard Blair Earle.

Jackson, (Miss) Kate Maud, and Henry Allen Dugdale Neville, substituted amides of tartaric acid, 1909, P., 226.

Jackson, Richard Fay. See Gilbert Newton Lewis.

See Martin Onslow Jackson, Thomas.

Jackson, W. H., method of transmission of the excited activity of radium to the

cathode, 1905, A., ii, 792. Jacob, Hugo, and R. Kaesbohrer, a new method for determining the extent of

rusting, 1911, A., ii, 896. See Wladimir W. Mark-

Jacob, L. ownikoff.

Jacob, Ludwig, feeding experiments with simple food-stuffs on pigeons and rats, 1906, A., ii, 561.

Jacob, Robert. See Karl Auwers.

Jacobi, K., rapid estimation of boric acid in borax, 1904, A., ii, 209.

estimation of alkalis in the presence of borates, 1904, A., ii, 209.

Jacobius, Ludwig. See Carl Friedheim. Jacobj, Carl, pharmacology of veronal. III. Action of veronal in reference to its specific paralytic action on the vessel walls, 1911, A., ii, 1120.

Jacobi, Carl, and Golowinski, action of caffeine on frogs, 1908, A., ii, 1061.

Jacobj, Carl, Harno Hayashi, and Szubinski, physiological action of cyclic isooximes, ketones, imines, and oximines of the hydroaromatic series, 1904, A., ii, 196.

Jacobj, Carl, and Carl Roemer, pharmacology of veronal. II. Influence of temperature, breathing, and circula-

tion, 1911, A., ii, 1120.

Jacobj, Carl, and Heinrich Walbaum, the limit of safety in adding sulphurous acids to foods, 1906, A., ii, 465.

Jacobs, Charles. See Frédéric de Mare. Jacobs, Charles B., deposition of alloys from mixed solutions, 1905, A., ii, 626.

Jacobs, Walter Abraham, the preparation of glucosides, 1912, A., i, 946. removal of phosphotungstic acid from aqueous solutions, 1912, A., ii, 1177.

Jacobs, Walter Abraham, and Phæbus A. Levene, nucleic acids, 1909, A., pentose in the pancreas, 1910, A., ii,

729.

inosic acid, 1911, A., i, 408.

Jacobs. Walter Abraham. See also Irving Cowan Allen, Emil Fischer, and Phabus A. Levene.

Jacobsen, Arnold, and Georg Landesen, application of palladium as a catalyst in elementary analysis, 1907, A., ii, 718.

Jacobsen, Carl Ludwig. See Alfred Coehn.

Jacobsen, Jules, pyknometer for small quantities (0.1 - 0.5 gram) of solid substances, 1905, A., ii, 232,

the physiological action of formalde-

hyde, 1906, A., ii, 473.

action of silver nitrate on chloroauric acid and the preparation of fulminating gold, 1908, A., ii, 601.

preparation of silver dimercurous arsenate and phosphate, 1909, A.,

ii, 887.

decomposition of silver tetrachloroplatinate by water and the preparation of fulminating platinum, 1909, A., ii, 897.

Jacobsen, K. A., production of acid and alkali by diphtheria bacilli, 1911, A.,

Jacobsen, K. A. See also Felix Ehrlich. Jacobsohn, Felix, assay of Sulphur antimonii auratum, 1908, A., ii, 540; 1909, A., ii, 942.

analysis of oxidised antimony and lead sulphide compounds, 1908, A., ii,

989.

assay of lead sulphides, 1909, A., ii, 185.

Jacobsohn, Felix. See also Fritz Frank. and Arthur Rosenheim.

Jacobsohn, Willy. See Carl Mannich, and Karl W. Rosenmund.

Jacobson, Clara, the concentration of ammonia in the blood of cats and

dogs necessary to produce ammonia tetany, 1910, A., ii, 986. the effects of blood-transfusion in parathyroid tetany, 1912, A., ii, 468.

Jacobson, Clara. See also Anton Julius Carlson.

Jacobson, Conrad. See Emil Goetsch.

Jacobson, C. Alfred, alfalfone, a ketone of the formula C₂₁H₄₂O, obtained from alfalfa; alfalfa investigation. II., 1912, A., i, 239.

improved extractor, 1912, A., ii, 37. myristone obtained from alfalfa, 1912, A., ii, 80.

alfalfa investigation. III. The colouring matters in alfalfa, 1912, A., ii, 976.

delicate method for determining minute quantities of chlorophyll, 1912, A., ii, 1011.

Jacobson, C. Alfred, and Sanford C. Dinsmore, improved siphon, 1910, A., ii, 601.

separating apparatus, 1910, A., ii, 704. Jacobson, C. Alfred, and Léon Marchlewski, duality of chlorophyll, 1912,

A., i, 285.

the chlorophyll group. XV. Methods for estimation of the components of chlorophyll (allo- and neo-chlorophyll), 1912, A., ii, 705.

Jacobson, C. Alfred. See also Edward Kellogg Dunham, and Harry Clary

Jones.

Jacobson, Paul [Heinrich], stereochemistry of dicyclic systems, 1903, A., ii,

triphenylmethyl, 1905, A., i, 186.

Jacobson, Paul, C. Bartsch, Arthur Loeb, and Adolf Steinbrenck, transformations of azo-compounds by means of hydrogen chloride in alcoholic solution, 1909, A., i, 681.

diazonium salts of highly halogenated parasemidines and certain other highly halogenated bases, 1909,

A., i, 683.

Jacobson, Paul, O. Fabian, H. Fulda, Edward Jankowski, and Huber, behaviour of ethers of ohydroxyazo-compounds when reduced with stannous chloride and hydrochlorie acid, 1909, A., i, 852.

Jacobson, Paul, Georg Franz, and Fritz Hönigsberger, acid reduction of oethoxy- and m-methoxy-azobenzenes,

1904, A., i, 202.

Jacobson, Paul, Georg Franz, and Karl Zaar, reduction products of azocompounds. X. Reduction of otolylazophenetole and bromophenylazophenetoles with acid reducing agents, 1904, A., i, 121.

Jacobson, Paul, and Fritz Hönigsberger, m-hydroxyazobenzene; constitution of p-hydroxyazo-compounds, 1904,

A., i, 205.

diaminophenols, 1904, A., i, 207.

Jacobson, Paul, and L. Huber, formation of indazole derivatives from orthomethylated anilines, 1908, A., i, 298.

Jacobson, Paul, Alfred Hugershoff,

Edward Jankowski, and Wilhelm Lischke, action of carbon disulphide on hydrazo-compounds, 1904, A., i, 106.

Jacobson, Paul, and Arthur Loeb, m-compounds of diphenyl; constitution of the diphenyl bases derived from p-substituted hydrazo-compounds, 1904, A., i, 203.

Jacoby, Ernst. See Ferdinand Blumenthal. and Otto Diels.

Jacoby, Hans. See Fritz Foerster.

Jacoby, J. See Carl Johann Blacher, and Max Mayer.

Jacoby, Martin, crotin-immunity, 1903, A., ii, 674.

receptivity of cells in normal and immunised animals, 1905, A., ii, 47. ferments and anti-ferments, 1907, A., i, 811; ii, 108; 1908, A., i,

236; 1911, A., i, 935.

digestion and rennet-action, 1907, A., ii, 38.

the action of resorbed salicylic acid in blood serum, 1908, A., ii, 512.

ferments and anti-ferments. VII. Detection of trypsin, 1908, A., ii,

Jacoby, Martin, and Albert Schütze, the influence of resorbed salicylic acid on the opsonic functions of the serum, 1908, A., ii, 511.

arsenie and trypanosomes, 1908, A., ii,

771.

the mechanism of the action of arsenic preparations on trypanosomes in the animal organism. II., 1908, A., ii, 973.

Jacoby, Martin. See also Samuel Bondi. Jacoby, Richard. See Nikodem Caro. Jacopson-Jacopmann, W. See Eugen

Khotinsky.

Jaczewski, L., garnet and magnetite from Caucasus, 1907, A., ii, 365.

Jadin, F., and A. Astruc, hydrogen apparatus for Marsh's test, 1912, A., ii, 387.

presence of arsenic in some vegetable foods, 1912, A., ii, 478.

presence of arsenic in plant parasites and in plants supporting parasites, 1912, A., ii, 976.

determination of manganese in the vegetable kingdom, 1912, A., ii, 976.

Jaeckel, Bernhard. See Robert Pschorr. Jaeckle, Hermann, lecithin in fats and oils, 1903, A., ii, 191.

Jäger, Carl, [preparation of substituted azines], 1909, A., i, 845.

[preparation of carbamide derivatives], 1911, A., i, 1027.

Jaeger, Carl. See Rudolph Tambach. Jäger, Friedrich. See Otto Wallach.

Jaeger, Frans Maurits, crystallography of some organic compounds, 1903, A., i, 240.

crystals formed in the Leclanché cell, 1903, A., ii, 20.

identity of simonyite with astrakanite [blödite], 1903, A., ii, 489.

Jaeger, Frans Maurits, crystallographic characteristics of isomeric halogen and nitro-derivatives of benzoic acid, 1904, A., i, 159.

crystallographic and molecular symmetry of position-isomeric benzene derivatives, 1904, A., i, 304.

benzylphthalimide and benzylisophthalimide, 1904, A., i, 895.

isomeric dichloronitrobenzenes, 1905, A., i, 583.

o-nitrobenzyltoluidine, 1905, A., i,

miscibility in the solid state, and isomorphism, in the case of carbon compounds, 1905, A., ii, 513.

derivatives of phenylcarbamic acid,

1906, A., i, 15.

diphenylhydrazine, hydrazobenzene. and benzylaniline, and miscibility of the last two with azobenzene, stilbene, and dibenzyl in the solid state, 1906, A., i, 112.

isomorphous substitution of elements fluorine, chlorine, bromine, and iodine in organic molecules,

1906, A., i, 273.

[crystallographic measurements of derivatives of phenylcarbamic acid,

1906, A., i, 500. new case of form-analogy and miscibility of position-isomeric benzene derivatives and the crystalline forms of the six dibromonitrobenzenes, 1906, A., i, 641.

crystallographic characters of some organic compounds, 1906, A., i,

642.

crystalline forms of the 2:4-dinitroaniline derivatives substituted in the NH₂-group, 1906, A., i, 649.

the fatty esters of cholesterol and phytosterol, and the anisotropic liquid phases of cholesterol derivatives, 1906, A., i, 742.

researches on the thermic and electric conductivity power of crystallised conductors, 1906, A., ii, 653.

miscibility of crystallised phases, 1906, A., ii, 657.

halogen derivatives of benzophenone and of di- and tri-phenylmethane, 1907, A., i, 1050.

a substance which possesses numerous liquid phases, of which three at least are stable in regard to the isotropic liquid, 1907, A., ii, 78.

substances which possess more than one stable liquid state, and the phenomena observed in anisotropic liquids, 1907, A., ii, 157.

Jaeger, Frans Maurits, irreversible phase-transitions in substances which may exhibit more than one liquid condition, 1907, A., ii, 157.

applicability of Bömer's phytosteryl acetate reaction to the detection of the adulteration of animal with vegetable fats, 1907, A., ii, 315.

the anisotropous liquid phases of dihydrocholesteryl butyrate and the question as to the necessary presence of an ethylene double linking for the occurrence of these phenomena, 1907, A., ii, 441. fatty esters of the two phytosterols of

Calabar fat, and the analogous cholesterol derivatives possessing three stable liquid phases, 1907,

A., ii, 751.

variation in the electrical conductivity of stibnite under the influence of light-rays, 1907, A., ii, 923.

Barlow and Pope's theory, 1907, A., ii,

970.

the crystal form of halogen derivatives of open-chain hydrocarbons with reference to the Barlow-Pope theory of structure, 1908, T., 517; P., 29.

the question of the miscibility and form-analogy in aromatic nitro- and nitroso-compounds, 1908, A., i, 147. crystallography of some cyclic organic compounds, 1908, A., i, 413.

tri-p-halogen substitution products of triphenylmethane and triphenylcarbinol, 1908, A., i, 523.

tri-halogen substitution products of aromatic compounds, 1909, A., i,

tellurium. I. The mutual behaviour of the elements sulphur and tellurium, 1910, A., ii, 497.

melting temperatures of sodium and lithium metasilicates, 1911, A., ii,

the photochemical transformations of solutions of ferric trichloroacetate, 1912, A., i, 3.

a remarkable case of isopolymorphism with salts of the alkali metals, 1912, A., ii, 47.

Frans Maurits, and Johannes Blanksma, the six isomeric tribromoxylenes, 1906, A., i, 9.

Jaeger, Frans Maurits, and H. Doornbosch, the iodides of elements of the nitrogen group, 1912, A., ii, 640.

Jaeger, Frans Maurits, and H. S. van Klooster, natural and artificial thioantimonites and thioarsenites, 1912. A., ii, 1169.

Jaeger. Frans Maurits, and J. R. N. van Kregten, miscibility in the solid condition between aromatic nitro- and nitroso-compounds, 1912, A., 338.

Jaeger, Frans Maurits, and J. B. Menke, tellurium. II. Compounds of tellurium and iodine, 1912, A., ii,

344.

Jaeger, Frans Maurits. See also Pieter

J. Montagne.

Jäger, Gustav, distribution of a nondissociating substance between two solvents, 1904, A., ii, 386.

Jäger, Gustav. See also Hermann

Grossmann.

Jaeger, Paul. See Richard Emil Meyer. Jäger, Richard, and Ernst Unger, estimation of pentoses, 1903, A., ii, 187.

Jäger, Richard. See also Ernst Unger. Jaeger, Wilhelm [Ludwig], cadmium amalgams, 1903, A., ii, 258.

Jaeger, Wilhelm, and Helmuth von Steinwehr, calorimetric measurement of heats of combustion, 1905, A., ii, 677.

elimination of thermometer lag in calorimetry, 1906, A., ii, 216.

Jaeggy, Ernst, erepsin in the fœtus, 1907, A., ii, 797.

Jänecke, Ernst, detection and estimation of traces of mercury in urine, with the aid of the Nernst balance, 1905, A., ii, 66.

new method of representing graphically aqueous solutions of two and three salts with the same ion, reciprocal pairs of salts, and van't Hoff's investigation on oceanic salt deposits, 1906, A., ii, 833.

two chemical compounds, each containing three metals, 1907, A., ii,

chemical compounds of potassium and

mercury, 1907, A., ii, 264.

new method of representing van't Hoff's investigations on oceanic salt deposits, 1907, A., ii, 278, 480, 702.

[application of thermal analysis to ternary systems], 1907, A., ii, 666. the ammonia soda process from the

standpoint of the phase rule, 1907, A., ii, 766.

the ternary system: Pb - Cd - Hg, 1907, A., ii, 870.

reciprocal salt-pairs. I., 1908, A., ii,

the reciprocal salt pair NaCl - K2SO4; KCl - Na₂SO₄, 1908, A., ii, 841.

Jänecke, Ernst, isomorphism of ternary mixtures in which the components are not completely miscible, 1909. A., ii, 872.

ternary systems with a ternary transition point in the liquidus-solidus diagram; the system: lead-cadmium -mercury, 1910, A., ii, 699.

the formation of potassium nitrate by double decomposition from the point of view of the phase rule, 1911, A., ii. 799.

the tenary system: copper-silver-gold,

1911, A., ii, 1089.

the constitution of Portland cement

clinker, 1912, A., ii, 159.

molecule or atomic percentages, and percentages and percentages by weight in binary and ternary systems, 1912, A., ii, 750.

8CaO, 2SiO₂, Al₂O₃, compound

1912, A., ii, 761.

II. The salt reciprocal salt pairs. pair K2Cl2-MgSO4, MgCl2-K2SO4, 1912, A., ii, 762.

Jänecke, Ernst, and K. H. Schumann, the constitution of Portland cement clinker. II., 1912, A., ii, 450.

Jänkendorf. See von Nostitz.

Järvinen, K. K., estimation of phosphoric acid as magnesium pyrophosphate, 1904, A., ii, 515.

estimation and separation of calcium in presence of phosphoric acid,

1905, A., ii, 62.

estimation of magnesium and phosphoric acid as magnesium pyrophosphate, 1905, A., ii, 555.

the estimation of sulphuric acid, 1912,

A., ii, 486.

Jaffé, Adolf. See Frederic William Richardson.

Jaffé, George, supersaturated solutions, 1903, A., ii, 469.

ionisation of liquid dielectric media by radium rays, 1908, A., ii, 148.

electrical conductivity of pure hexane, 1909, A., ii, 208.

specific velocity and recombination of the ions in hexane, 1910, A., ii, 481.

photoelectric effect exhibited by zinc in hexane, 1910, A., ii, 681.

a case of electrolytic saturation current, 1911, A., ii, 962.

electron theory of metals, 1912, A., ii, 418.

Jaffe, Helene. See Alfred Byk.

Jaffé, Max, p-methylaminobenzoic acid, 1905, A., i, 344.

Jaffe, Max, behaviour of p-dimethylaminobenzaldehyde in animal metabolism, 1905, A., ii, 186.

formation of creatinine in the organ-

ism, 1906, A., if, 783.

the regular occurrence of indole in the distillate of normal urine, 1908,

A., ii, 1057.

the scission of the benzene ring in the organism. I. The appearance of muconic acid in the urine after doses of benzene, 1909, A., ii, 914.

Jagellowitsch, W. See Alexis V.

Saposhnikoff.

Jager, L. de, estimation of calcium and magnesium in urine, 1903, A., ii, 182.

the reactions of urine, 1908, A., ii, 630.

chemistry of urine, 1909, A., ii, 1060. a red pigment in urine, 1910, A., ii, 328.

the formaldehyde titration [of aminoacids, etc.] in urines, 1910, A., ii, 467.

luteol [as an indicator], 1910, A., ii, 746.

estimation of total nitrogen by means of formaldehyde titration, 1910, A., ii, 751.

the influence of urea on the estimation of amino-acids by formaldehyde, 1910, A., ii, 761.

a yellow substance in the urine, 1911,

A., ii, 58.

the influence of magnesium salts and sodium acetate on the acidity of urine, 1912, A., ii, 276.

Jagt, H. A. C. van der, heating of bungkil, 1904, A., ii, 79.

Jahn, Artur. See Paul Jannasch.

Jahn, Friedrich, iron metabolism. I. The estimation of small amounts of iron, 1911, A., ii, 1136.

Jahn, Hans [Max], depression of the freezing point in dilute solutions of highly dissociated electrolytes, 1905, A., ii, 145; 1907, A., ii, 433.

rate of migration of ions in dilute solutions, 1907, A., ii, 430.

Jahn, Max. See Conrad Willgerodt.
Jahn, Stephan, ozone. I. Equilibrium

between ozone and hydrochloric acid, 1905, A., ii, 16.

ozone. II., III. and IV., 1906, A., ii, 225; 1909, A., ii, 37.

an ozonometer, 1910, A., ii, 996. Jahn, Stephan. See also Alfred Coehn, Alfred Einhorn, and Anton Kailan. Jahoda, Rudolf. See Hugo Strache.

Jahr, Max. See Paul Rabe.

Jakalo, A. See Bronislaw Radziszewski.

Jakob, F. See Karl von der Heide.

Jakob, Fritz. See Hans Hofer.

Jakób, W., and Stanislaw Tolłoczko, analysis of thorianite from Ceylon, 1912, A., ii, 172.

Jakowkin, Alexander A., osmotic pressure of complex solutions, 1909, A., ii, 796.

theory of solutions, 1910, A., ii, 274.

Jakowleff, W. See Wladimir N.

Ipatieff.
Jakowlew, Iwan. See Carl Adam

Bischoff.

Jaksch, Rudolf von, the nitrogen excretion in a case of phosphorus poisoning, 1904, A., ii, 192.

Jakubowski, L. von. See Carl Kippen-

berger.

Jakubowski, Zyg. von, quinoline-5-carboxylic acid. I., 1911, A., i, 81.

Jakubowski, Zyg. von, and Stefan von Niementowski, 8:8'-diquinolylearboxylic acids, 1909, A., i, 264.

Jalander, Y. W., the ricinus lipase, 1911,

A., i, 1053.

Jalon, Marx. See Fritz Fichter.

Jalowetz, Eduard, estimation of nitrogen, 1904, A., ii, 842.

isomaltose, 1905, A., i, 262.

Jama, Akseli. See Carl Hartwich.

Jamada, Kando, and Alb. Jodlbauer, action of light on peroxydase; sensitisation by fluorescent substances, 1908, A., i, 289.

Jámbor, Josef, estimation of the alkalis; removal of the ammonium salts, 1910, A., ii, 1111.

James, Charles, new method for the separation of the yttrium earths, 1907, A., ii, 467.

bromates of the rare earths. I. New method for the separation of the yttrium earths, 1908, A., ii, 190.

separation of the rare earths, 1908, A., ii, 498; 1912, A., ii, 690.

thulium, 1910, A., ii, 412; 1911, A., ii, 891.

James, Charles, F. M. Hoben, and Clifford Hanks Robinson, new compounds of samarium and neodymium, 1912, A., i. 233.

James, Charles, and Wilfred F. Langelier, bromates of the rare earths. II. Bromates of the cerium group and yttrium, 1909, A., ii, 734.

James, Charles, and Lester A. Pratt, basic nitrate of yttrium, 1910, A., ii, 713. a new method for the separation of cerium, 1911, A., ii, 935. James, Charles, and J. E. Robinson,

europium, 1911, A., ii, 893.

James, Charles, and Todd O. Smith, the quantitative separation of lanthanum from yttrium, 1912, A., ii, 999.

James, Charles, and Charles F. Whittemore, hydrates of lanthanum oxalate,

1912, A., ii, 943.

James, Charles. See also Lester A. Pratt. Todd O. Smith, and Charles F. Whitte-

James, Carlton C. See Harry Drake Gibbs.

James, Dan Ivor, and Humphrey Owen Jones, the mechanism of the racemisation of some hydroxy-acids by heat, 1912, T., 1158; P., 143.

James, Joseph H., and J. M. Nissen, technical analysis of ferro-nickel

briquettes, 1903, A., ii, 244.

James, Thomas Campbell, the action of bases on as-dibromobutyric acid and its esters, 1910, T., 1565; P., 201. the \(\beta\)-chlorocinnamic acids, 1911, T.,

1620; P., 216.

James, Thomas Campbell, and John Joseph Sudborough, the addition of iodine to acetylenic acids, 1907, T., 1037; P., 136.

halogen derivatives of cinnamic acid,

1909, T., 1538; P., 211.

James, Thomas Campbell. See also John Joseph Sudborough.

Jameson, P. E., precipitation of metallic

gold, 1906, A., ii, 35. Jamieson, George Samuel, thiodiacyl-

anilides, 1904, A., i, 396.

the natural iron-nickel alloy, awaruite, 1905, A., ii, 535.

some double and triple salts of cæsium nitrite with nitrites of silver, the alkali earths, and lead, 1907, A., ii,

new volumetric method for cobalt and

nickel, 1910, A., ii, 658.

a volumetric method for estimating antimony in alloys, 1912, A., ii, 96. volumetric method for the estimation of hydrazine, 1912, A., ii, 487.

new volumetric method for the estimation of mercury, 1912, A., ii, 493.

Jamieson, George Samuel, Louis Henry Levy, and Horace Lemuel Wells, volumetric estimation of copper, 1908, A., ii, 634.

Jamieson, George Samuel. See also Treat Baldwin Johnson, Samuel Lewis Penfield, and Henry Lord Wheeler.

Jamieson, James Sprunt, a delicate test for bromides alone or in solution with chlorides, 1908, P., 144.

Jamieson, Thomas, hairs of Stellaria media and the assimilation of nitrogen by plants, 1910, A., ii, 645.

Jandolo, Giovanni, xylenolglycollic [dimethylphenoxyacetic] acids and their derivatives, 1909, A., i, 101.

Janetzky, Emmerich. See Robert Kremann.

Janicki, L., constitution of the spectral lines of the elements. I. 1909. A.

structure of the mercury line $\lambda = 5461$,

1912, A., ii, 1017. Jankowitsch, Urosch, detection of chromium sesquioxide insoluble in acids, 1912, A., ii, 692.

Jankowski, Edward. See Paul Jacobson. Jannasch, Paul [Ehrhardt], analysis of lorandite from Allchar, Macedonia, 1904, A., ii, 416.

expulsion of ammonium salts after precipitation in their presence, 1905,

A., ii, 611.

supplementary remarks on the hydroxylamine method, 1905, A., ii, 613. separation of chlorine and bromine in acid solution by hydrogen peroxide, 1906, A., ii, 894.

separation of chlorine, bromine, and iodine by means of hydrogen peroxide in acid solution, 1908, A.,

ii, 730.

action of carbon tetrachloride vapours on minerals and application to quantitative analysis, 1910, A., ii, 1076.

use of a mixture of nitric acid and hydrogen peroxide in analytical investigations, 1912, A., ii, 383.

Jannasch, Paut, and Wilhelm Bettges, estimation of molybdenum and tungsten and their separation from mercury by the acid of hydrazine, 1904, A., ii, 517.

estimation of palladium and separation from other metals by means of hydrazine. III., 1904, A., ii, 519.

Jannasch, Paul, and Wilhelm Cohen, quantitative separations in presence of hydroxylamine. V., 1905, A., ii, 612. Jannasch, Paul, and Willy Gottschalk,

use of ozone in quantitative analysis,

1904, A., ii, 782; 1906, A., ii, 577. Jannasch, Paul, and Henry F. Harwood, volatilisation of boric acid by heating in a current of the vapours of carbon tetrachloride and methyl alcohol, 1909, A., ii, 728.

quantitative volatilisation of vanadic acid from its compounds by heating in a current of carbon tetrachloride

vapour, 1909, A., ii, 767.

Jannasch, Paul, and Eberhard Heimann, quantitative vaporisation of phosphorie acid from its salts, 1906, A., ii. 745.

of arsenic from lead. separation arsenic from copper, and bismuth from lead, 1907, A., ii, 197.

separation of metals by means of dry hydrogen chloride, 1907, A., ii, 201.

new gravimetric processes; [estimation of carbon dioxide, nitric acid,

arsenic], 1908, A., ii, 430.

Jannasch, Paul, and Artur Jahn. reduction of chlorates, bromates, and iodates with a view to the estimation of the halogens, 1905, A., ii, 416.

Jannasch, Paul, and Walter Jilke, quantitative vaporisation of phosphoric acid from its salts in a current of chlorine charged with carbon tetrachloride, 1907, A., ii, 864.

quantitative vaporisation of phosphoric acid from phosphates in a current of chlorine and carbon tetrachloride or of carbon tetrachloride only, 1908, A., ii, 685.

volatilisation of phosphoric acid and its quantitative separation from phosphates of the metals of the ammonium sulphide group, 1909, A., ii, 759.

Jannasch, Paul, and Otto von Mayer, quantitative separation of gold from other metals by hydrazine or hydroxylamine salts, 1905, A., ii, 557.

reaction of hydrazine and hydroxylamine salts with salts of the platinum metals and separation of

these from gold, 1905, A., ii, 557.

Jannasch, Paul, and Leopold Rostosky, separation of palladium in mineral acid solution by hydrazine, 1904, A.,

ii, 594.

Jannasch, Paul, and Oskar Routala, the quantitative separation of copper from arsenic, aluminium, zinc, tungsten, and tin in sodium hydroxide solutions containing sucrose by means of hydrogen peroxide, 1912, A., ii, 388.

Jannasch, Paul, and Friedrich Rühl, separation of iron from manganese and magnesium, and of aluminium and chromium from manganese, zinc, nickel, and magnesium by hydroxylamine in ammoniacal solution. IV., 1905, A., ii, 612.

Jannasch, Paul, and Johannes Schilling, quantitative separation of iron and thorium from uranium by hydroxylamine in ammoniacal solution. VI.,

1905, A., ii, 613.

Jannasch, Paul, and T. Seidel, quantitative volatilisation of arsenic from chloride solutions, arsenic reduced to arsenious chloride

hydrazine salts, 1910, A., ii, 546. Jannasch, Paul, and Carl Stephan, estimation and separation of platinum from potassium, sodium, barium, strontium, calcium, magnesium, manganese, tungsten, cobalt, nickel, copper, zinc, and cadmium in ammoniacal solution by means of hydrazine, 1904, A., ii, 519.

Jannasch, Paul, and Friedrich Zimmermann, use of hydrogen peroxide in the quantitative separation of the halo-

gens, 1906, A., ii, 194.

Janney, N., the excretion of ammonia in human urine by the administration of urea and sodium hydrogen carbonate, 1912, A., ii, 185.

Jannopoulos, Stephan P., detection of mercuric chloride in compressed gun-

cotton, 1910, A., ii, 549.

Barend Coenraad Petrus, Jansen. qualitative centrifugal analysis, 1908, A., ii, 891.

enterolipase, 1910, A., ii, 980.

fat metabolism in the absence of the pancreatic juice in the intestine, 1911, A., ii, 623.

Jansen, F. C. M. See Lodewyk Theodorus

Reicher.

Jansen, Hans, and Prytz, the bactericidal action of the emanation from radium, 1911, A., ii, 321.

Jansen, Hans, and Ove Strandberg, is the bactericidal action of radium emanation due to the evolution of ozone? 1912, A., ii, 974.

Janson, Alfred von, preparation of ω-chloroacetanilide and its homologues,

1907, A., i, 312.

Janssen, Rudolf Léon. See Alexander Gutbier.

Janssens, L. C., estimation of glycerol by distillation, 1906, A., ii, 808.

Jantsch, Gustav, determination of atomic weight of europium, 1908, A., ii,

the double nitrates of the rare earths. II., 1912, A., ii, 767.

Jantsch, Gustav, and A. Ohl, compounds of dysprosium, 1911, A., ii, 492.

Jantsch, Gustav, and S. Wigdorow, double nitrates of the rare earths. I. Double nitrates of the rare earths with the alkali metals, 1911, A., ii,

Jantsch, Gustav. See also Georges Urbain, and Alfred Werner.

Januschke, Hans, the abolition of oxalic acid poisoning in the frog, and the cause of oxalic acid action, 1909, A., ii. 1043.

Januschke, Hans, and Leo Pollak, pharmacology of the bronchial musculature,

1911, A., ii, 1120.

Januschke, Hans. See also Richard Chiari.

Japp, Francis Robert, and Joseph Knox. some derivatives of anhydracetonebenzil, 1905, T., 673; P., 152.

the dihydrocyanides of benzil and phenanthraquinone; second notice, 1905, T., 681; P., 153.

a condensation product of mandelo-nitrile, 1905, T., 701; P., 153. Japp, Francis Robert, and William

Maitland, formation of carbazoles by the interaction of phenols in the orthoketonic form, with arylhydrazines, 1903, T., 267; P., 19.

reduction products of as-dimethylanhydracetonehenzil, and densation products of benzaldehyde with ketones, 1904, T., 1473; P., 204.

interaction of sodium phenylglycidate with phenylhydrazine, 1904, T., 1490; P., 205.

a-benzoyl-B-trimethacetylstyrene, 1904, T., 1496; P., 205.

Japp, Francis Robert, and Arthur C. Michie, dimorphism of a-methylanhydracetonebenzil, 1903, T., 276; P., 20.

the oxidation products of the methyl homologues of anhydracetonebenzil.

1903, T., 279; P., 21.

Japp, Francis Robert, and James Wood, action of hydrazine on unsaturated y-diketones, 1905, T., 707; P., 154.

condensations of phenanthraquinone with ketonic compounds, 1904, P., 221; 1905, T., 712.

Jappelli, A., salivary secretion. IV. Influence of non-electrolytes, 1909, A., ii, 160.

Jappelli, A. See also Filippo Bottazzi. Jaquerod, Adrien, electrolysis of alkali chlorides; electrical conductivities, densities, and specific heats of solutions of potassium chloride and of potassium hydroxide, 1909, A., ii, 293.

Jaquerod, Adrien, and Stefan Bogdan. determination of the atomic weight of nitrogen by the volumetric analysis of nitrogen monoxide, 1904, A., ii, 557.

Jaquerod, Adrien, and François Louis Perrot, use of helium as thermometric substance and its diffusion through quartz, 1905, A., ii, 10.

expansion and density of some gases at high temperatures: application to the determination of their molecular weights, 1905, A., ii, 506.

melting point of gold, and expansion of gases at high temperatures, 1905, A., ii, 627, 720; 1906, A., ii, 34.

preparation of pure helium by filtration of the gases from cleveite through a quartz diaphragm, 1907, A., ii, 166.

Jaquerod, Adrien, and Alexandre Pintza, densities of sulphur dioxide and oxygen,

1904, A., ii, 612.

Jaquerod, Adrien, and M. Tourpaïan, application of the principle of Archimedes to the exact determination of the densities of gases, 1911, A., ii, 189.

Jaquerod, Adrien, and Eugène Wassmer, boiling points under different pressures of naphthalene, diphenyl, and benzophenone, 1904, A., ii, 538.

Jaquerod, Adrien. See also Morris

William Travers.

Jaques, Arthur, decomposition of crystallised sodium thiosulphate by heat, 1904, A., ii, 120.

interaction of ethyl bromide and silver

chromate, 1907, A., i, 817.

influence of dissolved gases on the electrode-potential in the system silver-silver acetate, 1910, A., ii, 383.

ionisation in aqueous solutions of lead and cadmium acetates, 1910, A., ii,

Jaquet, Alfred, the after effect of increased muscular work on metabolism, 1910, A., ii, 519.

Jarkowsky, W. See Paul Askenasy. Jaroschy, Stephan, formation of acyl derivatives of phenylhydrazine aqueous solution, 1911, A., i, 157.

See Carl Adam Jasinsky, Andreas. Bischoff.

Jassonneix. See Binet du Jassonneix. Jastrowitz, Hermann, the inhibition of peptic digestion by combining the free hydrochloric acid with amphoteric amino-compounds, 1907, A., ii, 106.

metabolism of glycine in liver affec-

tions, 1909, A., ii, 70.

formation of oxalic acid in the organism, 1910, A., ii, 978.

Jatar, S. B., volumetric estimation of iron and chromium by means of titanous chloride, 1908, A., ii, 778.

Jatzewitsch, M. G. See Michael I. Konowaloff.

Jaubert, George François, action of boric acid on the alkali peroxides; formation of perborates, 1905, A., ii, 26.

preparation of oxygen, 1905, A., ii, 311. action of acetylene on iodine pentoxide, 1906, A., ii, 125.

commercial preparation of calcium hydride, 1906, A., ii, 352.

new formation of liquid alloys of potassium and sodium, 1909, A., ii,

apparatus for estimating oxygen in peroxides, 1909, A., ii, 434.

preparation of highly oxygenated salts in a solid condition, 1911, A., ii, 489.

[the measurement of gases], 1912, A., ii. 1090.

Jaubert, George François, and Gaston Lion, sodium perborate; hydrogen peroxide in statu nascendi, 1905, A., ii, 585.

Jaufmann, Josef, radioactivity of atmospheric precipitations and of surface

waters, 1905, A., ii, 662.

Javal, Adolphe, elimination of sodium chloride in normal fæces and in diarrhœa, 1903, A., ii, 670.

molecular concentration of pathological fluids, 1908, A., ii, 716.

Javal, Adolphe. See also F. Widal.
Javillier, Maurice, some proteolytic ferments associated with rennet in plants, 1903, A., ii, 506.

analysis of a rhinolith, 1907, A., ii, 374.

favourable influence of small quantities of zinc in the growth of Sterigmatocystis nigra, 1908, A., ii, 124.

fixation of zinc by Sterigmatocystis nigra, 1908, A., ii, 317.

occurrence and rôle of zinc in plants,

1909, A., ii, 173.

migration of alkaloids in grafts of Solanaceæ on Solanaceæ, 1910, A., ii, 646.

silicotungstates of coniceine, sparteine, and atropine, 1911, A., i, 152.

estimation of atropine; titration of the alkaloids in belladonna extracts, 1911, A., ii, 551.

effect of withdrawing zinc from the culture medium of Aspergillus niger on the secretion of sucrase [invertase] by this mould, 1912, A., ii, 377.

influence of zinc on the consumption of its hydrocarbon, nitrogenous and mineral food by Aspergillus niger, 1912, A., ii, 861. Javillier, Maurice, compounds of silicotungstic acid with antipyrine and pyramidone, 1912, A., ii, 948.

Javillier, Maurice, and B. Guérithault, the crystalline deposit of a certain fluid extract of cinchona bark; the estimation of the quinine alkaloids and quininine silicotungstate, 1911, A., ii, 778.

Javillier, Maurice, and Benjamin Sauton, is iron indispensable to the formation of conidia of Aspergillus niger? 1912, A., ii, 192.

Javillier, Maurice. See also Gabriel Bertrand.

Jaweloff, J., action of ammonium cyanide on ketones of the series $CO(C_nH_{2n-7})(C_nH_{2n+1})$, 1906, A., i, 426.

Jaworsky, W., synthesis of acids of the β-hydroxyhydrosorbic and sorbic series. I., II., III., 1903, A., i, 728, 729, 730.

use of magnesium in place of zinc in the synthesis of alcohols of the allyl series, 1908, A., i, 753.

substitution of zinc by magnesium in the synthesis of unsaturated alcohols, 1909, A., i, 151.

action of magnesium on a mixture of allyl bromide and a terpene ketone, 1909, A., i, 168.

Jaworsky, W., and Sergius N. Reformatsky, new synthesis of sorbic acid and its homologues, 1903, A., i, 4.

Jay & Co. See La Société S. Jay & Co. Jean, Ferdinand, estimation of carbon monoxide and carbon dioxide in vitiated air, 1903, A., ii, 103.

detection of chestnut tree extract in oak extract, 1903, A., ii, 118.

black coating resisting acids and alkalis, 1904, A., ii, 611.

titration of ammonium salts, 1904, A., ii, 680.

detection of cocoanut oil in butter by the silver numbers, 1906, A., ii, 403.

Karité butter, 1906, A., ii, 589.

titration of tannin by means of iodine, 1908, A., ii, 76. estimation of organically-combined

estimation of organically-combined iodine and chlorine in "erythrosine," 1908, A., ii, 129.

Jean, Ferdinand, and C. Frabot, precipitation of the colouring matters of red wines and the detection of foreign colouring matters, 1907, A., ii, 320.

action of formaldehyde on tannins, 1907, A., ii, 415.

Jeancard, Paul, and Conrad Satie, essential oil of petit grain, 1904, A., i, 75.

essence of geranium from Cannes, 1904, A., i, 176.

two new Algerian essential oils, 1904, A., i, 516.

contribution to the analysis of rose oils, 1904, A., ii, 786.

observations on the analysis of lavender oils, 1908, A., ii, 232. Jeanneret, B. See Max Wunder.

Jeans, James Hopwood, determination of the size of molecules from the kinetic theory of gases, 1905, A., ii,

Jechel, Peter, spectrum of strontium in the orange and red, 1908, A., ii,

138.

Jeffers, Ernest Haynes. See Leonard Temple Thorne.

Jeffery, J. A. See Franklin Hiram

Jeffery, John Hugh. See George Cecil Jones.

Jeffreys, Charles W. See Frank Edwin Weston.

Jegoroff, M. A., the properties of phytin, 1912, A., i, 676.

Jehl, Paul. See Rudolph Fittig.

Jelagin, Sergius. See Hermann Staudinger.

Jelhchaninoff, E. See Petr. G. Melikoff. Jelinek, Johann. See Julius Stoklasa, and Emil Votocek.

Jeller, Rudolf, calculation of gas analy-

ses, 1911, A., ii, 433.

Jellinek, Karl, velocity of decomposition of nitric oxide and its dependence on the temperature, 1906, A., ii, 437.

existence of the argento-argenti (Ag + Ag · = Ag₂·) 1910, A., ii, 279. equilibrium,

the preparation of pure hyposulphites and the system: hyposulphitewater, 1911, A., ii, 278, 799.

[analysis of hyposulphites], 1911, A.,

ii, 331.

conductivity and dissociation sodium hyposulphite and hyposulphurous acid in comparison analogous sulphur-oxygen compounds; dissociation of terelectrolytes, 1911, A., ii, nary

electrolytic potential of hyposulphite reactions, 1911, A., ii, 365.

the electrolytic preparation of hyposulphites from solutions of hydrogen sulphites, 1911, A., ii, 482.

Jellinek, Karl, iron as a catalyst in the synthesis of ammonia under pressure, 1911, A., ii, 798.

Jeločnik, Viktor, the glycol from iso-valeraldehyde and isobutaldehyde, 1903, A., i, 787.

Jemmett, William Henry Coutts. See Albert Ernest Dunstan.

Jene, Karl, estimation of sulphur in burnt pyrites, 1905, A., ii, 350. estimation of carbon in ferrosilicon.

1905, A., ii, 355.

electrolytic estimation of zinc, 1905, A., ii, 653.

Jenisch, Guido, a new indolinol, 1907, A., i, 240.

Jenkins, Charles D., estimation of total sulphur in illuminating gas, 1906, A., ii, 391.

Jenkins, John H. B., analysis of London clay, 1909, A., ii, 64.

Jenkins, John H. B., and David Gibson Riddick, the microscopic examination of metals, 1905, A., ii, 118.

Jenkinson, Ernest Arthur. See Martin

Onslow Forster.

Jenks, Robert Leonard. See Charles Henry Bedford.

Jenner, N., apparatus for absorption of hydrogen sulphide in iron and steel analysis, 1905, A., ii, 282.

Jennings, Walter Louis, constitution of rosaniline and pararosaniline, 1904, A., i, 196.

Jenny, G. See Amé Pictet.

Jensen, Chr., fluorescence of some salicylic acid preparations under the influence of β - and γ -rays of radium, 1907, A., ii, 835.

Jensen, Orla, volatile fatty acids in cheese; biology of the cheese fer-

ment, 1905, A., ii, 114. estimation of the volatile fatty acids in palm oils and butter, 1905, A., ii, 772.

Jensen, Orla. See also Eduard von Freudenreich.

Jensen, P. Boysen, degradation of sugar during the respiratory process, 1909, A., ii, 172.

Jentgen, H., cellulose; hydrocellulose, 1910, A., i, 654; 1911, A., i, 115,355. III. Xyloidins, 1912, A., cellulose. i. 416.

Jentys, E., nature and structure of

starch, 1907, A., i, 589.

Jentzsch, Felix, radioactivity of the Kissingen mineral springs, 1908, A., ii, 9, 143.

emission of electrons by heated metallic oxides, 1908, A., ii, 652.

Jeriomin, Konstantin, copper-bismuth alloys, 1907, A., ii, 954.

formation of graphite in iron alloys, 1911, A., ii, 289.

Jermakoff, W. W., relation of calcium salts to the assimilation of nitric nitrogen, 1907, A., ii, 294.

Jeroch. Willi. See Otto Ruff.

Jerome, William J. Smith, influence of fruit on the precipitation of the uric acid of the urine, 1905, A., ii, 543.

Jerusalem, Ernst, a new process for the estimation of lactic acid in organs and animal fluids. I. Estimation of lactic acid in aqueous solutions, 1908, A., ii, 905.

a new process for the estimation of lactic acid in organs and animal fluids. II. Estimation of lactic acid in animal fluids, 1908, A., ii, 905.

Jerusalem, Ernst, and Ernest Henry Starling, the significance of carbon dioxide for the heart beat, 1910, A., ii, 524.

See also Otto von Jerusalem, Ernst. Fürth.

Jerusalem, George, the morphotropic relationships between the derivatives of picric acid, 1909, T., 1275; P., 201.

the morphotropic relationships between silicon and carbon compounds of corresponding compositions, 1910, T., 2190; P., 249.

morphotropic relationships between racemic compounds and their optically active components, 1912, T.,

1268; P., 165.

Jerusalem, George, and William Jackson Pope, relation between the crystalline form and chemical constitution of the picryl derivatives, 1908, A., ii, 674.

Jescheck, Fritz. See Karl Auwers.

Jesse, Richard Henry, jun., heat of combustion of ethylbenzene, 1912, A., ii, 1041.

Jesse, Richard Henry, jun. See also Gregory Paul Baxter, and Theodore William Richards.

Jessen, Heinrich, direct comparison of the diphenyladipic acids with the truxillic acids, 1907, A., i, 60.

derivatives of truxillic acid, 1907, A.,

Jessen-Hansen, H., Bang's method of estimating sugar, 1908, A., ii, 638.

wheaten flour. I. Influence of the hydrogen ion concentration on the baking value of flour, 1912, A., ii, 675.

Jessen-Hansen, H. See also Sören Peter Lauritz Sörensen.

Jesser, Leopold, the formation of minerals during sintering, 1911, A., ii, 500.

Jessup, A. C., and A. E. Jessup, evolution and devolution of the elements.

1908, A., ii, 96. Jessup, A. E. See A. C. Jessup. Jetzer, Max. See Fritz Fichter.

Jewett. Frank Baldwin, new method of determining the vapour density of metallic vapours, and an experimental application to the cases of sodium and mercury, 1903, A., ii, 61.

Jewson, Frederick Trevor. See George

Druce Lander.

Jex-Blake, Arthur John. See Georges Dreyer.

Jezek, B., braunite from Minas Geraes, Brazil, 1911, A., ii, 120.

natrolite from San Benito Co., California, 1912, A., ii, 774.

Jilke, Walter. See Paul Jannasch.

Jimbo, Kotora, Japanese zeolites, 1908, A., ii, 704.

Jimeno Gil, Emilio, decomposition potentials of certain double thiosulphates and their application to electro-

analysis, 1912, A., ii, 987. Jinendradasa, James Nadoris. See

Alfred Francis Joseph. Jo, Inohiko, hydrates of potassium thiosulphates, their solubility, and transition points, 1911, A., ii, 723.

Joachim, Julius, proteins in the body

fluids, 1903, A., ii, 312. Joachim, Julius. See also Ernst Fround. Joanin, Albert. See Alphonse Brissemoret.

Joannis, [Jean] Alexandre, action of ammonia on boron chloride, 1903, A., ii, 140.

cuprous sulphate, 1903, A., ii, 371.

some cuprous salts, 1904, A., i, 644. action of ammonia on boron bromide and on phosphorous trichloride, 1904, A., ii, 654.

action of potassammonium on barium bromide, 1905, A., ii, 450.

existence of potassammonium and sodammonium, 1906, A., ii, 161; 1907, A., ii, 459.

Joannovics, Georg, and Ernst Peter Pick, tolylenediamine poisoning, 1910, A., ii, 435.

intravital inhibition of oxidation in the liver by narcotics, 1911, A., ii,

Job, André, indirect oxidation by salts of the rare earths, 1903, A., ii, 214.

Job, André, oxidations by air; problem of the comparison of velocities, 1906, A., ii, 531.

modified nickel acetate, a new type of excitant of oxidation for quinols,

1907, A., i, 673.

spontaneous oxidation of cobalt hydroxide dissolved in an alkaline medium, 1907, A., il, 553.

the production of ozone at a low temperature and the continuous measurement of the yield, 1911, A., ii, 387.

Job, André, and Clarens, simplified form of constant volume ureometer,

1909, A., ii, 826.

preparation of hypobromite from a bromide for the estimation of urea, 1909, A., ii, 837.

Job, André, and P. Goissedet, a green, crystalline manganitartrate, 1911, A.,

i, 176.

Job, Paul, and Marcel Boll, photochemical hydrolysis of very dilute solutions of the chloroplatinic acids, 1912, A., ii, 1119.

Job, Paul. See also Marcel Boll.

Jobling, Edgar. See Gilbert Thomas Morgan.

Jochelson, Leo. See Jakob Meisenheimer. Jochheim, E. See Ludwig Knorr.

Jochheim, Hermann. See Carl Gustav Schwalbe.

Jochum, Edgar, and Stanislaus von Kostanecki, 5:7-dihydroxy-2-methylchromone, 1904, A., i, 608.

Jodidi, S. L., organic nitrogenous compounds in peat soils, 1910, A., ii, 339. chemical nature of organic nitrogen in the soil, 1911, A., ii, 820; 1912, A., ii, 292.

Jodlbauer, Alb., fluorine in bone and teeth, 1903, A., ii, 311.

further investigations whether fluorescent substances act in the dark, 1906, A., ii, 462.

action of light on invertin in the absence and presence of cane sugar and other substances, 1907, A., i, 456.

influence of oxygen on the destruction of ferments (invertin) by heat, 1907, A., i, 456.

significance of the presence of oxygen in the photochemical reactions which take place in Eder's solution and in solutions of ferric salts, 1907, A., ii, 595.

Jodlbauer, Alb., and Hermann von Tappeiner, photochemical action of mercuric oxalate (Eder's solution) in absence of oxygen and in presence of fluorescent compounds, 1905, A., ii, 565. Jodlbauer, Alb., and Hermann von Tappeiner, participation of oxygen in the action of fluorescent substances, 1905, A., ii, 603.

action of light on enzymes in oxygen and in hydrogen, compared with the action of photodynamic sub-

stances, 1906, A., i, 720.

influence of light on ferments (invertase) in the absence of oxygen, 1906, A., i, 917.

action of fluorescent substances on

toxins, 1906, A., ii, 462.

dependence of the action of fluorescent substances on their concentration, 1906, A., ii, 511.

action of ultra-violet light on invert-

ase, 1907, A., i, 267.

Jodlbauer, Alb. See also F. Duncker, Berthold Hannes, O. Harzbecker, Kando Jamada, T. Kudo, Hermann von Tappeiner, and Martin Zeller.

Jörg, P. See Theodor Zincke.

Jörgensen, Gunner, new modification of the estimation of phosphoric acid by precipitation as magnesium ammonium phosphate, particularly in regard to manures, 1906, A., ii, 579.

estimation of some of the organic acids occurring in fruits, 1907, A.,

ii, 312; 1909, A., ii, 445.

estimation of phosphoric acid as phosphomolybdic acid, 1907, Λ., ii, 652.

adsorption compounds, 1908, A., ii, 261.

detection of "saccharin" in beer, 1909, A., ii, 448.

estimation of phosphoric acid in mineral phosphates, 1909, A., ii, 829.

detection of morphine in organs, 1910, A., ii, 763.

the estimation of phosphoric acid,

1911, A., ii, 437. estimation of phosphoric acid as mag-

nesium ammonium phosphate, 1911, A., ii, 536.

Jörgensen, Sofus Mads, pure rhodium, 1903, A., ii, 300.

constitution of platinum bases, 1906, A., i, 338.

Jörgensen, Sofus Mads, and Sören Peter Lauritz Sörensen, a new red compound isomeric with Magnus' green 'salt, 1906, A., ii, 289.

Joffrin, H., use of acetylene gas for heating germinating stoves by means of an automatic temperature regulator, 1904, A., ii, 310.

Johann, U. See Otto A. Oesterle. Johannesen, J. C. F. See Henrik Bull. Johannissien, Akop. See Robert Stollé. Diedrich. See Johannsen, Stoermer.

Johannsen, Otto, See Olto Ruff and

Alfred Stock.

Johansen, E. S., a peculiar luminous effect in the Bunsen flame and the flame spectrum of sulphur, 1912, A., ii, 402.

Johansson, David. See Hans von Euler. Johansson, Hj., velocity of reaction of different bases with halogen-substituted acids. I., 1912, A., ii, 544.

Johansson, Johan Erik, elimination of carbon dioxide during activity of muscles, 1903, A., ii, 90.

carbohydrate metabolism, 1909, A., ii,

161.

Johansson, Johan Erik, J. Billström, and C. Heyl, output of carbon dioxide after the administration of various sugars, 1905, A., ii, 329.

Johlin, Jacob Martin. See Otto Diels. John, E., improvements in receivers for vacuum distillations, 1911, A., ii, 876.

John, William Thomas, See Thomas

Martin Lowry. Johns, Cosmo, allotropic forms of silica,

1907, A., ii, 257. Johns, Carl Oscar, pyrimidines. XXXVII. Synthesis of 4-methyl-

cytosine, 1908, A., i, 917. XLI. Formation of pyrimidines.

purine derivatives from 4-methylcytosine, 1909, A., i, 191.

purines. II. An isomeride of xanthine; 2:8-dioxypurine, 1911, A., i, 242.

purines. III. 2-Oxy-9-methylpurine and 2:8-dioxy-9-methylpurine, 1911, A., i. 506.

purines. IV. 2-Oxypurine and 2-oxy-8-methylpurine, 1912, A., i, 224.

V. 2-Oxy-1-methylpurine, 1912, A., i, 320.

purines. VI. 2:8-dioxy-6:9-dimethyland purine 2:8-dioxy-1-methylpurine, 1912, A., i, 588.

purines. VII. 2-Oxy-6:8:9-trimethylpurine, 2-oxy-6:9-dimethylpurine, and 2-oxy-8:9-dimethylpurine, 1912, A., i, 799.

Johns, Carl Oscar. See also Treat Baldwin Johnson, and Henry Lord Wheeler.

Johnson, Arrien, a new member of the rhombohedral carbonate group, 1903, A., ii, 223.

Vesuvian ash of April 1906, 1906, A.,

ii, 621.

crystallographic constants of some organic compounds, 1907, A., ii, 541.

Johnson, Arrien, regular intergrowth of carnallite and hæmatite, 1909, A.,

glauconite from the Kurische Nehrung. East Prussia, 1912, A., ii, 178.

Johnson, A. See Alfred Wohl.

Johnson, Alice. See Harold Leonard Higgins.

Johnson, Alfred E., the phenolsulphonic acid method for the estimation of nitrates in water, 1912, A., ii, 89.

Johnson, Arden Richard, organic boronitrogen compounds, 1912, A., i, 171.

Johnson, Benjamin L., and Charles Hyde Warren, mineralogy of Iron Mine Hill, Rhode Island, 1908, A., ii, 202.

Johnson, Charles M., estimation of carbon in iron and steel by direct combustion with red lead, 1906, A.,

rapid estimation of nickel in the presence of iron, chromium, and manganese, 1907, A., ii, 819.

estimation of carbon in steel, ferroalloys, and plumbago by means of an electric furnace, 1908, A., ii, 630.

Johnson, Edward S., estimation of carbon disulphide and total sulphur in commercial benzene, 1906, A., ii, 799.

Johnson, Frederick, the influence of tin and lead on the micro-structure of

brass, 1912, A., ii, 762.
Johnson, Frederick Murray Godschall, vapour pressure of dry sal ammoniac, 1908, A., ii, 157.

vapour pressure of the ammonium halogen compounds, 1909, A., ii, 23.

vapour pressures of mercuric chloride, bromide, and iodide, 1911, A., ii, 727.

dissociation pressures of phosphonium bromide and iodide, 1912, A., ii,

a simple automatic mercury pump, 1912, A., ii, 840.

alumina as a drying agent, 1912, A., ii, 847.

Johnson, Frederick Murray Godschall, and Kurt Buch, gas current pressure

regulator, 1908, A., ii, 270.

Johnson, Frederick Murray Godschall, and Douglas McIntosh, liquid chlo-

rine, 1909, A., ii, 881.

formation of ozone by the ultra-violet rays, 1909, A., ii, 881.

Johnson, Frederick Murray Godschall, and Norman Thomas Mortimer Wilsmore, electrode potential in liquid ammonia, 1908, A., ii, 455.

Johnson, Frederick Murray Godschall.
See also Douglas McIntosh, Bertram
Dillon Steele, and James Wallace
Walker.

Johnson, James McIntosh. See Solomon

Farley Acree.

Johnson, Manuel. See Carl Dietrich Harries.

Johnson, Treat Baldwin, pyrimidines; synthesis of thymine-4-carboxylic acid, 1907, A. i, 879.

pyrimidines. XXIX. Separation of thymine from uracil, 1908, A., i,

692.

action of nitric acid on 2:6-dioxypyrimidines; nitrohydroxyhydrothymine. XXX., 1908, A., i, 739.

pyrimidines. XLVIII. Synthesis of 5-cyanouracil, 1910, A., i, 69.

sulphur linkings in proteins, 1911, A., i, 758.

hydantoins. IX. Action of potassium thiocyanate of alanine, 1912, A., i, 390.

Johnson, Treat Baldwin, and Joseph Alfred Ambler, pyrimidines. LII. Thiocytosine-5-carboxylic acid, 1911, A., i, 576.

desmotropism in the \u03c4-thiohydantoins,

1912, A., i, 799.

Johnson, Treat Baldwin, Joseph Alfred Ambler, and Harley Taylor Peck, pyrimidines. LI. Synthesis of cytosine-5-acetic acid, 1911, A., i, 575.

Johnson, Treat Baldwin, Ernest Bateman, Charles Andrew Brautlecht, and Erik Schjöth Palmer, thiocyanates and thiocarbimides. VI., 1906, A., i, 954.

Johnson, Treat Baldwin, and Robert Bengis, synthesis of pyrrole compounds from imino-acids; N-phenylaa'-dicarbethoxy-\(\theta\beta'\)-diketo-1-phenylpyrrolidine [ethyl 3:4-diketo-1-phenylpyrrolidine-2:5-dicarboxylate], 1911, A., i, 564.

hydantoins. XVII. Synthesis of the hydantoin of 3-aminotyrosine, 1912,

A., i, 808.

hydantoins. XVIII. Synthesis of 3-bromotyrosine, 1912, A., i, 809.

Johnson, Treat Baldwin, and Charles
Andrew Brautlecht, hydantoins.
IV. Reduction of aldehyde condensation products of 2-thio-1phenylhydantoin, 1911, A., i, 813.
hydantoins. XII. Synthesis of thiotyrosine, 1912, A., i, 805.

Johnson, Treat Baldwin, Howard Stanley Bristol, William Bronson Cramer, and Morgan Shuit Elmer, \(\gamma\)-dithio-

biurets, 1903, A., i, 751.

Johnson, Treat Baldwin, and Gerald Burnham, sulphur in proteins; thiopolypeptides, 1911, A., i, 696.

thioamides: formation of thiolpolypeptide derivatives by the action of hydrogen sulphide on aminoacetonitrile, 1911, A., i, 712.

thioamides. IV. Action of hydrogen sulphide on nitrogen-substituted aminoacetonitriles, 1912, A., i, 304.

Johnson, Treat Baldwin, and Lewis H. Chernoff, benzoylphenylacetamide,

1911, A., i, 372.

action of alkyloxides and amines on benzoyl isocyanochloride [benzoylcarbylamine chloride], 1912, A., i, 219.

hydantoins. XIX. Synthesis of 5-thiohydantoins, 1912, A., i, 810.

Johnson, Treat Baldwin, and Samuel Hopkins Clapp, pyrimidines; synthesis of 2-amino-5-methyl-6-oxypyrimidine, 1904, A., i, 819.

pyrimidines; 5-amino-6-oxy-2-ethylpyrimidine. XI., 1905, A., i, 835. pyrimidines. XXXIV. Action of di-

azobenzenesulphonic acid on thymine, uracil, and cytosine, 1908, A., i, 931.

Johnson, Treat Baldwin, Samuel Hopkins Clapp. and Norman Andrews Martin, pyrimidines. XXXIII. Synthesis of N-alkyl derivatives of cytosine, thymine, and uracil, 1908, A., i, 835.

Johnson, Treat Baldwin, William Bronson Cramer, David Ford McFarland, and William Knickerbocker Wallbridge, molecular rearrangement of thiocyanoactanilides into labile 4thiohydantoins: and the molecular rearrangement of the latter into stable isomerides. II., 1903, A., i, 580.

Johnson, Treat Baldwin, and John Hamilton Derby, jun., pyrimidines. XXXVIII. Syntheses of some benzyl derivatives of uracil and thymine,

1908, A., i, 1018.

Johnson, Treat Baldwin, and Herbert Hartley Guest, thiocyanates and thiocarbimides. VII. New class of thiocarbimides; thiocarbimidoethers, 1909, A., i, 371. pyrimidines. XLV. Sulphur deriva-.

pyrimidines. XLV. Sulphur derivatives of 5-hydroxyuracil: preparation of 5-benzylthioluracil and 5benzylthiolcytosine, 1909, A., i, 744. amines. I. Synthesis of phenylethyl-

methylamine, 1909, A., i, 784. amines. II. Syntheses of p-nitrophenylethylamine and 2:4-dinitrophenylethylamine, 1910, A., i, 310. Johnson, Treat Baldwin, and Herbert Hartley Guest, amines. III. Alkylations with dimethyl sulphate; synthesis of dimethylphenylethylamine, 1910, A., i, 470.

metathetical reactions: ether-thiocarbamides and their relation to 4-ammonium bases, 1910, A., i, 729.

oxazole series: the addition of cyanic acid to epichlorohydrin, 1910, A., i,

hydantoins. X. Action of potassium thiocyanate on pyrrolidonecarboxylic 2-thiohydantoin-4-propionic acid, 1912, A., i, 316. dantoins. XIV. The action of

hydantoins. potassium thiocyanate on asparagine,

1912, A., i, 807.

Johnson, Treat Baldwin, and Frederick William Heyl, pyrimidines. Some condensation products of a substituted \(\psi\)-thiocarbamide; synthesis of 1-methyluracil, 1907, A., i, 728.

pyrimidines. XXI. Action of methyl iodide on 6-oxy-2-anilinopyrimidine and synthesis of 2-anilinopyrimidine,

1907, A., i, 877.

pyrimidines. XXVIII. Synthesis of 4-methyluracil-5-acetic acid, 1908,

A., i, 59.

Johnson, Treat Baldwin, and Arthur Joseph Hill, pyrimidines. I. Condensation of thiocarbamide with esters of allylmalonic acid and some alkylsubstituted allylmalonic acids, 1911, A., i, 502.

pyrimidines. LIV. Condensation of carbamide and guanidine with esters of allylmalonic and some alkylsubstituted allylmalonic acids, 1912,

A., i, 134.

LVII. Action of potaspyrimidines. sium thiocyanate on primary haloids,

1912, A., i, 912.

Johnson, Treat Baldwin, and Charles

Hoffman, hydantoins. VII. Action of bromine on tyrosinehydantoin, 1912, A., i, 136.

Johnson, Treat Baldwin, and George Samuel Jamieson, molecular rearrangement of unsymmetrical diacyl-\psi-thiocarbamides to isomeric symmetrical derivatives, 1906, A., i, 351.

Johnson, Treat Baldwin, and Carl Oscar Johns, pyrimidines: action of aqueous and alcoholic ammonia and aniline on some halogen- and thiol-pyrimidines. X., 1905, A., i, 836.

pyrimidines; 2:5-diamino-6-oxypyrimidine. XII., 1906, A., i, 113.

Johnson, Treat Baldwin, and Carl Oscar Johns, derivatives of 5-iodopyrimidine: 5-iodocytosine, 1906, A., i, 455.

researches on furans; 2:5-dicarbethoxy-3:4-diketotetrahydrofuran, 1906, A.,

i. 874.

Johnson, Treat Baldwin, Carl Oscar Johns, and Frederick William Hevl. pyrimidines: 5-nitrocytosine and its reduction to 5:6-diamino-2-oxypyrimidine. XVII., 1906, A., i, 770.

Treat Baldwin, and David Johnson, Breese Jones, pyrimidines. XXXIX. Syntheses of new derivatives of 5hydroxyuracil (isobarbituric acid),

1909, A., i, 59.

pyrimidines. XLII. Synthesis of 5hydroxy-1-methyluracil, 1909, A., i, 423.

transformation of allylphthalimide into propenylphthalimide, 1911, A., i, 455.

Johnson, Treat Baldwin, and Ralph Walker Langley, oxazole series; syntheses of 2-ketotetrahydro-oxazoles,

1910, A., i, 884. Johnson, Treat Baldwin, and Louis Henry Levy, thiocyanates and isothiocvanates [thiocarbimides]. VII. Diphenylcarbamyl thiocyanate, 1907, A., i, 910.

Treat Baldwin, and Elmer Johnson. Verner McCollum, certain derivatives of benzenesulphonylaminoacetonitrile, 1906, A., i, 156.

pyrimidines; synthesis of isobarbituric acid and of 5-hydroxycytosine, 1906,

A., i, 704.

pyrimidines: action of potassium thiocyanate on imide chlorides. 1906, A., i, 768.

pyrimidines: formation of purines from carbinidopyrimidines. XVI.,

1906, A., i, 769.

Johnson, Treat Baldwin, and Kenneth pyrimidines. Gerard Mackenzie, XLVI. Dimethyl derivatives of 2aminopyrimidine; preparation of 2methylamino-5-methylpyrimidine, 1909, A., i, 839.

Johnson, Treat Baldwin, Harold A. Meade, and Walter Chapin Chalker, o., m., and p-iodohippuric acids, 1906,

A., i, 852.

Johnson. Treat Baldwin, and George Albert Menge, action of phenylhydrazine on benzoyl-\psi-thiocarbamides; 3-amino-1:5-diphenylpyrro-a8'-diazole [3-amino-1:5-diphenyl-1:2:4-triazole] derivatives, 1904, A., i, 948. pyrimidines. XVIII. 5-Ethylcytosine,

1906, A., i, 986.

Johnson, Treat Baldwin, and Robert C. Moran, pyrimidines. LVIII. Oximes of some thioglycollide compounds and their behaviour on reduction, 1912, A., i. 913.

Johnson, Treat Baldwin, and Ben H. Nicolet, hydantoins. VII. Synthesis of 2-thiohydantoin, 1912, A., i, 53.

hydantoins. XI. New method of synthesising N-alkyl derivatives of aamino-acids; methyltyrosine, 1912, A., i, 585.

hydantoins. XVI. The alkylation 2-thio-4-benzylidenehydantoin,

1912, A., i, 808.

Johnson, Treat Baldwin, and William B. O'Brien, hydantoins. XIII. A new method for the synthesis of phenylalanine, 1912, A., i, 806.

Johnson, Treat Baldwin, George Morton Pfau, and Willard Wellington Hodge, hydantoins. XV. The desulphurisation of 2-thiohydantoins, 1912, A., i, 807.

Johnson, Treat Baldwin, and Norman Arthur Shepard, pyrimidines. LIII. Condensation of ethyl formate and ethyl oxalate with some pyrimidinethioglycollates, 1911, A., i, 924. rimidines. LVI. Action of hydr-

pyrimidines. oxylamine on 4-methyl-1:6-dihydro-6-pyrimidone-2-thioloxylacetic acid: α-oximino-β-thiolpropionic

1912, A., i, 910.

Johnson, Treat Baldwin, and Carl Frank Speh, pyrimidines. XXVII. Synthesis of thymine-5'-carboxylic acid, 1907, A., i, 1083.

Treat Baldwin, Walter Johnson, Frederick Storey, and Elmer Verner XXXV. McCollum, pyrimidines. Action of potassium thiocyanate on some imide chlorides, 1908, A., i, 837.

Johnson, Treat Baldwin. See also Henry Lord Wheeler.

Johnson, William A., proposed method for the routine valuation of diastase preparations, 1908, A., ii, 743.

Johnson, William A. See also John Harper Long.

Johnstin, Ruth M. See Elmer Peter Kohler. Johnston, Henry Mulrea. See William Henry Thompson.

Johnston, John, amphoteric nature of cacodylic acid, 1904, A., i, 984.

methylation of p-aminobenzoic acid, by means of methyl sulphate; preliminary note, 1905, P., 156.

affinity constants of amphoteric electrolytes. I. Methyl derivatives of p-aminobenzoic acid and of glycine, 1906, A., ii, 733.

Johnston, John, dissociation pressures of some metallic hydroxides and carbonates, 1908, A., ii, 358.

free energy changes attending the formation of certain carbonates and hydroxides, 1908, A., ii, 812.

application of Nernst's theorem to certain heterogeneous equilibria. 1909, A., ii, 390.

change of the equivalent conductivity of ions with the temperature, 1909, A., ii, 854.

thermal dissociation of calcium carbon-

ate, 1910, A., ii, 831.

a correlation of the elastic behaviour of metals with certain of their physical constants, 1912, A., ii, 129.

Johnston, John, and Leason H. Adams, influence of pressure on the melting points of certain metals, 1911, A., ii, 696.

phenomenon of occlusion in precipitates of barium sulphate, and its relation to the exact estimation of sulphates, 1911, A., ii, 766.

density of solid substances with especial reference to permanent changes produced by high pressures,

1912, A., ii, 537.

Johnston, John. See also Leason H. Adams, Eugene Thomas Allen, Arthur Amos Noyes, and James Walker.

Johnston, Marius Early. See Joseph Hoeing Kastle.

Johnston, Robert A. A., [Canadian minerals], 1912, A., ii, 358.

Johnston, Samuel M., boiling points of aqueous solutions, 1906, A., ii, 9. boiling and freezing points of concentrated aqueous solutions and the

> question of the hydration of the solute, 1908, A., ii, 661.

Johnstone, S. J. See Thomas Crook. Johnston-Lavis, Henry James, a Leonard James Spencer, chloromanganokalite, a new Vesuvian mineral, 1908, A., ii, 395.

Joist, Matthias, and Walther Löb, pyrogenic behaviour of tetrachloroethylene, acetyl chloride, trichloroacetic acid, and bromoform, 1906, A., i, 130.

Jolibois, Pierre, zinc phosphides, 1908,

A., ii, 1037. tin phosphides, 1909, A., ii, 319. allotropic states of phosphorus, 1909,

A., ii, 726. two new nickel phosphides, 1910, A., ii, 132.

relations between white phosphorus, red phosphorus, and pyromorphic phosphorus, 1910, A., ii, 846.

Jolibois, Pierre, allotropic modifications of arsenic and its melting point, 1911, A., ii, 720.

the yield in the Grignard reaction,

1912, A., i, 675.

the formula of organo-magnesium derivatives: magnesium hydride, 1912, A., i, 753.

Jolibois, Pierre, and Eugène L. Dupuy, definite compounds of arsenic and tin,

1911, A., ii, 612.

Jolibois, Pierre. See also Paul Lebeau. Jolkowsky, (Mme.). See H. Cantoni. Jolkver, (Mlle.) Eugènie, furfurylpropyl-

carbinol, 1910, A., i, 55.

Jolles, Adolf [F.], preparation of carbamide by the oxidation of albumin with permanganate, 1903, A., i, 723. estimation of albumin, 1903, A., ii, 48.

a simple method for the estimation of albuminous substances in blood, 1903, A., ii, 252.

human milk, 1903, A., ii, 667.

detection of mercury in urine, 1904, A., ii, 212.

sensitive test for bile pigments in urine, 1904, A., ii, 303.

colorimetric estimation of iron in blood, 1905, A., ii, 67, 206.

estimation of catalases in blood, 1905, A., ii, 215.

volumetric estimation of pentoses, 1906, A., ii, 203.

estimation of acetone, 1906, A., ii, 401.

levulosuria: detection of levulose in urine, 1907, A., ii, 56.

detection of pentoses in urine, 1907, A., ii, 135.

estimation of methylpentoses, 1907, A., ii, 309.

nitrogenous constituents of the urine, 1907, A., ii, 900.

estimation of pentoses in urine, 1908, A., ii, 235.

the degree of acidity of urine, 1908, A., ii, 970.

a new reaction for bile acids, 1908, A., ii, 998.

estimation of albumin in urine, 1909,

A., ii, 194. estimation of urea, 1909, A., ii, 275.

detection of biliary acids, lævulose, glycuronic acid, and pentoses in urine, 1910, A., ii, 164.

the degradation of the sugar group, 1911, A., i, 15.

the action of ammonia and sodium carbonate on different varieties of sugar in dilute aqueous solutions, 1911, A., i, 421.

Jolles, Adolf [F.], the destruction of dextrose by light, 1911, A., i, 524.

a new method of obtaining glycuronic acid, 1911, A., i, 709.

the behaviour of invert sugar in alkaline solution in presence of hydrogen

peroxide, 1911, A., i, 951. new method for the quantitative estimation of sucrose in the presence

of other sugars, 1911, A., ii, 74. the physico-chemical basis of the Seliwanoff lævulose reaction, 1912,

A., i, 608. estimation of sucrose in urine in the

presence of other sugars, 1912, A., ii. 1004. detection of glycuronic acid in diabetic

urine, 1912, A., ii, 1217.

Jolles, Adolf, and Moritz Oppenheim, blood-ferments, 1905, A., ii, 265, 600.

Jolliffe, E. H. See William Robert Lang

Jolly, Léopold, oxidation of dextrese in the blood, 1904, A., ii, 183.

Jolly, W. A. See Swale Vincent. Joly, John, the radioactivity of sea-water,

1908, A., ii, 246.

radium content of deep-sea sediments, 1908, A., ii, 649.

distribution of thorium in the earth's surface materials, 1909, A., ii, 458, 637.

radium content of sea-water, 1909, A., ii, 780.

radioactivity of certain lavas, 1909, A., ii, 848.

the amount of thorium in sedimentary rocks. I. Calcareous and dolomitic rocks, 1910, A., ii, 723.

the amount of thorium in sedimentary rocks. II. Arenaceous and argillaceous rocks, 1910, A., ii, 969.

a method of investigating the quantity of radium in rocks and minerals, etc., 1911, A., ii, 685.

radioactivity of the rocks of the St. Gothard tunnel, 1912, A., ii,

radioactivity of terrestrial surface materials, 1912, A., ii, 1032.

Joly, John, and Louis B. Smyth, the amount of radium emanation in the soil and its escape into the atmosphere, 1911, A., ii, 1048.

Jomini, Paul. See Louis Pelet-Jolivet. Jona, Judah J., salivary adaptation,

1910, A., ii, 516.

Jona, Temistocle, action of sulphuric acid on calcium cyanamide, 1908, A., i,

Jona, Temistocle, preparation of aminodicyanodiamidine, 1908, A., i, 964.

relations between the cryoscopic constants and position isomerism in disubstituted derivatives of benzene: influence of the substituent groups, 1909, A., ii, 860.

index of oxidation of milk, 1911, A.,

ii, 233.

new method of estimating the lactose and fat in milk, 1911, A., ii, 234.

bromo- and chloro-guaiacols, 1912, A., i, 760.

detection of small quantities of chloral in the presence of chloroform, 1912, A., ii, 698.

nitrogenous compounds in meat ex-

tract, 1912, A., ii, 785. dipeptides in the extractive substances of the muscle, 1912, A., ii, 785.

cryoscopy of meat extracts, 1912, A., ii, 785.

Jona, Temistocle, and G. B. Pozzi, chloroguaiacols, 1911, A., i, 854.

Jona, Temistocle. See also Enrico Rimini.

Jonas, Leslie, thallium accumulator, 1903, A., ii, 586.

Jones, Bernard Monat, the spontaneous crystallisation of solutions of some alkali nitrates, 1908, T., 1739; P.,

the spontaneous crystallisation of solutions of sodium carbonate and sodium thiosulphate, 1909, T., 1672; P., 213.

Jones, Bernard Mouat. See also Thomas Crook, Wyndham Rowland Dunstan,

and Harold Brewer Hartley.

Jones, Charles Owen, the physiological effects of selenium compounds with relation to their action on glycogen and sugar derivatives in the tissue, 1909, A., ii, 1041.

the action of certain sulphur compounds on metabolism and excre-

tion, 1911, A., ii, 742.

the action of selenium salts on red blood-corpuscles, 1911, A., ii, 1108. Jones, Cecil Price, changes in blood and bone-marrow produced by hæmorrhage

and blood-destruction, 1911, A., ii, 995.

Jones, David Breese, See Treat Baldwin
Johnson, and Thomas Burr Osborne.

Jones, David Trevor, note on certain derivatives of cyclopropene, 1905, T., 1062; P., 216.

Jones, David Trevor, and George Tattersall, a new synthesis of isocaprolactone and certain derivatives, 1904, T., 1691; P., 218.

Jones, Ernest Griffiths, William Henry Perkin, jun., and Robert Robinson, isonarcotine, 1912, T., 257; P., 4. Jones, E. V. See William Lofland

Dudley.

Jones, Edward William Taylor, colorimetric method for the estimation of formaldehyde in milk, 1909, A., ii, 99.

Jones, Francis, action of alkalis on glass and on paraffin, 1903, A., ii, 143.

union of hydrogen with sulphur, selenium, and tellurium, 1904, A., ii, 723.

action of selenium and tellurium on arsine and stibine, 1907, P., 164.

the volatility of sulphur and its action on water, 1912, A., ii, 934.

Jones, Grinnell, explanation of the negative coefficient of expansion of silver iodide, 1909, A., ii, 210.

atomic weight of hydrogen, 1910, A., ii, 404.

Jones, Grinnell. See also Gregory Paul Baxter, and Theodore William Richards.

Jones, George Cecil, and John Hugh Jeffery, estimation of iron by permanganate in presence of hydrochloric acid, 1909, A., ii, 704.

Jones, George Cecil. See also Arthur Robert Ling.

Jones, Harry Clary, atomic weight of lanthanum, 1903, A., ii, 650.

significance of the maximum in the conductivity curves of Kraus at high temperatures, 1904, A., ii, 464.

atomic weight of radium and the periodic system, 1905, A., ii, 789.

bearing of hydrates on the temperature-coefficients of conductivity of aqueous solutions, 1906, A., ii, 327. hydrate theory, 1907, A., ii, 78.

present status of the solvate theory,

1909, A., ii, 221.

absorption spectra and the solvate theory of solution, 1912, A., ii, 507.

Jones, Harry Clary, and John Augustus
Anderson, absorption spectra of
neodymium and praseodymium
chlorides in water, methyl alcohol,
ethyl alcohol, and mixtures of these
solvents, 1909, A., ii, 197.

absorption spectra of solutions of a number of salts in water in certain non-aqueous solvents, and in mixtures of these solvents with water.

XXIV., 1909, A., ii, 359.

Jones, Harry Clary, and Harry Preston Bassett, determination of the relative velocities of the ions of silver nitrate in mixtures of the alcohols and water and on the conductivity of such mixtures, 1905, A., ii, 8.

approximate composition of the hydrates formed by certain electrolytes in aqueous solutions at different concentrations. X., 1905, A., ii,

445.

influence of temperature on the amount of water of crystallisation as evidence supporting the theory of the existence of hydrates in solution,

1905, A., ii, 509.

approximate composition of the hydrates formed by a number of electrolytes in aqueous solutions, together with a brief general discussion of the results thus far obtained. XIII.,

1905, A., ii, 687.

Jones, Harry Clary, and Eugene C. Bingham, conductivity and viscosity of solutions of certain salts in mixtures of acetone with methyl alcohol, ethyl alcohol, and water, 1906, A., ii, 66.

Jones, Harry Clary, and Charles G. Carroll, lowering of the freezing point of aqueous hydrogen peroxide produced by certain salts and acids, 1903, A., ii, 131.

conductivities of certain electrolytes in water, methyl and ethyl alcohols, and mixtures of these solvents; relation between conductivity and

viscosity, 1905, A., ii, 73.

Jones, Harry Clary, and Frederick Hutton Getman, molecular lowering of the freezing point of water produced by concentrated solutions of certain electrolytes, 1904, A., ii,

nature of concentrated solutions of electrolytes; hydrates in solution, 1904, A., ii, 386, 710.

existence of hydrates in solutions of certain non-electrolytes and the non-existence of hydrates in solutions of organic acids, 1904, A., ii, 710.

existence of alcoholates in solutions of certain electrolytes in alcohol, 1904,

A., ii, 711.

Jones, Harry Clary, and J. Sam Guy, absorption spectra of aqueous solutions of salts of neodymium and praseodymium as measured by means of the radiomicrometer, 1912, A., ii, 711.

Jones, Harry Clary, and C. Alfred Jacobson, conductivity and ionisation of electrolytes in aqueous solutions as conditioned by temperature, dilution, and hydrolysis, 1908, A., ii, 1011.

Jones, Harry Clary, and Charles Fowler Lindsay, conductivity of certain salts in water, methyl, ethyl and propyl alcohols, and in mixtures of these

solvents, 1903, A., ii, 55.

Leroy Mc-Jones, Harry Clary, and Master, formation of alcoholates by certain salts in solution in methyl and ethyl alcohols, 1906, A., i, 329.

conductivity and viscosity of solutions of certain salts in water, methyl alcohol, ethyl alcohol, acetone, and binary mixtures of these solvents.

V., 1906, A., ii, 737.

Jones, Harry Clary, Edward G. Mahin, conductivity of solutions of lithium nitrate in ternary mixtures of acetone, methyl alcohol, ethyl alcohol, and water; viscosity and fluidity of the mixtures, 1909, A., ii, 539.

conductivity and viscosity of dilute solutions of lithium nitrate and cadmium iodide in binary and ternary mixtures of acetone with methyl alcohol, ethyl alcohol, and

water, 1909, A., ii, 957.

Harry Clary, and Grantland Jones. Murray, lowering of the freezing point of aqueous hydrogen peroxide by sulphuric and acetic acids, 1903, A., ii, 634.

association of a liquid diminished by the presence of another associated

liquid, 1903, A., ii, 637.

effect of one associated solvent on the association of another associated

solvent, 1904, A., ii, 387.

Jones, Harry Clary, and J. Newton Pearce, dissociation as measured by lowering of freezing point and by electrical conductivity; bearing on the theory; the approximate hydrate composition of the hydrates formed by a number of electrolytes. 1908, A., ii, 19.

Jones, Harry Clary, and Charles August Rouiller, relative migration velocities of the ions of silver nitrate in water, methyl alcohol, ethyl alcohol, and acetone, and in binary mixtures of these solvents, together with the conductivity of such solutions, 1906, A.,

ii, 827.

Jones, Harry Clary, and Charles M. Stine, the effect of one salt on the hydrating power of another salt present in the same solution. XX., 1908, A., ii, 474.

Jones, Harry Clary, and William Walker Strong, absorption spectra of certain salt solutions, 1909, A.,

ii, 775.

absorption spectra of various salts in solution, and the effect of temperature on such spectra, 1910, A., ii, 87, 172.

absorption spectra of solutions; a possible method for detecting the presence of intermediate compounds in chemical reactions, 1910, A., ii, 246.

absorption spectra of certain uranous and uranyl compounds, 1910, A., ii,

370.

absorption spectra of certain salts of cobalt, erbium, neodymium, and uranium as affected by temperature and by chemical reagents. I. and II., 1911, A., ii, 166.

selective oxidation. XXXIII., 1911,

A., ii, 168.

absorption spectra of comparatively rare salts. XXXV. Spectrophotography of certain chemical reactions, and the effect of high temperature on the absorption spectra of non-aqueous solutions, 1912, A., ii, 216.

Jones, Harry Clary, and Horace Scudder Uhler, absorption spectra of certain salts in aqueous solution as affected by the presence of certain other salts with large dehydrating power, 1907, A., ii, 147, 211.

absorption spectra of certain salts in non-aqueous solvents as affected by the addition of water, 1907, A., ii,

212.

Jones, Harry Clary, and William Reed Veazey, possible explanation of the increase in viscosity which results when the alcohols are mixed with water, and of the negative viscosity coefficient of certain salts when dissolved in water, 1907, A., ii, 438.

conductivity and viscosity of solutions of certain salts in water, methyl alcohol, ethyl alcohol, acetone, and binary mixtures of these solvents.

1908, A., ii, 259.

conductivity and viscosity of tetraethylammonium iodide in water, methyl alcohol, ethyl alcohol, nitrobenzene, and binary mixtures of these solvents, 1908, A., ii, 260. Jones, Harry Clary, and Augustus Price West, temperature-coefficients of conductivity in aqueous solutions and the effect of temperature on dissociation, 1905, A., ii, 794.

Jones, Harry Clary. See also Alphonso Morton Clover, P. B. Davis, J. Sam Guy, Henry H. Hosford, Henry R. Kreider, Maurice Roland Schmidt, A. Springer, jun., Augustus Price West, George Frederic White, E. P. Wightman, and L. G. Winston.

Jones, Henry Chapman, detection of chlorides in the presence of bro-

mides, 1904, A., ii, 440.

silver amalgams, 1910, T., 336; P., 47.

Jones, Herbert Edwin. See David Leonard Chapman.

Jones, Humphrey Owen, a study of the isomerism and optical activity of quinquevalent nitrogen compounds, 1903, T., 1400; P., 228.

optically active nitrogen compounds: d- and l-phenylbenzylmethylethylammonium salts, 1904, T., 223; P.,

6.

a further analogy between the asymmetric nitrogen and carbon atoms, 1905, T., 135; P., 10.

the stereoisomerism of substituted ammonium compounds, 1905, T., 1721; P., 237; discussion, P., 238. the stereochemistry of nitrogen, 1905,

A., ii, 1.

absence of isomerism in substituted ammonium compounds, 1906, A., i, 15.

solubility of stereoisomerides in optically active solvents, 1907, A., ii,

resolution of optically active ammonium salts by means of tartaric acid, 1908, A., i, 257.

Jones, Humphrey Owen, and Frederick William Carpenter, the estimation of hydroxylamine, 1903, T., 1394; P., 228.

Jones, Humphrey Owen, and John Gunning Moore Dunlop, the configuration of substituted ammonium compounds, 1912, T., 1748; P., 221.

Jones, Humphrey Owen, and Percy Edwin Evans, the mechanism of Doebner and von Miller's quinaldine synthesis, 1911, T., 334; P., 43.

Jones, Humphrey Owen, and John Robertshaw Hill, the replacement of alkyl radicles by methyl in substituted ammonium compounds, 1907, T., 2083; P., 290. Jones, Humphrey Owen, and John Robertshaw Hill, the effect of constitution on the rotatory power of optically active ammonium compounds. II., 1908, T., 295; P., 28.

Jones, Humphrey Owen, and Joseph Keith Mathews, the reduction of nitrosyl chloride, 1910, A., ii, 1060.

Jones, Humphrey Owen, and John Price Millington, spatial configuration of tervalent nitrogen compounds, 1904, A., i, 866.

Jones, Humphrey Owen, and Charles Stanley Robinson, nickelo- and palladio-dithio-oxalic acids, 1912, T., 932; P., 129.

dithiomalonates, 1912, T., 935; P.,

129.

Jones, Humphrey Owen, and Hubert Sanderson Tasker, note on oxalyl

chloride, 1908, P., 271.

the action of mercaptans on acid chlorides. Part I. Oxalyl chloride: the mono- and di-thio-oxalates, 1909, T., 1904; P., 247.

thio-oxalates; preliminary note, 1909,

P., 159.

Jones, Humphrey Owen, and Edward John White, a supposed case of stereoisomeric tervalent nitrogen pounds, 1910, T., 632; P., 57.

Jones, Humphrey Owen, and Hubert Arthur Wootton, the chemical composition of petroleum from Borneo, 1907, T., 1146; P., 184.

Jones, Humphrey Owen, See also Frank Buckney, (Sir) James Dewar, John Gunning Moore Dunlop, (Miss) Muriel Gwendolen Edwards, William Gidley Emmett, Reginald William Everatt, Ralph Eddowes Garrod, Dan Ivor James, Richard William Dades Preston, John Edward Purvis, Charles Stanley Robinson, Hubert Sanderson Tasker, (Miss) Mary Beatrice Thomas, and Thomas Barlow Wood.

Jones, Lionel Manfred. See Thomas

Slater Price.

Jones, Lauder William, isomeric aßdialkylhydroxylamines. I. a-Methyl-\$-ethylhydroxylamine. II. \$-Methyl-a-ethylhydroxylamine, 1907, A., i, 897.

Beckmann rearrangement of hydroxamic acids, 1912, A., i, 692.

Jones, Lauder William, and Ralph Oesper, preparation of hydroxamic acids from hydroxylamine salts of organic acids, 1910, A., i, 13.

Jones, (Miss) Marian. See Kennedy

Joseph Previté Orton.

Jones, Robert Henry. See Harold Baily Dixon.

Jones, Samuel Mansfield. See Friedrich Kehrmann.

Jones, Walter, enzyme of the thymns and suprarenal, 1904, A., ii, 191. autodigestion of nucleo-proteins, 1904,

A., ii, 625.

occurrence of guanase in the spleen of oxen and its non-occurrence in the

spleen of pigs, 1905, A., ii, 644, identity of nucleic acids of thymus, spleen, and pancreas, 1908, A.,i,744.

the relationship of aqueous extracts which contain nuclein enzymes to the physiological phenomena in the living organisms, 1910, A., ii, 526.

nucleases, 1911, A., i, 410.

the physiological agents concerned in nuclein fermentation, with special reference to four independent deami-

dases, 1911, A., i, 410. the formation of guanylic acid from yeast nucleic acid, 1912, A., i, 670.

Jones, Walter, and Charles Robert Austrian, the ferments which participate in nuclein metabolism, 1906, A., ii, 561.

thymus-nucleic acid, 1907, A., i, 572. nuclein ferments of embryos, 1907,

A., ii, 708.

Jones, Walter, and C. L. Partridge,

guanase, 1904, A., i, 838.

Jones, Walter, and Leonard George Rowntree, guanylie acid of the spleen, 1908, A., i, 487.

Jones, Walter, and Milton Charles Winternitz, adenase, 1905, A., ii, 333.

Jones, Walter. See also Samuel Amberg, George de Forest Barnett, Arthur Gamgee, Veader Newton Leonard, James Raglan Miller, Alice Rohdé, Martin Norris Straughn, Carl Vögtlin, and Milton Charles Winternitz.

Jones, William App, action of ozone, hydrogen peroxide, etc., on carbon monoxide, 1903, A., ii, 594.

Jones, William Jacob, the determination of solubility coefficients by aspiration,

1911, T., 392; P., 21.

William Jacob, and Arthur Lapworth, the influence of temperature on the basic water value of ethyl alcohol, 1911, T., 917; P.,

equilibrium in the system: ethyl alcohol, acetic acid, ethyl acetate and water, and its apparent dis-placement by hydrogen chloride, 1911, T., 1427; P., 143.

Jones, William Jacob, and Arthur Lapworth, the heat of hydrolysis of ethyl alcohol hydrochloride; a correction, 1911, P., 143.

Jones, William Jacob, and Kennedy Joseph Previté Orton, the chlorination of acetanilide, 1909, T., 1056; P.,

146.

Jones, William Jacob. See also Kennedy Joseph Previté Orton.

nedy Joseph Previté Orton.

Jones, Webster Newton. See Latham

Clarke.

Jonescu, (Mile.) Anna, detection of benzoic acid in foodstuffs, 1909, A., ii, 627, 707

Jonescu, D., excretion of antipyrine by the human organism, 1906, A., ii, 565.

precipitation and estimation of alkaloids with potassium bismuth iodide, 1906, A., ii, 637.

digestion of egg and serum proteins by

papain, 1907, A., i, 167.

fate of the cresols in the organism and their influence on the metabolism and intestinal putrefaction of carnivora, 1907, A., ii, 117.

pharmacological investigation of tetrahydronaphthylamine, 1909, A., ii,

599.

Jonescu, D., and Otto Loewi, action of the digitalis group on the kidneys,

1908, A., ii, 720.

Jong, Anne Willem Karel de, transformations of salts of pyruvic acid, 1903, A., i, 146; 1904, A., i, 550; 1906, A. i, 623.

1906, A., i, 623. action of hydrogen sulphide on pyruvic acid, 1903, A., i, 146.

action of hydrochloric acid on pyruvic acid. IV., 1904, A., i, 550.

essential oil of patchouli; action of sulphuric acid on oil of patchouli, 1905, A., i, 802.

milk of Castilloa elastica, 1905, A., ii,

52.

estimation of alkaloids in coca leaves, 1905, A., ii, 778; 1908, A., ii, 440; 1909, A., ii, 276.

action of bromine on cocaine, 1906, A., i, 301.

extraction of coca leaves, 1906, A., i,

occurrence of quebrachitol in the latex of *Hevea brasiliensis*, 1906, A., ii, 248.

assay of the alkaloids of Javanese coca, 1906, A., ii, 315.

the alkaloids of coca, 1906, A., ii, 625. does crystallisable cocaine occur in Java coca ? 1908, A., i, 825. Jong, Anne Willem Karel de, presence of i-dimethylinosite in the latex of Melabæai from Sumatra, 1908, A., i, 952.

estimation of ecgonine in Java coca, 1908, A, ii, 239.

separation of benzoic acid and cinnamic acid, 1908, A., ii, 993.

assay of coca, 1908, A., ii, 997.

cyanogenetic plants, 1909, A., ii, 424. estimation of cinnamic and benzoic acids in mixtures of the two acids, 1910, A., ii, 81.

action of sunlight on allo-cinnamic

acid, 1911, A., i, 639.

assay of coca leaves, 1911, A., ii, 552. decomposition of gynocardin by the enzyme of the leaves of *Pangium edule*, 1912, A., i, 39.

influence of calcium benzoate on the solubility of calcium cinnamate.

1912, A., i, 699.

plants containing essential oils, 1912, A., ii, 80.

estimation of cinnamic acid in aqueous solutions by means of bromine, 1912, A., ii, 103.

Jong, Anne Willem Karel de, and Willem Ryk Tromp de Haas, milk of Castilloa elastica, 1904, A., ii, 762.

cause of the coagulation of the milk of Castilloa elastica, 1904, A., ii, 763. Jong, Mozes de, stannous chloride, 1903,

A., ii, 108.

Jongkees, W. J. A., iminodiacetic acid and some derivatives, 1908, A., i, 959. Jongkees, W. J. A. See also Rudolf

Adrian Weerman.

Jonker, Willem Peter Andries, sublimation of arsenic, 1908, A., ii, 1033. the system; sulphur-arsenic, 1909,

A., ii, 397.

freezing-point and boiling-point curves in a binary system, 1909, A., ii, 466.

the system: mercuric chloride and mercurous chloride, 1910, A., ii, 127.

colloidal chemistry and the phase rule, 1911, A., ii, 103; 1912, A., ii, 440. Jordan, Anson, action of urinary anti-

septics, 1911, A., ii, 218.

Jordan, H. E., and J. A. E. Eyster, the physiological action of extracts of the pineal body, 1912, A., ii, 74.

pineal body, 1912, A., ii, 74.

Jordan, H. E. See also J. A. E. Eyster.

Jordan, Stroud, condensation of some primary aromatic amines with chloral-aniline, 1910, A., i, 664.

Jordan, Stroud. See also Alvin

Sawyer Wheeler.

Jordan, Whitman Howard, Edwin Bret Hart, and Andrew J. Patten, physiological effects of certain phosphorus compounds on milch cows, 1906, A., ii, 472.

Jordis, Eduard [Friedrich Alexander], silicic acid, 1903, A., ii, 364; 1905,

A., ii, 317.

double salts of antimony trichloride,

1903, A., ii, 603.

salts of antimony with organic acids. I. and III., 1904, A., i, 216, 468. new points in the theory of colloids,

1904, A., ii, 714.

theory of colloids, 1905, A., ii, 153, 447; 1908, A., ii, 675, 820, 1023.

hydration and hardening, 1905, A., ii,

155.

silicates of the alkaline earths, 1905,

A., ii, 248.

silicate analysis. I., 1905, A., ii, 610. "setting" and "hardening" of cement, 1905, A., ii, 709.

preparation and purification of the hydrogel of silicic acid, 1906, A., ii,

84.

ferric silicates, 1907, A., ii, 876. the metallic form of metalloids, 1908,

A., ii, 98.

silicates, VII., 1908, A., ii, 103.

metallic silicates. I. Preparation of metallic silicates by wet methods, 1908, A., ii, 291.

1908, A., ii, 291. silicates. VIII. Alkali silicates, 1908,

A., ii, 492.

chemistry of colloids, 1911, A., ii,

011.

precipitation from salt solutions by alkali hydroxides and carbonates,

1912, A., ii, 745.

Jordis, Eduard, and Wilhelm Hennis, metallic silicates. II. Interactions of sodium silicate and metallic salt solutions, 1908, A., ii, 291.

Jordis, Eduard, and Erhard Hans Kanter, silicic acid. II., 1903, A.,

ii. 475.

silicates, 1903, A., ii, 475, 595; 1905,

A., ii, 88, 161, 248.

silicates. II. Action of hydroxides of the alkaline earth metals on silicic acid with less than 23 per cent. of water, 1903, A., ii, 542.

Jordis, Eduard, and Paul Lincke, metallic silicates. III. The reaction between solutions of sodium silicate and ferric chloride, 1910, A., ii, 416.

Jordis, Eduard, and Wilhelm Ludewig, analysis of silicates. II., 1906, A., ii, 51.

colloidal silicic acid, 1907, A., ii, 344.

Jordis, Eduard, and Withelm Meyer, salts of antimony with organic acids. II., 1904, A., i, 282.

Jordis, Eduard, and Wilhelm Rosenhaupt, action of oxygen on copper, tin, zinc, and the alloys of tin and zinc with copper, 1908, A., ii, 107.

action of oxygen on metals, 1908, A.,

ii, 172.

Jordis, Eduard, and Eugen Schweizer, the action of liquids which dissolve sulphur on metallic sulphides, 1910, A., ii, 405.

Jordis, Eduard, and Wilhelm Stramer, decompositions in potassium cyanide silver baths, 1903, A., ii, 631.

Jordis, Eduard, and Hubert Vierling, oxidation of solutions of ferrous salts,

1904, A., ii, 740.

Jorissen, Armand, a test for hydrastinine, 1903, A., ii, 518.

detection of peroxides in ether, 1903, A., ii, 579.

a delicate reaction of titanium, 1904, A., ii, 149.

presence of chromium and vanadium in coal from Liége, 1905, A., ii, 535.

linamarin, the cyanogenetic glucoside of flax, 1907, A., i, 434, 1063.

formation of hydrogen cyanide, 1910, A., i, 466.

identification of veronal, 1911, A., ii, 670.

a reaction of sparteine, 1911, A., ii, 1144.

importance of hydrogen cyanide and glucosides producing hydrogen cyanide in plant chemistry, 1912, A., ii, 864.

Jorissen, Willem Paulinus, production of active oxygen and the hypothesis of electrons, 1904, A., ii, 394.

amount of chlorine in rain-water, 1906, A., ii, 486; 1907, A., ii, 48.

gas from spring water, 1907, A., ii, 388.

heat of hydration, 1909, A., ii, 120; 1910, A., ii, 269, 828; 1912, A., ii, 626.

some corroded metals, 1909, A., ii, 311.

estimation of dissolved oxygen in water, 1909, A., ii, 343; 1910, A., ii, 749.

heat of hydration of sodium sulphate,

1910, A., ii, 392.

corrosion of copper and iron alloys by water containing salt and air; oxidation of copper at high temperatures, 1911, A., ii, 41. Jorissen, Willem Paulinus, oxidation of ammonia in aqueous solution, 1912, A., ii, 249.

formation of hydrogen sulphide through "galvanic action," 1912, A., ii, 637.

Jorissen. Willem Paulinus, and Hendrik Filippo, laboratory preparation of sodium or potassium hydroxide free from carbonate, 1909, A., ii, 311.

lecture experiments, [oxides of copper],

1909, A., ii, 564.

Jorissen, Willem Paulinus, and N. H. Siewertsz van Reesema, oxidation of phosphorus, 1910, A., ii, 81.

extinction of flames, 1910, A., ii, 122. Jorissen, Willem Paulinus, and Lodewyk Theodorus Reicher, oxidation of oxalic acid by free and combined oxygen, 1904, A., i, 6.

Jorissen, Willem Paulinus, and Wilhelm Eduard Ringer, phosphorescence of zinc sulphide, 1904, A., ii, 817; 1906, A., ii, 448.

oxidation of benzaldehyde in the presence of acetic anhydride, 1905, A.,

action of radium rays on mixtures of hydrogen and chlorine, 1905, A., ii,

decomposition of iodoform dissolved in chloroform by diffused daylight and by radium rays, 1906, A., i, 475.

estimation of dissolved oxygen in sea water, 1906, A., ii, 490.

action of radium rays on mixtures of hydrogen and chlorine and of hydro-

gen and oxygen, 1906, A., ii, 515. conductivity of air in contact with autoxidising substances, 1906, A., ii, 518.

the effect of cathode rays on uranosouranic oxide, 1907, A., ii, 422.

chemical actions of radium rays, 1907, A., ii, 520.

action of cathode rays on certain substances, 1907, A., ii, 731.

Jorissen, Willem Paulinus, and Jan Rutten, naphthalene picrate and the estimation of naphthalene, 1909, A., ii, 523.

Jorisson, Willem Paulinus, and Adriaan Peter Herman Trivelli, metallic uran-

ium, 1911, A., ii, 207.

Jorissen, Willem Paulinus, and Herman Wijbe Woudstra, action of radium emanation on colloids, 1910, A., ii, 1024; 1912, A., ii, 522.

Jorns, August, the catalases of bacteria,

1908, A., ii, 880.

Joseph, Alfred Francis, reciprocal displacement of acids in heterogeneous systems, 1906, T., 823; P., 82.

Joseph, Alfred Francis, estimation of iron in ferric solution, 1910, A., ii.

estimation of formic acid [in formates]. 1910, A., ii, 1118.

action of bromine on formic acid, 1911, A., ii, 384.

Joseph, Alfred Francis, and James Nadoris Jinendradasa, the colour and constitution of bromine solutions, 1910, P., 233; 1911, T., 274.

Joseph, Alfred Francis. See also John

Edwin Mackenzie.

Joseph, Don R., effect of magnesium on some of the toxic effects of eserine,

1909, A., ii, 170. Joseph, Don R., and Samuel James Meltzer, antagonistic action of barium and magnesium, 1910, A., ii, 228

the inhibitory influence of magnesium on the direct excitability of frog's muscle, and the antagonistic effects of sodium and calcium on this influence, 1911, A., ii, 55.

Joseph, Don R. See also Orville Harry

Brown.

Joseph, W. E. See A. D. Emmett. Joshua, Walter Philip. See Martin

Onslow Forster. Jost, B., explosion of radium bromide through the action of water, 1912, A.,

ii, 224. Jost, F., the violet and green varieties of chromium chloride, 1907, A., ii, 95. ammonia equilibrium, 1908, A., ii, 362, 761.

Jost, Hans. See Otto Diels.

Jouard, Farel Louis. See Marston Tay-

lor Bogert.

Jouck, Karl, the cyanogenetic glucosides in the leaves of the cherry-laurel (Prunus laurocerasus) and in the bark of the bird-cherry (P. padus), 1905, A., i, 912.

Jouguet, indifferent points, 1911, A., ii,

869.

Jouniaux, Alcide, reduction of some metallic haloids by hydrogen; influence of pressure, 1903, A., ii,

a supposed compound of camphor and naphthalene, 1912, A., i, 198.

binary mixtures containing camphor, 1912, A., i, 572.

cryoscopy in camphor, 1912, A., ii, 625. Jourdain, Pierre Roger, alumina from the oxidation of aluminium amalgam in air, 1910, A., ii, 297. oxidation of aluminium amalgam,

1910, A., ii, 715.

Jourdain, Pierre Roger. See also Marcel Guichard.

Jovanovits, Johann. See Alfred Werner. Jovitschitsch, Milorad Z., synthesis of derivatives of ethyl acetoacetate.

II., 1906, A., i, 230. constitution of fulminic acid, 1906,

A., i, 732.

compounds containing a previously unknown ring. II., 1907, A., i, 98. mysterious lack of carbon in the condensation products of ethylene and acetylene, 1908, A., i, 118.

condensation products obtained from ethylene and acetylene by means of the dark electric discharge, 1908, A., i, 118.

solubility of chromic oxide, 1909, A.,

ii, 243.

new chromium mineral from Servia, 1909, A., ii, 246.

chromic and aluminium nitrates, 1912,

A., ii, 261.

Jowett, Hooper Albert Dickinson, the constitution of pilocarpine. Part IV., 1903, T., 438; P., 54.

the constitution of epinephrine, 1904,

T., 192; P., 18.

the fusion of isopilocarpine with caustic potash; a correction, 1904, P., 14.

preparation and properties of 1:4:5trimethylglyoxaline, 1905, T., 405; P., 116.

the constitution of pilocarpine. Part V. Conversion of isopilocarpine into pilocarpine, 1905, T., 794; P., 172. bromomethyl heptyl ketone, 1905, P.,

chemical examination of cascara bark,

1905, A., ii, 192.

Jowett, Hooper Albert Dickinson, and Archie Cecil Osborn Hann, preparation and properties of some new tropeines,

1906, T., 357; P., 61.

Jowett, Hooper Albert Dickinson, and Charles Etty Potter, preparation and properties of 1:4(or 1:5)-dimethylglyoxaline and 1:3-dimethylpyrazole, 1903, T., 464; P., 56.

the constitution of chrysophanic acid and of emodin, 1903, T., 1327; P.,

220.

the constitution of barbaloin. Part I., 1905, T., 878; P., 181; discussion,

P., 182.

Jowett, Hooper Albert Dickinson, and Frank Lee Pyman, relation between chemical constitution and physiological action in the tropeines, 1906, P., 317; 1907, T., 92; 1909, T., 1020; P., 165.

Jowett, Hooper Albert Dickinson, and Frank Lee Pyman, some derivatives of salicylic acid, 1906, P., 317.

note on the alkaloids of Pilocarpus racemosus, 1912, P., 268.

Jowett, Hooper Albert Dickinson. See also George Barger, and Wyndham Rowland Dunstan.

Joyce, Clarence N. See Jasper E. Crane. Joye, Paul, and Charles Garnier, compounds of neodymium, 1912, A., ii, 352.

Joyner, Reginald Arthur, amalgams containing silver and tin, 1911, T., 195; P., 5.

the affinity constants of hydrogen peroxide, 1912, A., ii, 1123.

Juch, Viktor, behaviour of hydroxysalicylic acid [quinolearboxylic acid] towards oxidising agents, 1905, A., i, 701.

Juckenack, Adolf. See Heinrich Lührig.

Judd, (Miss) Hilda Mary. See Martin Onslow Forster.

Judd, John Wesley, coral rock from borings in the Funafuti Atoll, 1909, A., ii, 351.

Judd, Roy C. See James H. Walton, jun.

Jüngel, Karl. See Fritz Ullmann. Jüngermann, Emil, reactions of iso-

amylanthrone chloride and bromide, 1905, A., i, 795.

Jüngst, Edward, and Rudolf Mewes, preparation of silicides, borides, aluminides, etc., 1905, A., ii, 316. Jüptner [von Jonstorff], Hanns, free

Jüptner [von Jonstorff], Hanns, free energy of formation in several reactions of bechnical importance, 1904, A., ii, 382, 549.

significance of the coefficient B in the expression for the alteration of free energy, 1904, A., ii, 549.

free energy of formation, 1905, A., ii, 16.

A., ii, 522; 1907, A., ii, 742.

chemistry of iron, 1906, A., ii, 614. relationships between heat effect and

free energy, 1907, A., ii, 786. vaporisation, 1908, A., ii, 663, 810; 1909, A., ii, 21; 1910, A., ii, 583, 689; 1912, A., ii, 829.

Jürgens, Boris. See Wilhelm Steinkopf. Jürgens, Heinrich. See Gustav Heller. Jürgens, Victor, m-toluic acid, 1907, A., i, 1036.

Jürgense, Wilhelm. See Julius Tafel. Jürgensen, E. See Sören Peter Lauritz Sörensen. Jüttner, Ferencz, reaction-velocity and diffusion, 1909, A., ii, 300.

dynamics of a gas in motion according to the theory of relativity, 1911, A., ii, 579.

general integrals of chemical kinetics.

1911, A., ii, 972.

Jufereff, Wladimir, conductivity of solutions of ferric and ferrous chlorides and the structure of ferric chlorides, 1908, A., ii, 698.

Juillard, Paul, erythrin (erythric acid),

1904, A., i, 593.

nitro-derivatives of orange IV. I. and II., 1905, A., i, 843.

nitrodiphenylamines, 1906, A., i, 12.

Juillard, Paul. See also Paul Freundler. Julius, W. H., and B. J. van der Plaats, anomalous dispersion of light in gases,

1911, A., ii, 449.

Juliusberg, Fritz, derivatives of methylvanillin [2:4-dimethoxybenzaldehyde], 1907, A., i, 219.

Juman, Lucien, electrolytic extraction of copper from its ores, 1908, A., ii, 282.

Jumelle, Henri, resin from a passion flower, 1903, A., i, 712.

Jumper, Charles H. See William Albert

Noyes.

Jung, Adalbert, influence of thermal treatment on the properties and structure of hypereutectoid steel, 1911, A., ii, 898.

See Th. Schumacher. Jung, W. L.

Jungfleisch, Emile [Clément], method of resolving fermentation lactic acid into its optically active components, 1904, A., i, 645.

dissimilarity in the reactions of d- and l-lactic acids, 1904, A., i, 796.

the phosphorescence of phosphorus, 1905, A., ii, 244.

direct oxidation of phosphorus, 1907, A., ii, 761.

r-dilactylic acid and i-dilactylic acid,

1912, A., i, 942. Jungfleisch, Emile, and Marcel Godchot, lactyl-lactyl-lactic acid and the dilactide of inactive lactic acid, 1905, A., i, 259.

d-lactic acid, 1905, A., i, 318. d-lactide, 1905, A., i, 630.

l-lactic acid, 1906, A., i, 333.

the lactide of l-lactic acid, 1906, A., i, 333.

ethyl lactyl-lactate, 1907, A., i, 279. r-dilactylic acid, 1907, A., i, 471. diglycollic acid and its homologues,

1907, A., i, 748.

new homologues of diglycollic acid,

1908, A., i, 127.

Jungfleisch, Emile, and Henri Leroux, the constituents of the guttapercha from Palaquium treubi, 1906, A., i. 525.

lupeol, 1907, A., i, 783.

identity of ilicyl alcohol and a-amyrin, 1908, A., i, 1000.

Junghahn, Alfred, 4-m-xylidine-5-sulphonic acid, 1903, A., i, 22.

a practical modification of the technical "baking" method of preparing sulphonic acids of aromatic bases, 1903, A., i, 473.

new controllable apparatus for heating sealed tubes, 1903, A., ii, 138.

Junghahn, Alfred, and J. Bunimowicz, action of hydrazine on thiamines, 1903, A., i, 130.

Junghans, Erhard. See Julius Schmidt. Jungius, Coenraad Lodewyk, the mutual transformation of the two stereoisomeric methyl-d-glucosides,

A., i, 733.

mutual transformation of the two stereoisomeric penta-acetates of dextrose, 1904, A., i, 651.

theoretical consideration of reactions which take place in two or more successive stages, 1904, A., ii, 716.

conversion of diazoamino-p-into aminoazo-p-toluene in the solid state, 1905, A., i, 555.

isomeric changes of some dextrose derivatives, and the mutarotation of the sugars, 1905. A., i. 573.

Jungius, Coenraad Lodewyk. See also Cornelis Adriaan Lobry de Bruyn, and Arnold Frederik Holleman.

Jungjohann, Wilhelm, the emission and absorption of luminous gases from experiments with continuous currents of high intensity, 1911, A., ii, 82.

Junius, Adolf, molybdates, 1905, A., ii, 825.

Junk, Aloys. See Edw. Bergmann. Junker, Fritz. See Ernst Beckmann. Junkersdorf, Peter, influence of phlorid-

zin on the sugar in the blood, 1910, A., ii, 225.

the formation of carbohydrates from fat in the animal organism, 1911, A., ii, 127.

Junkersdorf, Peter. See also Richard Anschütz, Eduard Pflüger, and Bernhard Schöndorff.

Juppen, Carl, and Stanislaus von Kostanecki, 7:4'-dihydroxyflavonol, 1905, A., i, 79.

Jurisch, E. See Adolf Sieverts.

Jurisch, Konrad W., the constitution of Weber's acid, 1910, A., ii, 950.

Jurrissen, A. W. See Ernst Berl.

Juschkevitsch, N., theory of the fusion of copper in cupola furnaces, 1909, A., ii, 577.

Juschtschenko, A. J., influence of iodothyrin, spermine, and adrenaline on oxidation processes, and on the toxicity of the urine, 1909, A., ii, 169.

the fat-splitting and oxidising ferments of the thyroid glands and the influence of the latter on lipolytic and oxidative processes in the blood. 1910, A., ii, 526.

the nuclease content of different organs of man and animals, 1911, A., ii, 412. the thyroid and enzymatic processes,

1911, A., ii, 1112.

Just, Alexander, a complex double salt of manganous acid and tungstic acid,

1904, A., ii, 38.

Just, Gerhard, anode potentials in the formation of lead carbonate and chromate, 1903, A., ii, 629.

inflammation of light petroleum, 1904,

A., i, 361.

reaction between potassium ferricyanide and potassium iodide, 1908, A., ii, 825.

Just, Gerhard, Paul Askenasy, and B. Mitrofanoff, rapid formation of positive lead accumulator plates, 1910, A., ii, 96.

Just. Gerhard, and W. Berezowsky, relation between the rate of a chemical reaction and those of its intermediate

changes, 1909, A., ii, 651.

Just, Gerhard, and Yrjö Kauko, kinetic investigation of the action of hydrogen on solutions of potassium permanganate (auto-reduction), 1911, A., ii, 494.

Just, Gerhard, and Terres, kinetic examination of the autoxidation of ferrous hydrogen carbonate, dissolved in water, 1907, A., ii, 852

Just, Gerhard. See also Fritz Haber, and Jacobus Henricus van't Hoff.

Just, J. See Julius Stoklasa. Just. M. See Albin Köhler.

Justin-Mueller, Ed., adsorption (dyeing) and cohesion (felting) of woollen fibres and swelling affinity, 1909, A., ii, 302.

Justus, Jakab, iodine in cells, 1903,

A., ii, 311.

the amount of iodine in animal cells, 1904, A., ii, 499.

K., estimation of silicon in 50 per cent. ferro-silicon, 1905, A., ii, 420.

Kaas, Carl. See Emil Fischer.

Kaas, Karl, cinchomeronic and apophyllenic acids, 1903, A., i, 117.

constitution of &-isocinchonicine, 1905,

A., i, 151.

constitution of α-iso-ψ-cinchonicine and of \$\beta\$-isocinchonicine, 1905, A., i, 296. amount of phosphorus in egg-albumin, 1906, A., i, 776.

Kaas, Karl. See also Robert Kremann.

and Zdenko Hanns Skraup.

Kabacznik, A. See Roland Scholl.

Kablukoff, Iwan A., double decomposition of silver nitrate and potassium haloids in the absence of a solvent. 1907, A., ii, 865.

preparation of aluminium bromide and its latent heat of fusion, 1908, A., ii,

Kablukoff, Iwan A., and Al. N. Sachanoff, hydrolytic and electrolytic dissociaof aluminium bromide in aqueous solution, 1909, A., ii, 965. complex compounds of aluminium

bromide with organic compounds,

1910, A., i, 163.

Kablukoff, Iwan A., A. Solomonoff, and A. Galine, pressure and composition of the vapours of solutions in aqueous alcohol, 1904, A., ii, 238.

Kablukoff, Iwan A. See also Wladimir

F. Luginin.

Kačer, Philipp, and Roland Scholl, some diazonium salts of the anthraquinone series, 1905, A., i, 102.

Kačer, Philipp. See also Roland Scholl.

Kade, Fritz. See Adolf Grün.

Kadiera, Victor, action of sulphuric acid on butane-ay-diol, 1904, A., i, 466. action of sulphuric acid on diphenylamine, 1905, A., i, 934.

Victor. Kadiera, See also

Noelting.

Käding, Christoph. See August Michaelis. Kämmerer, Heinrich. See Dieckmann.

Kämpf, Adolf, preparation of aromatic substituted guanidines from cyanamide, 1904, A., i, 534.

Kämpf, Adolf. See also Julius Schmidt. Kämpf, E. See Emil Abderhalden.

Kaempf, F., fluorescence absorption and Lambert's absorption law in the case of fluorescein, 1911, A., ii, 833.

Kaesbohrer, R. See Hugo Jacob.

Kaess, L., and J. Gruszkiewicz, compounds of mesoxalic acid and glyoxylic acid with guanidine, 1903, A., i, 6.

action of cyanogen chloride on methyl-

amine, 1903, A., i, 11.

Kaestle, K. See Julius Sand.

Kafka, Erwin, potassium iodide and mercurous nitrate as delicate reagent for tungsten and molybdenum, 1912, A., ii, 693.

Kagan, J. B. See Petr Petrovic von

Weimarn.

Kahan, M., Benin copal, 1910, A., i, 689.

Acera copal, 1910, A., i, 690.

Kahan, (Miss) Zelda, the effect of heat on the alkyl iodides, 1907, P., 307; 1908, T., 132.

quantitative separation of barium from strontium, 1908, A., ii, 133. Kahan, (Miss) Zelda. See also (Miss)

Ida Guinevere O'Donoghue.

Kahl, Richard, coupling of acid hydrazides with sugars, 1904, A., i, 936.

Kahlbaum, C. A. F., preparation of hydrogen peroxide, 1908, A., ii, 829.

Kahlbaum, Georg Wilhelm August, changes of density caused by passage through draw-plates, 1904, A., ii, 805.

Kahlbaum, Georg Wilhelm August, and Max Steffens, spontaneous action of metals on sensitive films of photographic plates without direct contact, 1905, A., ii, 295.

Kahlbaum, Georg Wilhelm August, and E. Sturm, alteration of specific gravity,

1905, A., ii, 680.

Kahlenberg, Louis [Albert Berthold], action of metallic magnesium on aqueous solutions, 1903, A., ii, 426. electrical conductivity of solutions in thiocyanates and thiocarbimides, 1904, A., ii, 225.

recent investigations bearing on the theory of electrolytic dissociation, 1905, A., ii, 139; 1906, A., ii, 68.

nature of the process of osmosis and osmotic pressure with observations concerning dialysis, 1906, A., ii, 337.

passage of substances into the human system by osmosis, 1908, A., ii, 408. osmotic studies, 1909, A., ii, 301.

Kahlenberg, Louis, and Roland B. Anthony, specific inductive capacity of solutions of the cleates of the heavy metals, 1906, A., ii, 825.

Kahlenberg, Louis, and Robert K. Brewer, equilibrium in the system: silver nitrate and pyridine, 1908,

A., ii, 469.

Kahlenberg, Louis, and David Klein, reaction between sodium and mercury,

1911, A., ii, 723.

Kahlenberg, Louis, and Robert Koenig, latent heat of vaporisation and specific heat of methyl silicate, 1908, Å., ii, 460. Kahlenberg, Louis, and Francis Craig Krauskopf, separation of lithium chloride from the other alkali chlorides and barium chloride, 1908, A., ii, 777.

Kahlenberg, Louis, and Alonzo Simpson McDaniel, potential differences between manganese and lead peroxide and various aqueous and other solutions, 1907, A., ii. 326.

Kahlenberg, Louis, and Otto E. Ruhoff, electrical conductivity of solutions in

amylamine, 1903, A., ii, 464.

Kahlenberg, Louis, and Herman Schlundt, solubility, electrolytic conductivity, and chemical action in liquid hydrogen cyanide, 1908, A., ii, 57.

liberation of hydrogen during the action of sodium on mercury, 1905,

A., ii, 387.

Kahlenberg, Louis, and Walter J. Wittich, equilibrium in the system: silver chloride and pyridine, 1909, A., i, 602.

Kahn, Eduard, the influence of calcium on the action of muscular excitation by their constant current, 1912, A., ii,

184.

Kahn, Henry Morel, solubility of carbon in calcium carbide, 1906, A., ii, 538.

solubility of carbon in barium and strontium carbides, 1907, A., ii, 166. temperature of formation of strontium and barium carbides, 1907, A., ii,

Kahn, Max, absorption and distribution of aluminium from aluminised foods,

1912, A., ii, 366.

460.

Kahn, Robert, fission of acid anhydrides by alcohols and alkyloxides and the mechanism of esterification, 1903, A.7 i, 93.

formation of ester-acids, 1903, A., i, 696.

action of alcohols on mixed anhydrides, 1903, A., i, 696.

Kahn, Robert, and Ludwig Benda, some homologues and derivatives of arsanilic acid. II. Oxidation of aminotolylarsinic acids, 1909, A., i, 75.

Kahn, Robert. See also Ludwig Benda.
Kahn, Richard H., the internal secretion of chromaffine tissue, 1909, A., ii, 686.

Kahn, Richard H., and Emil Starkenstein, the injury to the heart's activity produced by glyoxylic acid, 1910, A., ii, 976.

behaviour of glycogen after extirpation of the suprarenal capsules, 1911,

A., ii, 415.

Kahn, Walter. See Richard Willstätter. Kahnemann, Emil. See August Mich-

Kailan, Anton, fermentation amyl alco-

hol, 1903, A., i, 786.

esterification of benzoic acid by means of alcoholic hydrogen chloride, 1906. A., ii, 659.

dehydration of alcohol by lime, 1907,

A., i, 814.

esterification of anisic and gallic acids by means of alcoholic hydrogen chloride, 1907, A., i, 849.

esterification of aminobenzoic acids by means of alcoholic hydrogen chlor-

ide, 1907, A., ii, 158. esterification of o-, m-, and p-nitrobenzoic acids by means of alcoholic hydrogen chloride, 1907, A., ii, 242.

esterification of hydroxybenzoic acids by means of alcoholic hydrogen chloride, 1907, A., ii, 243.

formation of ethyl chloride, 1907, A.,

esterification of dinitrobenzoic acids by means of alcoholic hydrogen chloride, 1907, A., ii, 674.

of dihydroxybenzoic esterification acids by means of alcoholic hydrogen chloride, 1907, A., ii, 675.

esterification of pyridinemonocarboxylic acids by means of alcoholic hydrogen chloride, 1907, A., ii. 676.

esterification of a- and B-naphthoic acids by means of alcoholic hydrogen chloride, 1907, A., ii, 853.

esterification of cinnamic and hydrocinnamic acids by means of alcoholic hydrogen chloride, 1908, A., ii, 27.

esterification of nitrocinnamic acids by means of alcoholic hydrogen

chloride, 1908, A., ii, 27.

esterification of p-mandelic acid and benzoylformic acid, 1908, A., ii,

esterification of trichloroacetic acid, 1908, A., ii, 936.

behaviour of sulphuric acid in ester formation, 1909, A., ii, 218.

formation of esters, 1909, A., ii, 305,

sparking at the electrodes in the electrolysis of molten salts, 1910, A., ii, 928.

specific gravity of absolute ethyl alcohol at 25°, 1911, A., i, 939.

specific gravity and hygroscopic power of glycerol, 1912, A., i, 154.

Kailan, Anton, the chemical action of penetrating radium rays. I. The influence of penetrating rays on hydrogen peroxide in neutral solution, 1912, A., ii, 10.

the formation of ozone, 1912, A., ii,

the chemical action of penetrating radium rays. II. The influence of the penetrating rays on alkali iodides in aqueous solution, 1912, A., ii, 522.

Kailan, Anton, and Stephan Jahn, ozone. V. The development of heat in the decomposition of ozone, 1910, A., ii,

Kailan, Anton, See also Rudolf Wegscheider.

Kaim, Hans. See Karl Löffler.

Kainoshô, Tadaka, See Mitsuru Ku-

Kaiser [Friedrich Wilhelm], Erich, crystalline form of pyrrhotite, 1906, A., ii, 455.

separating apparatus for heavy liquids. 1906, A., ii, 662.

Kaiser, Hans. See Ludwig Weiss.

Kaiser, Karl, continuous production of ammonia from its elements, 1907, A., ii, 862.

Kaiser, Robert. See Friedrich Kehrmann.

Kaiserling, Carl, unusual bilirubinconcretion in the liver, 1907, A., ii, 113.

Kaisin, F., crystals of s-tetrachloroisopropylformal, 1906, A., i, 5.

Kajiura, S., is choline present in the cerebro-spinal fluid of epileptics? 1909, A., ii, 71.

proteins of rice, 1912, A., ii, 291. Kajiura, S., and Otto Rosenheim, the

etiology of beri-beri, 1910, A., ii, 635.

Kajiura, S. See also Otto Rosenheim.

Kakiuchi, Samuro, estimation of fat in pathological urine, 1911, A., ii, 549.

Kalaboukoff, (Mlle.) L., and Emile F. Terroine, influence of the products of reaction on the hydrolysis of fats by pancreatic juice, 1908, A., ii, 1050.

Kalähne, [Friedrich Wilhelm Hermann] Alfred, radiation of quinine sulphate,

1906, A., ii, 2.

Kalandek, Stanislaw, absorption light in solutions of aniline colours from the standpoint of optical resonance, 1908, A., ii, 139.

Kalb, Ludwig, dehydroindigotin, a new oxidation product of indigotin. I.,

1909, A., i, 966.

Kalb, Ludwig, dehydroindigotin. II. The hydrogen sulphite compounds of dehydroindigotin and a new process of indigo-dyeing, 1909, A., i. 967.

preparation of dehydroindigotin, its homologues, and substitution products, 1910, A., i, 340.

quinone di-imines of the acridone series, 1910, A., i, 637.

dehydroindigotin. III. Decomposition by means of acids and alkalis, 1911, A., i, 680.

Additive IV. dehydroindigotin. compounds, 1912, A., i, 725.

Kalb, Ludwig, and Joseph Bayer, 2phenylindolone and phenylindoxyl, 1912, A., i, 726.

Kalb, Ludwig. See also Richard Will-

stätter.

Friedrich. See Gustav Kalberlah. Embden.

Kalecsinszky, Alexander von, analyses of Hungarian minerals, 1911, A., ii, 47.

Kalikinsky, G., specific heats of aqueous solutions, 1904, A., ii, 232.

Kalischeff, A., preparation and properties of B-cumenyl-a-ethylhydracrylic acid, 1906, A., i, 178.

Kaliski, David J. See Reuter Ottenberg.

See Wassili W. Scharwin. Kalianoff. Kallauner, O., magnesium oxychlorides, 1909, A., ii, 809.

estimation of magnesium as oxide,

1911, A., ii, 1032.

Kallauner, O., and I. Preller, the separation of calcium from magnesium, 1912, A., ii, 604.

Kallauner, O. See also Josef Hanus.

Kalle & Co., [preparation of a new aromatic dithiocarbamide], 1903, A., i, 555.

nitroaminohydroxytoluene-ω-sulphonic acid, 1903, A., i, 616.

[2:4-dinitro-4'-hydroxydiphenylamine-2'-sulphonic acid], 1903, A., i, 816.

preparation of tetraiodophenolphthalein, 1903, A., i, 832.

preparation of a sulphur dye, 1903, A., i, 868.

preparation of anthranilic acid from sulphoanthranilic acid, 1904, A., i,

[sulphur derivatives of diphenyl], 1904,

A., i, 305.

preparation of phenylglycine-o-carboxylic acid from sulphophenylglycine-o-carboxylic acid, 1904, A., 1, 317.

Kalle & Co., [preparation of aromatic carbamides], 1904, A., i, 346.

[derivatives of diphenylamine], 1904, A., i, 414.

preparation of azine compounds, 1904. A., i, 455.

azo-compounds containing a 4-aziminobenzene residue, 1904, A., i, 460.

decomposition products of proteins containing sulphur, 1904, A., i, 460.

black sulphur dye from m-phenylenediamine, 1904, A., i, 607.

preparation of p-aminophenol-m-sulphonic acid, 1904, A., i, 664, 870. compounds of albumin with bismuth

and formaldehyde, 1904, A., i, 790. preparation of indigotin, 1904, A., i, 1019.

diazo-compounds from aminonaphtholdisulphonic acid, 1904, A., i. 1065.

[indophenol from p-phenyleuediamine and o-acetylaminophenol], 1905, A., i. 157.

haloid acid salts of peptones, 1905, A., i, 252.

brown sulphur dye from 2:4:5-triaminotoluene, 1905, A., i, 540.

trihydroxyphenylrosinduline, 1905. A., i, 554, 840.

bromodialkylacetamides, 1905, A., i, 638; 1906, A., i, 485, 634.

hydroxyphenylrosindulines, 1906, A., i. 314.

polyazo-compounds, 1906, A., i, 324. derivatives of 3-amino-p-cresol-5sulphonic acid, 1906, A., i, 658.

preparation of 4-chloro-a-naphthol, 1906, A., i, 659.

production of colloidal preparations containing gold, silver, or copper, 1906, A., i, 912.

[preparation of bromides of dialkylacetic acids], 1907, A., i, 276.

preparation of 8-naphthylamine-3:6:8trisulphonic acid, 1907, A., i, 313. preparation of acetylsalicylamide,

1907, A., i, 320.

preparation of the sulphonic acids of 1-diazo-2-oxynaphthalene, 1907, A.,

sulphonation of diazo-oxynaphthalene-4-sulphonic acids, 1907, A., i, 363.

nitration of diazo-oxynaphthalenesulphonic acids, 1907, A., i, 363. preparation of solid soluble silver

salts in combination with colloids,

1907, A., i, 370.

preparation of o-carboxyphenylthioglycollic [o-carboxyphenylthiolacetic] acid, 1907, A., i, 935; 1908, A., i, 984.

- Kalle & Co., preparation of thionaphthen derivatives, 1907, A., i, 953; 1911, A., i, 667; 1912, A., i, 126.
 - [preparation of isatin], 1907, A., i, 963.
 - preparation of 1-diazo-β-naphtholdiand tri-sulphonic acids, 1907, A., i, 986.
 - preparation of thioglycollic acid from chloroacetic acid, 1907, A., i, 1008.
 - [preparation of isatin derivatives], 1907, A., i, 1073; 1910, A., i, 278.
 - [diazotisation of acetyl-2:6-diaminophenol-4-sulphonic acid], 1907, A., i, 1090.
 - preparation of 3-hydroxy-(1)-thionaphthen, 1908, A., i, 360.
 - preparation of anthroxanic acid, 1908, A., i, 421, 646.
 - preparation of 3-hydroxy-(1)-thionaphthen-2-carboxylic acid, 1908, A., i, 451, 797.
 - preparation of dithioglycollic acid and arylthioglycollic [arylthiolacetic] acids, 1908, A., i, 605, 940, 983.
 - preparation of a red colouring matter of the thionaphthen series, 1908, A., i, 672.
 - preparation of the leuco-derivative of colouring matter obtained by oxidation from 3-hydroxy-(1)-thionaphthen, 1908, A., i, 785.
 - preparation of o-nitrosobenzyl alcohol and anthranil, 1908, A., i, 786. preparation of anthranil, 1908, A., i,
 - preparation of anthranil, 1908, A., i, 828.
 - [preparation of diazo-derivatives of 1-amino-β-naphtholsulphonic acids], 1908, A., i, 842.
 - preparation of a compound having the composition of nitrosobenzyl alcohol, 1908, A., i, 980.
 - preparation of o-nitrobenzaldehyde and o-nitrobenzaldoxime, 1909, A., i, 76.
 - preparation of o-nitrobenzonitrile and o-nitrobenzamide, 1909, A., i, 230.
 - preparation of a substituted α-oxythionaphthen, 1909, A., i, 252.
 - preparation of indoxylcarboxylic acid and indoxyl, 1909, A., i, 256.
 - [preparation of alkylthiol derivatives of primary aromatic amines], 1909, A., i, 339.
 - [preparation of arylsulphoxyacetic acids], 1909, A., i, 477.
 - preparation of o-nitro-derivatives of nitriles, 1909, A., i, 717.

- Kalle & Co., preparation of aromatic acyl-p-diamines, 1909, A., i, 736.
 - preparation of o-aminobenzonitrile and its substitution products, 1909, A., i, 793.
 - preparation of p-methoxysalicylaldehyde from p-hydroxysalicylaldehyde, 1910, A., i, 40.
 - preparation of glycerol mono- and dilactates, 1910, A., i, 297.
 - [preparation of dioxindols], 1910, A., i,
 - preparation of reduction products of acenaphthenequinones, 1910, A., i,
 - preparation of a nitrogenous oxidation product of acenaphthene, 1911, A., i, 309.
 - preparation of 8-aminopurine derivatives, 1911, A., i, 507.
 - preparation of sulphonated naphthalene derivatives, 1911, A., i, 627.
 - preparation of 6-amino-a-naphthol-5-sulphonic acid, 1911, A., i, 630.
 - preparation of alkyloxy- and alkylthioderivatives of 3-hydroxy-(1)-thionaphthen-2-carboxylic acid, 1911, A., i, 666.
 - preparation of thiazole compounds of "thioindigo-reds" and their derivatives, 1911, A., i, 678.
 - [preparation of dichloro-o-carboxy-phenylthiolacetic acid], 1911, A., i, 871
 - [preparation of carbazole derivatives], 1911, A., i, 917.
 - preparation of amino- and alkylaminosubstituted (in the aryl group) derivatives of 3-oxy-(1)-thionaphthen-2-carboxylic acids and of 3-oxy-(1)thionaphthen, 1911. A., i. 1009.
 - thionaphthen, 1911, A., i, 1009. [preparation of "thioindigo" derivatives], 1912, A., i, 126.
 - [preparation of ketonaphthathiophen], 1912, A., i, 208.
 - [preparation of indigoid compounds],
 - 1912, A., i, 208. [preparation of "dihalogendimethyl-
 - thioindigos"], 1912, A., i, 208. [preparation of "naphthioindigo"], 1912, A., i, 209.
 - [preparation of 2:4-dichlorophenylthiolacetic acid], 1912, A., i, 354.
 - [preparation of ψ -cumylthiolacetic acid], 1912, A., i, 354, 557.
 - preparation of p-hydroxyaryl derivatives of 2-imino-3-ketodihydro-(1)thionaphthen, 1912, A., i, 382.
 - preparation of oxindole derivatives of 2:3-diketodihydro-1-thionaphthen, 1912, A., i, 389.

Kalle & Co., preparation of m-acetylaminophenylthiolacetic and amino-o-tolylthiolacetic acids, 1912, A., i, 452.

preparation of s-xylylthiolacetic acid, 1912, A., i, 453.

"tetramethylthiopreparation of indigo," 1912, A., i, 487.

preparation of 3:4-dichlorophenylthiolacetic acid, 1912, A., i, 557.

preparation of 4-chloro-o-tolylthiolacetic acid, 1912, A., i, 557. preparation of 4-chloro-m-tolylthiol-

acetic acid, 1912, A., i, 557. preparation of dibromoisatin, 1912,

A., i, 580.

preparation of 4:6-dichloro-m-tolylthiolacetic acid and of 4-chloro-3:6dimethyl-1-phenylthiolacetic acid, 1912, A., i, 770.

preparation of aldehydes of the aromatic series with at least one hydroxy-group next to the aldehyde

group, 1912, A., i, 777.

preparation of chloro-1-diazo-2-oxyand of chloro-2-diazo-1-oxy-naphthalenesulphonic acids, 1912, A., i, 814. preparation of a monosulphonic acid of acenaphthene, 1912, A., i, 959.

Kallenberg, Sten. See Ludwig Ramberg. Kalmthout, P. C. J. van. See Nicolaas Schoorl.

Kalmus, Ernst, hæmochromogen and its crystals, 1910, A., ii, 664.

compounds of pyridine in blood-pig-

ment, 1911, A., i, 95.
Kalmus, Herbert T. See Richard Lorenz. Kalnin, A. See Mieczyslaw Centnerszwer.

Kalning, Harald. See Hans Stobbe. Kaluza, Ludwig, substituted rhodanic acids and their aldehyde condensation products. VIII., 1910, A., i, 130.

Kaluza, Ludwig, and R. Haid, a new method of preparing thiocarbimides,

1912, A., i, 440.

Kamberský, O., effect of impregnating with nutritive salts on the germination of seeds, 1906, A., ii, 481.

Kamerlingh Onnes. See Onnes.

Kametaka, Tokuhei, the composition of so-called elæomargaric acid, 1903, T., 1042; P., 200; 1908, A., i, 850.

Japanese vegetable oils, 1908, A., i, 850.

derivatives of protocatechuic acid, 1909, A., i, 387.

Kametaka, Tokuhei, and Arthur George Perkin, carthamine, 1909, P., 223; 1910, T., 1415; P., 181.

Kametaka, Tokuhei. See also Emil Fischer, and Richard Willstätter.

Oliver. See Laurie Lorne Kamm.

Burgess.

Kammann, Max. See Gustav Heller. Kammann, O., pollen toxin, 1912, A., ii,

Kammerer, Alfred Lewis, electrolytic estimation of bismuth and its separation from other metals, 1903, A., ii,

Kampen, G. B. van, estimation of phosphoric acid by Woy's method, 1907, A., ii, 50.

estimation of fluorides, 1912, A., ii, 88.

Kamphausen, W. See Max Busch. Kampschulte, Wilhelm. See Wilhelm Manchot.

Kanamori, Shigeru, agronomical equivalent of artificial magnesium carbonate, 1908, A., ii, 625.

Kanasirski, Georg. See Arthur Hantzsch. Kaneko, Kiosuke. See Rudolf Ruer.

Kanewsky, I. See Alexis V. Saposhnikoff.

Kanger, Arthur, ericolin, 1903, A., i,

composition and pharmacological action of cranberry leaves, 1904, A., ii, 74. increase of uric acid excretion in cats after administration of that substance by the mouth, 1906, A., ii,

Kanitz, Aristides titration of fatty acids of high molecular weight, 1903, A., ii, 248.

antiferments, 1903, A., ii, 661.

influence of hydrogen ions on invertase from Aspergillus niger, 1904, A., i,

influence of temperature on the assimilation of carbon dioxide, 1905, A.,

pancreas steapsin and the velocity of fat hydrolysis produced by enzymes, 1906, A., i, 328.

affinity constants of some hydrolytic products from albumin, 1906, A., ii,

affinity constants of tyrosine and phenylalanine, 1907, A., i, 764.

influence of temperature on vital processes, 1910, A., ii, 316.

the dissociation constants of tryptophan, 1911, A., i, 97.

the conditions for optimal action of invertase, 1912, A., i, 60.

Kanitz, Aristides, and Albert Dietze, influence of hydroxyl ions on tryptic digestion, 1903, A., ii, 160.

Kann, Karl. See Karl Fries.

Kanolt, Clarence Whitney, ionisation of water at 0°, 18°, and 25°, derived from conductivity measurements of the hydrolysis of the ammonium salt of diketotetrahydrothiazole, 1907, A., ii. 839.

Kanolt, Clarence Whitney. See a John Livingston Rutgers Morgan. See also

Kanomata, C., influence of didymium [and glucinum] on plants, 1908, A., ii, 616.

depression of growth by large amounts of calcium, 1908, A., ii, 624. Kanomata, C. See also I. Namba.

Kanonnikoff, Innocentius I., true density of chemical compounds and its relation to composition and constitution. VI. Halogenated compounds. VII. Sulphur compounds, 1903, A., ii, 11.

Kansky, Eugen. See Carl Neuberg. Kanter, Erhard Hans, silicic acid and silicates of the alkalis and alkaline earths, 1903, A., ii, 542.

Kanter, Erhard Hans. See also Eduard

Jordis.

Kantor, J. L., and William John Gies. new microscopic test for free acid, 1911, A., ii, 446.

experiments with the biuret reagent [detection of protein, etc.], 1911, A., ii, 554.

Kantorowicz, Hans. See Franz Sachs. Kantorowicz, Hermann. Sachs.

Kantscheff, Wasili. See Pavel Iw. Petrenko-Kritschenko.

Kaoli, Arno, and Sigmund Hals, nutritive value of whale meat, 1904, A., ii,

Kapeller, Friedrich. See Erich Müller. Kapfberger, Georg. See Emil Abderhalden.

Kappeler, Hans, sulphonation of β-nitronaphthalene, 1912, A., i, 251.

the iodine oxides I₆O₁₃ and I₁₀O₁₉, and iodine nitrate, 1912, A., ii, 39.

Kappeler, Hans. See also Fritz Fichter. Kappelmeier, Paul. See Kurt Heinrich Meyer, and Heinrich Wieland.

Kappen, Hubert, crystallography of some lichenic acids, 1903, A., i, 175.

the influence of sterilisation "kalkstickstoff" solutions, 1908, A., ii, 414.

the decomposition of calcium evanamide, 1908, A., ii, 414.

absorption of calcium cyanamide in soil, 1908, A., ii, 728.

chemical changes of calcium cyanamide in manuring, 1909, A., i, 92.

Kappen, Hubert, changes in calcium cvanamide when stored and their estimation, 1909, A., ii, 609,

bacteria which decompose cyanamide,

1909, A., ii, 822.

decomposition of cyanamide by fungi, 1910, A., ii, 436.

analysis of "nitrolime," 1911, A., ii,

Karandéeff, B., crystalline form and optical characters of lead formate, 1910, A., i, 151.

thermal analysis of the system K₂SO₄ - KF, 1910, A., ii, 83.

the binary systems of calcium metasilicate with calcium chloride and calcium fluoride, 1910, A., ii, 954.

Karaoglanoff, Z., oxidation and reduction in the electrolysis of solutions of salts of iron, 1905, A., ii, 674; 1906, A., ii, 145.

volumetric estimation of manganese, 1910, A., ii, 754; 1912, A., ii, 1214.

gravimetric estimation of magnesium, 1912, A., ii, 1212.

Karasseff. See Leo A. Tschugaeff.

Karaúlow, Theodor, the antagonistic action of cholesterol to the glucosidic heart poisons as determined by investigations on the isolated frog's heart, 1911, A., ii, 517.

Karaúlow, Theodor. See also Leon

Asher.

Karauschanoff, S., the significance of dihydroxyacetone as an intermediate product of alcoholic fermentation, 1911, A., ii, 914.

Karczag, László, the physiological action of tartaric acids, 1910, A., ii, 434.

toxic action of isomeric butyric and hydroxybutyric acids on frog's muscles and nerves, 1910, A., ii, 434. the fermentation of the different tartaric

acids, 1912, A., ii, 284.

in what way is tartaric acid attacked

by yeast? 1912, A., ii, 973.
Karczag, László. See also Giuseppe
Buglia, Willy Marckwald, and Carl Neuberg.

Kardos, M. See Carl Liebermann.

Kareff, N. See Maurice Doyon.

Karl, Adrien, triboluminescence of substances containing zinc, 1907, A., ii, 420.

triboluminescence of mineral substances, 1908, A., ii, 549.

Karl, Arthur. See Carl Paal.

Karl, E. See Christian Seer. Karl, Georges, some new thorium salts,

1910, A., i, 551.

Karl. Georges. See also Amé Pictet.

Karlík, V., apparatus for gas analysis, 1905, A., ii, 279.

Karman, Theodor von, the turbulence viscosity of different liquids, 1911, A., ii, 469.

Karo, Walther. See Max Bodenstein, and Robert Pschorr.

Karp, E. See Leo Pissarjewsky.

Karpa, J., rigor mortis, 1906, A., ii, 374.

Karpiński, Adam, and Bronislaw Niklewski, influence of organic matter on nitrification in impure cultures, 1908, A., ii, 123.

Karpinsky, Alexander Petrowitsch, brucite from Caucasus, 1907, A., ii, 362.

Karrer, P., aromatic arsenic compounds.

 p-Nitrosophenylarsinic acid, 1912,
 i, 740.

aromatic arsenic compounds. II.

Azo-dyes containing arsenic, 1912,

A., i. 929.

A., i, 929. Karrer, Ulrich. See Felix Kaufler.

Karslake, William Jay, detection of manganese and chromium in the presence of each other, 1908, A., ii, 635.

procedure for the oxidation of chromic acid of perchromic acid, 1909, A., ii, 269.

Karslake, William Jay, and Perry A. Bond, oxidation products of 6-nitro-1:3-dimethylbenzene-4-sulphonic acid, 1909, A., i, 231.

Karslake, William Jay, and R. C. Huston, action of nitric acid on benzoyl chloride in presence of acetic anhydride, 1909, A., i, 301.

6-nitro-4-sulpho-3-toluic acid and some of its derivatives, 1909, A., i, 795. Karslake, William Jay, and Will J.

Morgan, some derivatives of 2:6-dinitro-1:3-dimethylbenzene-4-sulphonic acid, 1908, A., i, 410.

onic acid, 1908, A., i, 410.

Karsten, Barta J., behaviour of the halogens to one another, especially the systems chlorine-bromine and chlorine-iodine, 1907, A., ii, 447.

Karsten, Barta J. See also Ernst Hendrik Büchner.

Karsten, Walter, active principle contained in the seeds of Dregea rubicunda, 1903, A., ii, 171.

occurrence of strophanthin, choline, and trigonelline in Strophanthus hispidus, 1903, A., ii, 172.

Karstens, H., thorium, 1909, A., ii, 243.Karvonen, A., halogen ethers, 1909, A., i, 202.

Karzoff, Nikolaus. See Oskar Baudisch.

Kasanezky, Puul, action of hydrogen peroxide on acid carbonates, 1903, A., ii, 366.

Kasanezky, Paul. See also Petr G. Melikoff.

Kasanski, A., the separation of peroxydase and catalase, 1912, A., i, 403.

Kasansky, Alexander, action of ethyl succinate on allyl iodide in presence of zinc; synthesis and properties of γ-diallylbutyrolactone, 1904, A., i, 367.

action of allyl iodide on ethyl succinate in presence of zinc; γ-diallylbutyrolactone, 1905, A., i, 320.

Kasarnowski, H., apparatus for estimating [traces of] arsenic, 1910, A., ii, 451.

Kasarnowski, H. See also Reginald Oliver Herzog, and Lothar Wöhler. Kasatkin, F. S. See Alexis A. Shukoff.

Kaschinsky, Paul, separation of iron and aluminium from manganese, calcium, and magnesium in ash analysis, 1905, A., ii, 423.

Kaschiwabara, M., the influence of acids and alkalis on autolysis with the use of different antiseptics, 1912, A., ii, 959.

Kashiwado, T. See Emil Abderhalden. Kaselitz, Oscar. See Otto Kühling.

Kaserer, Hermann, oxidation of hydrogen and methane by micro-organisms, 1906, A., ii, 113. oxidation of hydrogen by micro-

organisms, 1906, A., ii, 697.

some new autotrophic nitrogen bacteria, 1907, A., ii, 381.

Kaserer, Hermann, and Ignaz K. Greisenegger, estimation of phosphoric acid in soils and crops, 1911, A., ii, 152.

Kaserer, Hermann. See also W. Seifert.

Kasper, Franz Joseph, measurements in the silver spectrum, 1911, A., ii, 831.

Kassel, Richard. See Karl Drucker.
Kassner, Georg [Max Julius], calcium lead orthoplumbate, 1903, A., ii,

formation of red lead by light and air, 1904, A., ii, 124.

oxidation phenomena, 1905, A., ii, 19.

diffusion of gases, 1906, A., ii, 273. preparation of hydrogen iodide from barium peroxide, iodine, and sulphur dioxide, 1909, A., ii, 992.

oxidation of lead oxide in presence of light and air, 1911, A., ii, 284. ethyl ether, 1912, A., i, 826.

Kast, Hermann, freezing and melting points of glyceryl nitrate, 1906, A.,

chlorination of a-naphthol, 1911, A.,

i, 439.

the metallic salts of trinitrophenols and trinitrocresols, 1911, A., i, 852. derivatives of 5-benzylpyrimidine, 1912, A., i, 1023.

Kasten, Wilhelm. See Daniel Vor-

länder.

Kastle, Joseph Hoeing, method for the determination of the affinities of acids colorimetrically by means of certain vegetable colouring matters, 1905, A., ii, 154.

influence of chemical constitution on the lipolytic hydrolysis of esters,

1906, A., i, 548.

action of ozone and other oxidising agents on lipase, 1906, A., i, 615.

stability of oxydases and their behaviour towards various reagents, 1906, A., i, 615.

behaviour of phenolphthalein in the animal organism, 1906, A., ii, 473.

test for "saccharin" and a simple method of distinguishing coumarin from vanillin, 1906, A., ii, 503.

phenolphthalin as a reagent for oxydases in plant and animal tissues, 1907, A., ii, 708.

available alkali in the ash of human and cows' milk, 1908, A., ii, 714.

the use of nitrous acid, nitrites, and aqua regia in the estimation of the mineral constituents of urine, 1908, A., ii, 982.

peroxydase accelerators and their possible significance for biological oxidations, 1909, A., i, 75.

decomposition of the leucosulphonic acids of rosaniline hydrochloride and crystal-violet in aqueous solution, 1909, A., i, 845.

exidation of carbon monoxide, 1909,

A., ii, 508.

experimental illustration of the law of multiple proportions, 1910, A., ii, 600.

preparation of certain sulphonic acids in the free state, 1911, A., i, 30.

study of o-amino-p-sulphobenzoic acid with special reference to its fluorescence, 1911, A., i, 200.

conversion of benzenesulphondibromoamide into dibromobenzenesulphonamide by means of concentrated sulphuric acid, 1911, A., i, 361.

several acids suitable for use as standards in acidimetry, 1911, A., ii, 66.

Kastle, Joseph Hoeing, experimental illustration of the law of definite proportions through combination of the halogens with finely-divided silver, 1911, A., ii, 481.

Kastle, Joseph Hoeing, and Harold L. Amoss, estimation and recognition of hydrochloric acid in the gastric contents by a new reagent, 1907, A., ii,

716.

Kastle, Joseph Hoeing, and Mary Eva Clarke, cyanogen iodide as an indicator for acids, 1903, A., ii, 683.

occurrence of invertase in plants, 1904.

A., ii, 73.

Kastle, Joseph Hoeing, and Elias Elvove. oxidation and reduction in animal organism, 1904, A., ii, 354.

reduction of nitrates by certain plant extracts and metals, and the accelerating effect of certain substances on the progress of the reduction, 1904. A., ii, 480.

ammonium thiocyanate and thiocarbamide as sources of nitrogen to fungi and micro-organisms, 1904,

A., ii, 504.

magenta-S as a permanent standard for the estimation of nitrites in water analysis, 1911, A., ii, 437.

Kastle, Joseph Hoeing, and R. L. Haden. o-amino-p-sulphobenzoic acid and its derivatives, with special reference to their fluorescence. II., 1911, A., i, 974.

colour changes occurring in the blue flowers of the wild chicory, Cichorium intybus, 1911, A., ii, 1023.

Kastle, Joseph Hoeing, Marius Early Johnston, and Elias Elvove, hydrolysis of ethyl butyrate by lipase, 1904, A., i, 702.

Kastle, Joseph Hoeing, and Walter Pearson Kelley, rate of crystallisation of plastic sulphur, 1905, A., ii, 21.

Kastle, Joseph Hoeing, and Arthur Solomon Loevenhart, catalytic decomposition of hydrogen peroxide. 1903, A., ii, 537.

Kastle, Joseph Hoeing, and Eloise Chesley McCaw, fate of potassium myronate in the animal organism and its hydrolysis by the ferments of the liver, 1904, A., ii, 758.

Kastle, Joseph Hoeing, and F. Alex. McDermott, production of light by the

firefly, 1910, A., ii, 1088.

Kastle, Joseph Hoeing, and James S. McHargue, combustion of sulphur in air and oxygen, 1907, A., ii, 861.

Kastle, Joseph Hoeing, and Madison B. Porch, peroxydase reaction of milk, 1908, A., ii, 409.

Kastle, Joseph Hoeing, and Norman Roberts, tests for pus and blood,

1909, A., ii, 528.

Joseph Hoeing, and Claude Robert Smith, oxidation of thiocyanic acid and its salts by hydrogen peroxide, 1904, A., i, 856.

Kastle, Joseph Hoeing. See also Joseph G. Dinwiddie, Arthur Solomon Loevenhart, and Oliver March Shedd.

Kastner, Jaroslav. See Emil Votoček. Kastner, Richard. See Theodor Curtius. Kasztan, Max, the action of strophan-

thin on the blood-vessels, 1910, A., ii, 1094.

Katayama, Massao, nature of iodide of

starch, 1908, A., i, 9.

amalgam concentration cells, chemical cells, and Daniell cells, constructed with solid electrolytes, 1908, A., ii,

anomaly of the strong univalent electrolytes, 1908, A., ii, 926.

the nature of atomic weight, 1912,

A., ii, 1156. Katayama, Massao. See also Max Bodenstein, and Richard Lorenz.

Katayama, Tomio, determination of the available amounts of lime and magnesia in the soil, 1904, A., ii,

is the availability of phosphoric acid in bone-dust modified by the presence of gypsum ? 1905, A., ii, 347.

degree of stimulating action of manganese and iron salts on barley, 1906, A., ii, 888.

condensed vegetable milk, 1903, A., ii, 889.

vegetable cheese from the protein of the soy bean, 1906, A., ii, 889.

Katayama, Tomio. See also Hermann

Kato, Kan, microchemical detection of glycogen, 1909, A., ii, 355.

the relationship of glycogen in the frog's ovary to the time of year, 1910, A., ii, 628.

the enzymes in young bamboo shoots, 1912, A., ii, 81.

Kato, Yogoro, reaction between ferric chloride and potassium ferricyanide, 1909, A., i, 463.

electrical conductivity and dissociation of sulphuric acid in aqueous solutions at high temperatures, 1909, A., ii, 538.

"tofu," 1909, A., ii, 607.

Kato, Yogoro, colloidal barium sulphate, 1910, A., ii, 850.

Yogoro, and Ichisaburo Noda. gravimetric estimation of sulphuric acid in the presence of alkali metals, 1910, A., ii, 895.

Kato, Yogoro. See also Arthur Amos

Noyes.

Katschalowsky, Alex., and Stanislaus von Kostanecki, synthesis of 6:2'dihydroxyflavonol, 1904, A., i. 608. flavindogenides, 1904, A., i, 911.

Katsuyama, K. See Ginzaburo Totani. Kattwinkel, Paul, and Richard Wolffenstein, action of persulphates on aromatic nitriles, 1904, A., i, 896.

Katz, Julius, estimation of caffeine, 1903, A., ii, 250.

estimation of phosphorus in phosphorised oil and similar preparations, 1904, A., ii, 290.

amount of caffeine in the coffee used as a beverage, 1904, A., ii, 301.

titration of hydrofluoric acid containing hydrofluosilicic acid, 1904, A., ii, 442.

volumetric estimation of quinine in drugs, etc., 1911, A., ii, 79.

the excretion of quinine by the dog, and a new method for the estimation of this alkaloid, 1911, A., ii, 1013.

Katz, J. R., the analogy between swelling (imbibition) and mixing.

1911, A., ii, 475.

the analogy between swelling (imbibition) and mixing. II. Swelling (imbibing) crystals and mixed crystals, 1911, A., ii, 475.

significance of Nernst's formula relating to ideal concentrated solutions for the phenomena of swelling, 1912.

A., ii, 1142.

Katz, J. R. See also Philipp Kohnstamm. Katzenellenbogen, Marjam, the influence of diffusibility and the solubility of lipoids on the rate of intestinal absorption, 1906, A., ii, 780.

Katzenstein, A. See Alfred Schitten-

Katzer, Friedrich, poechite, an iron manganese ore from Vares, in Bosnia, 1912, A., ii, 178.

Kauffmann, Hugo [Josef], ring-system of benzene. III., 1903, A., i, 19.

action of auxochromic groups, 1903, A., i, 406.

constitution of a-pyridone, 1903, A., i, 514.

law of substitution in aromatic compounds, 1903, A., ii, 401.

Kauffmann, Hugo [Josef], constitution of the basic triphenvlmethane dves, 1904, A., i, 534.

theory of pseudo-acids, 1904, A., ii,

326, 550,

the ring-system of benzene. VI. Fluorescence, 1904, A., ii, 690.

radium rays and benzene derivatives, 1904, A., ii, 691.

disintegration of elements, 1904, A., ii, 720.

modern position of the benzene theory, 1905, A., i, 868.

investigation of fluorescence, 1905, A., ii, 783.

constitution and colour of nitrophenols, 1906, A., i, 577; 1907, A., i,

127.

condition of benzene derivatives as deduced from the magnetic rotation, 1906, A., ii, 520.

colour and chemical constitution, 1907,

A., ii, 3.

lecture experiment on the auxochrome theory; the sulphonic group as fluorogen, 1907, A., ii, 214.

and the auxochrome fluorescence theory, 1907, A., ii, 519.

divisibility of valencies, 1907, A., ii,

fluorescence and chemical constitution, 1908, A., ii, 5.

electron theory and valency, 1908, A.,

ii, 478. fluorescence of potassium quinoldisul-

phonate, 1909, A., i, 96. nitroquinol dimethyl ether and theory

of solution, 1909, A., ii, 107. constitution of triphenylmethane dyes,

1912, A., i, 397.

Kauffmann, Hugo, and Alfred Beisswenger, the ring system of benzene, 1903, A., i, 330; 1905, A., i, 280.

3-aminophthalimide, 1903, A., i, 700.

3-aminophthalanil, 1904, A., i, 671.

the benzene ring-system. V. Fluores-

cence, 1904, A., ii, 528. solvent and fluorescence, 1905, A., ii,

Kehrmann's explanation of change of fluorescence, 1905, A., ii, 218.

Kauffmann, Hugo, and Karl Burr, derivatives of quinol dimethyl ether, 1907, A., i, 605.

2:5:2':5'-tetramethoxystilbene, 1907,

A., i, 609.

relation of colour to constitution of acids, salts, and esters, 1907, A., ii, 215.

Kauffmann, Hugo, and Willy Franck, distribution of auxochromes in the molecule, 1906, A., i, 841.

steric hindrance, 1907, A., i, 1092.

Kauffmann, Hugo, and Imanuel Fritz. nitroquinol ether, 1907, A., i, 127. chromophores without double linkings, 1909, A., i, 95.

triphenylcarbinols, 1909, A., i, 99. nitroquinol monomethyl ether, 1910,

A., i. 376.

Kauffmann, Hugo, and Adolf Grombach. the ring system of benzene. 1905, A., i, 280.

triphenylcarbinols, 1905, A., i, 773.

fluorogen groups; a contribution to the theory of partial valencies, 1906, A., i, 283.

Kauffmann, Hugo, and Felix Kieser, triphenylcarbinols. IV., 1912, A., i,

Kauffmann, Hugo, and W. Kugel, 4nitroresorcinol, 1911, A., i, 368.

distribution of auxochromes in azocompounds, 1911, A., i, 930.

Kauffmann, Hugo, and Paul Pannwitz, derivatives of resorcinol, 1910, A.,

triphenylcarbinols. III., 1912, A., i,

Kauffmann, Hugo, and Albrecht de Pay, 4'-nitro-2:5-dimethoxybenzophenone, 1912, A., i, 365.

Kauffmann, Hugo, and Erwin de Pay, preparation of 2-nitroresorcinol, 1904, A., i, 157.

derivatives of the volatile nitroresorcinol, 1906, A., i, 168.

Kauffmann, Hugo, and Leopold Weissel, fluorescence in the terephthalic acid series, 1912, A., i, 863; ii, 1020.

Kauffmann, Max, gelatin in metabolism, 1905, A., ii, 735.

condensation of cyclopentanone with benzaldehyde, 1908, A., i, 986.

choline in pathological cerebro-spinal

fluid, 1910, A., ii, 636. the behaviour of indole in the human organism, 1911, A., ii, 420.

choline in ox-brain, 1911, A., ii, 1005.

Kauffmann, Max, and Daniel Vorländer, detection of choline; trimethylamine, 1910, A., i, 822.

Kaufler, Felix, action of aromatic amines on 1:5-dinitroanthraquinone, 1903, A., i, 427.

indanthrene, 1903, A., i, 446, 582.

displacement of osmotic equilibrium by surface tension, 1903, A., ii,

Kauffer, Felix, azo- and azomethine derivatives of 2-aminoanthraquinone, 1904, A., i, 207.

2-substitution derivatives of anthraquinone, 1904, A., i, 256.

kinetics of successive reactions, 1906, A., ii, 424.

stereochemical conceptions of polycylic compounds, 1907, A., i, 307, 794.

explanation of the effect of supertension, 1907, A., ii, 924; 1908, A., ii, 558, 1008.

[electrolysis of carboxy-acids], 1910,

A., i, 151.

Kaufler, Felix, and Henri Borel, ring formation in derivatives of diphenyl, diphenylmethane, and diphenylethane, 1907, A., i, 794.

Kaufler, Felix, and Egon Bräuer, periderivatives of naphthalene, 1907, A., i,

799.

Kaufler, Felix, and C. Herzog, electrolysis of carboxy-acids, 1909, A., i, 870.

Kaufler, Felix, and Max Imhoff, dibromoanthracene tetrabromide, 1905, A., i, 124.

Kaufler, Felix, and Ulrich Karrer, 2:7derivatives of naphthalene, 1907, A., i, 795.

Kaufler, Felix, and E. Kunz, acid haloid salts, 1909, A., i, 136, 556.

Kaufler, Felix, and Walter Suchannek, meso-derivatives of anthracene, 1907, A., i, 225.

Kaufier, Felix, and Oskar Thien, 2:6and 2:7-naphthalenedicarboxylic acids, 1907, A., i, 776.

Kaufler, Felix. See also Robert Gnehm, and Richard Lorenz.

Kaufmann, A. See Iwan Koppel.

Kaufmann, Adolf, preparation of condensation products in the pyridine, quinoline, isoquinoline, and acridine series, 1912, A., i, 516.

preparation of condensation products of cyclic ammonium bases, 1912, A.,

i. 1017.

Kaufmann, Adolf, and Alberto Albertini, cyanodihydrocyclicamines. II. Quino-

line series, 1909, A., i, 958.

Kaufmann, Adolf, Alberto Albertini, and Max Holsboer, cyanodihydrocyclic amines. I. Acridine series, 1909, A., i, 606.

Kaufmann, Adolf, Alberto Albertini, and Robert Widmer, cyanodihydrocyclic amines. III., 1911, A., i, 750.

Kaufmann, Adolf, and Herman Decker, quinoline derivatives. II. Nitration of quinoline and its mononitro-derivatives, 1906, A., i, 984. Kaufmann, Adolf, and Hans Hüssy, nitration of quinoline and its mononitro-derivatives. II., 1908, A., i, 565.

Kaufmann, Adolf, Richard Hüssy, and A. Luterbacher, acetylation of amines and phenols, 1909, A., i, 783.

Kaufmann, Adolf, and A. Luterbacher, preparation of acid anhydrides, 1909, A., i, 792.

Kaufmann, Adolf, Heinrich Peyer, and Max Kunkler, 4-quinolyl ketones,

1912, A., i, 1017.

Kaufmann, Adolf, Heinrich Peyer, and Robert Widmer, cyanocyclaminanes.
V. Synthesis of cinchonic and quininic acids, 1912, A., i, 650.

Kaufmann, Adolf, and J. M. Plá y Janini, constitution of the ψ-bases of quino-

line. II., 1911, A., i, 915.

Kaufmann, Adolf, Radoslav Radošević, Richard Hüssy, and Wulf Damje, ψ-phenanthroline, 1909, A., i, 608.

Kaufmann, Adolf, and Paul Strübin, constitution of the pseudo-ammonium bases, 1911, A., i. 321.

bases, 1911, A., i, 321.

Kaufmann, Adolf, Paul Strübin, A.
Anastachewitz, N. Popper, and L.
Sznajder, quinoline dyes, I. Apocyanines, 1911, A., i, 328.

Kaufmann, Adolf, and Louis G. Vallette, a new method of preparing cyclamine aldehydes and alcohols, 1912, A., i,

665

Kaufmann, Adolf, and Ernst Vonderwahl, quinoline dyes. II. Constitution, synthesis, and degradation of cyanides, 1912, A., i, 502.

Kaufmann, Adolf, Robert Widmer, and Alberto Albertini, cyanodihydrocyclic amines. IV. Synthesis of cinchonic acid, 1911, A., i, 749.

Kaufmann, Adolf. See also Herman Decker.

Kaufmann, Hans. See Wilhelm Schneider, and Leopold Spiegel.

Kaufmann, Ludwig, triphenylstibine sulphide, 1908, A., i, 1031.

chemical and physiological properties of triphenylstibine sulphide; behaviour of this substance in the animal body, 1910, A., ii, 984. preparation of aromatic stibines, 1912,

A., i, 328.

Kaufmann, Paul. See Wolf Müller.
Kaufmann, Rudolf, influence of protoplasmic poisons on tryptic digestion, 1903, A., ii, 743.

Kaufmann, William Perot. See William Robert Lang.

Kauko, Yrjö. See Gerhard Just.

Kaul. H., claysand loams near Niirnberg. 1903, A., ii, 30.

Kaumheimer, L. See Jussuf Ibrahim.

Kausch, Oscar, new methods of producing ozone by means of electricity, 1905, A., ii, 698, 811.

Kautzsch, J. See Johannes D'Ans. Kautzsch, Karl. See Emil Abderhalden. Emil Fischer, and Hans Stobbe.

Kawakita, I., behaviour of guanidine to

plants, 1904, A., ii, 762.

Kawamura, Shin-ichi, coagulation of colloidal aluminium hydroxide by

electrolytes, 1908, A., ii, 949.

Kawashima, K., the behaviour of the anti-substances of the blood-serum towards solvents and other reagents, 1910, A., ii, 140,

the cortex of the suprarenal body,

1910, A., ii, 1088.

Kawashima, K. See also Theodor

Brugsch.

Kawohl, Paul. See Emil Abderhalden. Kay, Francis William, resolution of a-methylisoserine into its optically

active components, 1908, A., i, 772. synthesis of polypeptides. XXVI. (II.) Derivatives of \(\beta\)-aminobutyric acid and of a-methylisoserine, 1908, A., i, 773.

the conversion of d-a-methylisoserine into d-a-methylglyceric acid. 1909.

T., 560; P., 90.

Kay, Francis William, and William Henry Perkin, jun., experiments on the synthesis of the terpenes. Part V. Derivatives of v-cymene, 1905, T., 1066; P., 216.

experiments on the synthesis of the terpenes. Part VIII. Synthesis of the optically active modification of Δ^3 -p-menthenol (8) and $\Delta^{3:8(9)}$ -p-menthadiene, 1906, T., 839; P., 72.

experiments on the synthesis of the Part IX. The preparaterpenes. tion of cyclopentanone-4-carboxylic acid and of cyclohexanone-4-carloxylic acid (8-ketohexahydrobenzoic acid), 1906, T., 1640; P., 269.

experiments on the synthesis of the terpenes. Part I. (continued). Direct synthesis of terpin from ethyl cyclohexanone-4-carboxylate, 1907, T., 372.

Kay, Francis William.

Pictet. Kay, Sidney Alexander. See James Walker.

Kaya, Riukichi, and Ernest Henry Starling, asphyxia in the spinal animal, 1910, A., ii, 50.

Kava, Riukichi, See also Julius Morgenroth, and Robert Henry Aders Plimmer.

Kaye, Frederick. See Philip Schidrowitz.

Kaye, George William Clarkson, John Allen Harker, and T. H. Laby. Kaye, John. See Thomas Stewart Patter-

Kayser, E., lactic acid fermentation, 1905, A., ii, 750.

influence of nitrates on alcoholic ferments, 1910, A., ii, 1098.

the juice of beer yeast, 1911, A., ii, 421, 640,

the greasiness ("graisse") of ciders,

1911, A., ii, 648. influence of humates on mieroorganisms, 1911, A., ii, 759.

influence of uranium salts on alcoholic ferments, 1912, A., ii, 860.

influence of nitrogenous matter on the production of ethyl acetate in alcoholic fermentation, 1912, A., ii, 861.

Kayser, E., and A. Demolon, Charentes brandies, 1907, A., ii, 714.

formation of acetaldehyde in alcoholic fermentation, 1908, A., i, 317.

influence of aeration on the formation of volatile products in alcoholic fermentation, 1909, A., ii, 170.

life of yeast after fermentation, 1909; A., ii, 823.

Kayser, E., and H. Marchand, influence of manganese salts on alcoholic fermentation, 1907, A., ii, 288, 383, 903.

Kayser, Ernst. See Julius von Braun. Kayser, Gustav. See Arthur Kötz.

Kayser, Heinrich, normals from the arc spectrum of iron in the international system, 1911, A., ii, 166.

spectroscopy of oxygen, 1911, A., ii, 237, 785.

Kayser, Robert, the acids occurring in raspberry juice, 1906, A., ii, 387.

Kaysser, August, estimation of manganese in steel by the Volhard-Wolff method, 1911, A., ii, 70.

assay of bog ores, 1911, A., ii, 229. Kazakoff, N. See Peter J. Schestakoff. Kazanecky, P., zinc peroxide, 1911, A., ii, 282.

Kazay, Endre von, displacement of absorption spectra in different liquids, 1907, A., ii, 919.

importance of refractometric investigations in pharmacy, 1909, A., ii, 277.

influence of water on the rotatory power of camphor solutions, 1911, A., i, 892.

See also Amé

Kaznelson, Helene, sham feeding in men, 1907, A., ii, 633.

Keane, Charles Alexander, and Harry Burrows, the autolysator, an apparatus for the automatic estimation of carbon dioxide, 1908, A., ii, 735.

Keane, Charles Alexander, and Percival Narracott, experiments on the separation of mixtures of some aliphatic acids by means of benzene, 1909, A., ii, 947.

Keane, Charles Alexander, and William Walter Scott Nicholls, the condensation of salicylamide with aryl aldehydes, 1907, T., 264; P., 36.

Keane, Charles Alexander. See also William Lyle Austin, Harry Burrows, and Arthur Gordon Francis.

Kedesdy, Erich, gall-iron inks, 1908, A., ii. 642.

Kedesdy, Erich. See also Friedrich Willy Hinrichsen.

Keding, Willy. See Hans Stobbe.

Keeble, Frederick, and Edward Frankland Armstrong, distribution of oxydases in plants and their rôle in the formation of pigments, 1912, A., ii, 673.

Keegan, P. Q., plant chemistry, 1911, A., ii, 917; 1912, A., ii, 1085.

Keen, William Herbert, volumetric estimation of zinc, 1908, A., ii, 431.

Keesing, A., plait point temperatures of the system water-phenol, 1909, A., ii, 117.

Keesom, W. H., spectro-photometric investigation of the opalescence of a simple substance in the neighbourhood of the critical condition, 1911, A., ii, 787.

the second virial coefficient for diatomic gases, 1912, A., ii, 1157.

Keetman, Bruno, ionium, 1909, A., ii, 852.

Keetman, Bruno. See also Willy Marck-

Kehren, Carl. See Emil Erlenmeyer,

Kehrmann, [Johann August Ludwig] Friedrich, fluorescence, 1904, A., ii, 797.

azoxonium compounds. II. and III., 1905, A., i, 930, 949.

coloured and colourless di-imines,

1906, A., i, 46. [preparation of naphthaphenosafranine derivatives], 1907, A., i, 1087.

constitution and colour, 1908, A., i, 699, 993.

history of the discovery of the rules of the so-called "steric hindrance," 1909, A., ii, 130. Kehrmann, [Johann August Ludwig] Friedrich, the two forms of o-benzoquinone, 1911, A., i, 883.

Kehrmann, Friedrich, and Robert Brunel, azonium compounds and azines from 7-hydroxy-\$\text{-naphthaquinone}, 1908, A., i, 579.

Kehrmann, Friedrich, Emil Bühler, Max Mattisson, and Walter Urech, oxidation products of o-aminophenols, 1906, A., i, 210.

Kehrmann, Friedrich, and Otto Dengler, carboxonium dyes. I. The chromogen of fluorescein and the simplest ros-

amine, 1908, A., i, 1002.

Kehrmann, Friedrich, Olto Dengler, Samuel Mansfield Jones, Karl Scheunert, Robert Silzer, and Xavier Vogt, xanthen and triphenylmethane, 1910, A., i, 406.

Kehrmann, Friedrich, Otto Dengler, and Karl Scheunert, carboxonium dyes. II. Strongly basic, neutral, salt-forming, nitrogen-free oxonium compounds and the constitution of fluorescein, 1909, A., i, 249.

Kehrmann, Friedrich, and Alfred Duttenhöfer, aromatic sulphine bases, 1906, A., i, 83, 949.

dimethylpyrone methiodide, 1906, A., i, 447.

methylene-azure, 1906, A., i, 460.

Kehrmann, Friedrich, and Ernst F. Engelke, derivatives of 8-amino-\(\beta\)-naphthol, 1909, A., i, 150.

Kehrmann, Friedrich, and Bernhard Flürscheim, complex inorganic acids.

IX., 1904, A., ii, 411.

Kehrmann, Friedrich, and Henri de Gottrau, action of hydroxylamine hydrochloride on naphthaphenoxazone, 1905, A., i, 670.

Kehrmann, Friedrich, Henri de Gottrau, and Gottlieb Leemann, azoxonium compounds. V. Azoxonium compounds derived from β-naphthaquinone, 1907, A., i, 554.
 Kehrmann. Friedrich, and Werner

Kehrmann, Friedrich, and Werner P. Gresly, the azoxine analogue of aposafranine, 1909, A., i,

Kehrmann, Friedrich, and M. Günther, ethers of hydroxyquinolbenzein; [2:3:7-trihydroxy-9-phenylfluorone], 1912, A., i, 1012.

Kehrmann, Friedrich, and Robert Kaiser, a new dinitrodiphenylamine, 1906, A., i, 12.

Kehrmann, Friedrich, and Joseph Knop, carboxonium compounds, 1912, A., i, 43. Kehrmann, Friedrich, and L. Löwy, 5aminophenazoxonium salts, 1911, A., i, 1033.

the simplest thiopyronine, 1912, A., i,

Kehrmann, Friedrich, and A. Masslenikoff, third isomeride of aposafranine, 1911, A., i, 927.

action of acetic anhydride on 1aminoaposafranone, 1912, A., i,

1033.

Kehrmann, Friedrich, and St. Micewicz. cause of the blue colour produced by nitrous acid and other oxidising agents in sulphuric acid solutions of diphenylamine, 1912, A., i, 1020.

Kehrmann, Friedrich, Konstantin Modebadzé, and Victor Vesely, constitution of thiazine and oxazine dyes, 1906,

A., i, 306.

Kehrmann, Friedrich, and Wladislaus Poplawski, behaviour of hydroxy-pphenylenediamine and its unsymmetrical dialkyl derivatives in acetic acid solution on oxidation with air, 1909, A., i, 516.

Kehrmann, Friedrich, and Hermann Prager, oxidation of diaminophenols,

1906, A., i, 967. action of hydroxylamine on isoro-

sindone, 1907, A., i, 447.

Kehrmann, Friedrich, and José Riera y Punti, isomeride of aposafranine and the third isomeride of phenosafranine, 1911, A., i, 926.

synthesis of naphthaphenazine derivatives, 1911, A., i, 927.

Kehrmann, Friedrich, and Adolf Saager, nitro-derivatives of phenoxazine and the analogue of Lauth's violet in the oxazine series, 1903, A., i,

Kehrmann, Friedrich, Charles Sabo, and Werner P. Gresly, a new type of quinonoid grouping in azonium compounds, 1907, A., i, 563.

Kehrmann, Friedrich, and Georges A. Sava, aromatic sulphine bases. III.,

1912, A., i, 967.

Kehrmann, Friedrich, and Robert Schwarzenbach, prasindones, 1908, A., i, 297.

Kehrmann, Friedrich, and J. Steinberg, 3:5-diaminophenazthionium derivatives, 1911, A., i, 1034.

Kehrmann, Friedrich, and (Mlle.) Aimée Stépanoff, derivatives of 5-phenylacridine, 1909, A., i, 54.

Kehrmann, Friedrich, and Karl Leo Stern, constitution of rosindone and isorosindone, 1908, A., i, 220.

Kehrmann, Friedrich, and Fritz Wentzel. tautomerism in the triphenylmethane series, 1907, A., i, 601.

Kehrmann, Friedrich, and Albert Winkelmann, azoxonium compounds. IV. Phenanthraquinoneazoxine derivatives, 1907, A., i, 345.

See Karl Auwers. Keil, Gustav. Keil, Rudolph. See August Klages. Keim, Paul. See Hans von Liebig.

Keimatsu, S., soya bean oil, 1911, A., i, 766.

Keiper, Willy. See Karl Elbs.

Keiser, Edward Harrison, and S. W. Forder, estimation of free lime and on so-called "dead burnt" lime, 1904, A., ii, 210.

Keiser, Edward Harrison, and J. J. Kessler, nitrile of fumaric acid, 1911,

A., i, 949.

Keiser, Edward Harrison, and Sherman Leavitt, preparation and composition of the hydrogen carbonates of calcium and barium, 1908, A., ii, 1037.

Keiser, Edward Harrison, and LeRoy McMaster. detection of ozone, nitrogen peroxide, and hydrogen peroxide in gas mixtures, 1908, A.,

composition of the hydrogen carbonates of calcium and barium, 1908, A., ii,

action of magnesium on the vapours of organic compounds, 1910, A., i, 213.

synthesis of fumaric and maleic acids from the acetylene di-iodides, 1911, A., i, 949.

Keiser, Franz. See Gustav Keppeler. Keiserman, Sender, hydration and constitution of Portland cement, 1910, A., ii, 848.

Kelber, Ludwig Christian, action of carbon disulphide and potassium hydroxide on acetophenone, 1910, A., i, 390.

Kelber, Ludwig Christian, and Anton Schwarz, action of carbon disulphide and potassium hydroxide on p-tolyl methyl ketone and a-thienyl

methyl ketone, 1911, A., i, 740. constitution of the desaurins, 1912,

A., i, 206.

colloidal palladium; partial and total hydrogenation of phenylacetylene, tolane, and diphenyldiacetylene, 1912, A., i, 617.

ketoaldehydes; mercaptals of benzoylthienoylacetaldehyde, 1912,

A., i, 866.

colloidal platinum, 1912, A., ii,

Kelber, Ludwig Christian. See also Hermann Apitzsch.

Kelhofer, W., reaction for fruit tannin and other tannins, 1904, A., ii, 102. gravimetric estimation of sugar by means of Fehling's solution, 1906, A., ii, 311; 1907, A., ii, 186.

distribution of sugar, acid, and tannin in apples, 1909, A., ii, 1047.

Kellenberger, F., and Karl Kraft, specific heat of some cerium and lanthanum compounds, 1903, A., ii, 213.

Keller, Christian, supposed displacement of lines in the spark spectrum, 1907, A., ii, 2.

Keller, Franz. See Carl Friedheim.
Keller, Hans. See Heinrich Goldschmidt.

Keller, Hugo. See Wilhelm Schlenk.
Keller, Harry Frederick, occurrence of alum as an efflorescence on bricks, 1903, A., ii, 296.

a new variety of chrysocolla from Chile, 1911, A., ii, 1104.

Keller, K. See Alfred Thiel.

Keller, O. See Josef Tambor, and M. Wintgen.

Keller, Oscar, damascenine, 1904, A., i, 768.

alkaloids of the species of Nigella, 1908, A., i, 283.

the hellebore group. I., 1910, A., ii,

the hellebore group. II. New delphinium bases, 1910, A., ii, 888.

alkaloids of ipecacuanha root, 1911, A., i, 1014.

Kellerhoff, Ernst. See Erich Müller. Kelley, George Leslie. See Charles Loring Jackson, and Theodore William Richards.

Kelley, Walter Pearson. See Henry Chalmers Biddle, and Joseph Hoeing Kastle.

Kellner, Erich. See Josef Houben.

Kellner, J., theory of hydrolysis of fats and oils, 1909, A., i, 357, 548, 759.

Kellner, Oskar [Johann], importance of asparagine and lactic acid for the feeding of non-carnivorous animals, 1906, A., ii, 193.

the action of non-protein nitrogenous substances on nitrogenous metabolism in animals, 1906, A., ii, 690; 1907, A., ii, 108.

the nutritive value of asparagine, 1907, A., ii, 794.

nutritive value of non-proteins in hay, 1908, A., ii, 220.

examination of calcium phosphate food, 1909, A., ii, 617.

Kellner, Oskar [Johann], manurial action of nitrates and nitrites, 1910, A., ii, 340

Kellner, Oskar, P. Eisenkolbe, Rudolf Flebbe, and R. Neumann, effect of non-protein nitrogen compounds on the protein metabolism in ruminants, 1910, A., ii, 424.

Kellner, Oskar, Justus Volhard, and Franz Honcamp, composition and digestibility of dried potatoes, 1903, A., ii, 235.

digestibility of beet sections dried by different methods, 1904, A., ii, 437.

Kellogg, David R., effect of neutral salts on hydrolysis by water, 1909, A., i, 203, 627.

Kellogg, James W. See Burt Laws Hartwell.

Kelly, Agnes, occurrence of ethereal sulphates, taurine, and glycine in lower animals, 1904, A., ii, 427.

Kelly, Robert Ernest. See Benjamin Moore.

Kelvin, [William Thomson] (Lord), an attempt to explain the radioactivity

of radium, 1907, A., ii, 216.

Kemmerer, George, atomic weight of palladium, 1908, A., ii, 1046.

the electrolytic estimation of zinc in ores, 1911, A., ii, 335.

Kemmerich, W. See Arthur Hantzsch.

Kemmerich, W. See Arthur Hantzsch. Kemp, George Theophilus, effect of altitude on the blood, 1904, A., ii, 183.

Kemp, George Theophilus, and L. D. Hall, formation of fat in animals fattened for slaughter, 1907, A., ii, 187.

Kemp, George Theophilus, and E. R. Hayhurst, survival respiration of muscle, 1906, A., ii, 178.

Kemp, James Furman, and C. G. Gunther, [garnet from Idaho], 1909, A., ii, 589.

Kemp, Jakob G. See Jakob Kunz. Kempe, Adolph. See Arthur Kötz.

Kempe, B., preparation of colloidal silicic acid, 1907, A., ii, 343.

Kempe, Martin. See Emil Abderhalden. Kempe, Wilhelm. See Otto Wallach.

 Kempf, J. See Theodor Zincke.
 Kempf, Richard, oxidation of ammonia by alkali persulphates in alkaline solution, 1906, A., ii, 19.

oxidations with silver peroxide. I. Oxidation of oxalic acid, 1906, A.,

oxidations with silver peroxide. II. Formation of nitric acid from ammonium persulphate, 1906, Δ., ii, 25. Kempf, Richard, shaking apparatus fitted with a gas delivery tube and a temperature regulator, 1906, A., ii,

oxidations with silver peroxide. III. Oxidation of p-benzoquinone, 1907,

A., i. 63.

apparatus for sublimation in a vacuum. 1907, A., ii, 71.

apparatus for demonstrating the synthesis of water, 1908, A., ii, 480.

practical studies in vacuum sublimation, 1908, A., ii, 929.

electrolytic oxidation of p-benzoquinone, 1911, A., i, 464.

automatic extraction of aqueous liquids by organic solvents of lower density, 1911, A., ii, 106.

weighing in analytical operations,

1912, A., ii, 1207.

Kempf, Richard, and Eduard Ochler, reaction between ammonium persulphate and sodium peroxide, 1908, A., ii, 764.

Kempf, Richard. See also Friedrich Willy Hinrichsen, and Franz Sachs. Kempner, Felicja. See Rudolf Höber.

Kendall, Arthur I., bacillus infantilis,

1909, A., ii, 422

Kendall, Arthur I., and Chester J. Farmer, bacterial metabolism. I., II., III., V., VI., VII., 1912, A., ii, 793, 860, 1199.

Kendall, Arthur I., Chester J. Farmer, Edward P. Bagg, jun., and Alexander A. Day, bacterial metabolism. IV., 1912, A., ii, 860.

Kendall, Arthur I. See also Christian

Archibald Herter.

Kendall, E. C., estimation of copper; modification of the iodide method, 1912, A., ii, 93.

new method for the estimation of the reducing sugars, 1912, A., ii,

estimation of copper, 1912, A., ii, 604.

estimation of iodine in presence of other halogens and organic matter, 1912, A., ii, 864.

Kendall, E. C., and Henry Clapp Sherman, detection and identification of certain reducing sugars by condensation with p-bromobenzylhydrazide, 1908, A., ii, 902.

amylases. II. Action of pancreatic amylase, 1910, A., i, 799.

Kendall, E. C. See also Henry Clapp Sherman.

Kendall, James, the ionic solubility product, 1911, A., ii, 474.

Kendall, James, the velocity of the hydrogen ion, and a general dissociation formula for acids, 1912, T., 1275; P., 158.

the problem of strong electrolytes: preliminary note, 1912, P., 255.

solubility of calcium carbonate in water, 1912, A., ii, 643.

Kennaway, Ernest Laurence, the effect of muscular work on the excretion of endogenous purines, 1909, A., ii,

estimation of purine bases in urine, 1910, A., ii, 83.

purine metabolism

in hibernating animals, 1910, A., ii, 728.

Kennaway, Ernest Laurence, and Marcus Seymour Pembrey, the effects of section of the spinal cord on temperature and metabolism, 1912, A., ii,

Kennaway, Ernest Laurence. See also Edward Provan Cathcart,

Albrecht Kossel.

Kennedy, W. T., active deposit from actinium in uniform electric fields, 1909, A., ii, 955.

the number of 8-particles expelled concurrently with each a-particle emitted by polonium, 1912, A., ii, 719.

Kennedy, W. T. See also John Cunningham McLennan.

Kenner, James, formation of seven- and eight-membered rings from 2:2'-ditolyl, 1912, P., 187.

diphenyl-2:3:2':3'-tetracarboxylic acid; preliminary note, 1912, P.,

Kenner, James, and (Miss) Emily Gertrude Turner, formation of sixand seven-membered rings from derivatives of 2:2'-ditolyl, 1911, T., 2101 : P., 262.

a synthesis of phenanthrene, 1911, P.,

the reactions of dibenzocycloheptadienone; preliminary note, 1912, P., 277.

Kenner, James, and Ernest Witham, the formation of tolane derivatives from p-chlorotoluene and 3:4-dichlorotoluene, 1910, T., 1960; P., 219.

Kenner, James. See also John Theodore Hewitt, and Emil Knoevenagel.

Kennon, William Lee. See Harmon

Northrop Morse.

Kenrick, Edgar B., and Frank Boteler Kenrick, polarimetric estimation of tartaric acid in commercial products, 1903, A., ii, 112.

Kenrick, Frank Boteler, a mechanical model to illustrate the gas laws, 1904, A., ii, 554.

hydrates and acid salts of ferrous sulphate, 1909, A., ii, 147.

lantern experiments on surface tension, 1912, A., ii, 840.

lantern experiments on reactions in non-homogeneous systems, 1912, A., ii, 841.

Kenrick, Frank Boteler. See also Edgar B. Kenrick, and William Lash Miller.

Kent, Albert Frank Stanley, influence of salts on the action of rennet on milk, 1912, A., ii, 184.

Kenyon, Joseph. See Robert Howson Pickard.

Kepinoff, Leon, the influence of the blood-corpuscle lipoids on the blood formation, 1911, A., ii, 125.

the influence of iodine on autolysis,

1912, A., ii, 69.

Kepinoff, Leon. See also A. Braun-

Keppeler, Gustav, estimation of acetone by the iodoform process, 1905, A., ii, 360

Keppeler, Gustav, and Johannes D'Ans, thermal dissociation of the anhydrous sulphates of iron, 1908, A., ii, 289.

Keppeler, Gustav, Johannes D'Ans, Ivar Sundell, and Frank Keiser, the iron oxide contact process, 1908, A., ii, 482.

Keppeler, Gustav, and Albert Spangenberg, protective action of colloids on clay suspensions, 1908, A., ii, 60.

Kerb, Johannes, preparation of mercury compounds of sulphamidobenzoic acid, 1912, A., i, 452.

preparation of readily soluble compounds of oxymercurisalicyl anhydride (salicylic acid mercury oxides), 1912, A., i, 932.

Kerb, Johannes, and Paul Lazarus, the degradation of monosodium urate under the influence of radium emanation-D, 1912, A., i, 662.

Kerb, Johannes. See also Carl Neuberg. Kerb, Joh. Wolfgang. See Georg Bredig. Kerbosch, Max, destruction of organic

substances, 1908, A., ii, 981. formation and distribution of certain alkaloids in Papaver somniferum, 1910, A., ii, 1101.

Kerbosch, Max. See also Leopold van Itallie.

Kerényi, E. See Josef Herzig. Kereszty, Georg von. See Franz Tangl. Kerkovius, W. See Hans Rupe. Kern, Edward F. See Ching Yu Wen.

Kernbaum, Miroslaw, chemical action of the penetrating radium rays on water, 1909, A., ii, 364, 714.

decomposition of water by ultra-violet

rays, 1909, A., ii, 717.

decomposition of water vapour by the silent electrical discharge, 1910, A., ii. 818.

decomposition of water by metals, 1911, A., ii, 716.

decomposition of water by solar radiations, 1912, A., ii, 342.

Kernbaum, Miroslaw. See also Heinrich Greinacher, and Charles Eugène Guye.

Giuseppe, nitrotolylglycollic [nitrotolyloxyacetic] acids, A., i, 286.

chemical analysis of Vesuvian ashes of April 1906; 1907, A., ii, 365.

influence of potassium persulphate on catalytie decomposition of hydrogen peroxide by means of colloidal iridium solutions, 1909, A., ii, 880.

solubility of barium sulphate in ammonium acetate solutions, 1909, A.,

ii, 940.

the presence of radioactive elements in some incrustations from the fumaroles of Vesuvius, 1910, A., ii, 1026.

Kernot, Giuseppe, and F. Arena, action of colloidal iridium solutions on hydrogen peroxide, 1909, A., ii, 880. action of colloidal rhodium solutions

on hydrogen peroxide, 1909, A., ii, 881.

Kernot, Giuseppe, E. D'Agostino, and M. Pellegrino, influences of solubility, 1908, A., ii, 568.

Kernot, Giuseppe, and F. de Simone Niquesa, absorption of hydrogen by colloidal platinum and palladium solutions, 1909, A., ii, 878.

Kernot, Giuseppe, and E. Petrone, con-densation of benzyl chloride with the aminobenzoic acids, 1905, A., i, 283.

Kernot, Giuseppe, and Francesco Pietrafesa, rate of reaction between potassium dichromate and iodide in the presence of hydrochloric acid and of catalysts, 1911, A., ii, 383.

Kernot, Giuseppe, and Umberto Pomilio, cryoscopic and viscometric behaviour of some solutions of quinoline, 1912,

A., ii, 429.

influence of non-electrolytes on the solubility of lead chloride, 1912, A., ii, 452.

Kerp, [Karl Gerhard] Wilhelm, organically combined sulphurous acid in foods, 1903, A., ii, 326.

Kerp, [Karl Gerhard] Wilhelm, combined sulphurous acids, 1904, A., i, 713; ii, 638.

sulphurous acid in wine. I. General,

1904, A., ii, 636.

sulphurous acid in wine. II. Aldehyde-sulphurous acid in wine, 1904, A., ii, 636.

Kerp, Wilhelm, and Emil Baur, combined sulphurous acids. II., 1907,

A., i, 1010.

combined sulphurous acids. III.

Dextrose-sulphurous acid, 1907, A.,
i, 1012.

electrolytic dissociation constant of sulphurous acid, 1907, A., ii, 925.

Kerp, Wilhelm, and Paul Wöhler, combined sulphurous acids. IV. and V., 1909, A., i, 806.

. Kerschbaum, Fritz. See Max Le Blanc, and Robert Kremann.

Kersten, Max. See Oscar Doebner.

Kertess, Ernst. See Franz Knoop. Kesseler, Hans. See Georg Schroeter.

Kesseler, Willy. See Franz Kunckell. Kesselkaul, Ludwig. See Josef Houben.

Kesselring. See Rudolf Nietzki. Kessler, Alex. See Reinhold vo

Walther.

Kessler, Heinrich. See Ernst Deussen.
Kessler, Henri, preparation of the anhydrides of fatty acids, 1903, A., i, 309.

Kessler, Johannes. See Oscar Hinsberg,

and August Klages.
Kessler, J. J. See Edward Harrison
Keiser.

Kessler, Sidonius, and Hans Rupe, reduction of semicarbazones, 1912, A., i, 219.

Kessler, Sidonius, See also Hans Rupe.

Kester, Frederik Edward, Joule-Thomson effect in carbon dioxide, 1905, A., ii, 303.

Kestner, Eugen. See Pavel Iw. Petrenko-Kritschenko.

Ketcham, C. S., J. T. King, jun., and Donald Russell Hooker, the effect of carbon dioxide on the isolated heart, 1912, A., ii, 1191.

Ketner, Cornelius Hendrik, estimation of phosphoric acid in basic slags by Grete's method, 1908, A., ii, 64. solubility of sodium carbonate, 1911,

A., ii, 603.

Ketron, L. W. See J. M. Wolfsohn.

Kette, Alfred, new triangle for crucibles, 1906, A., ii, 14.

Kettembeil, Wilhelm, amalgams, 1904, A., ii, 172.

Kettembeil, Wilhelm, and C. F. Carrier, jun., electrolysis of alkali chlorides, using iron plates over which mercury flows, 1904, A., ii, 729.

Kettembeil, Wilhelm. See also Alfred

Coehn.

Kettler, Engelbert, estimation of calcium, 1904, A., ii, 517, 780.

an improved Geissler apparatus for the estimation of carbon dioxide, 1904, A., ii, 779.

Keutner, Joseph, presence and distribution of nitrogen-fixing bacteria in the

sea, 1905, A., ii, 189.

Keyes, Frederick G., improved method of collecting gases from the mercury pump, 1910, A., ii, 66.

dissociation pressures of sodium and potassium hydrides, 1912, A., ii,

627.

Keyes, Frederick G. See also Gilbert Newton Lewis.

Kholodny, P. I., colloidal selenium, 1907, A., ii, 165.

Khotinsky, Eugen, pyrrole, 1909, A., i, 602.

a-siliconaphthoic acid, 1909, A., i,

Khotinsky, Eugen, and W. Jacopson-Jacopmann, 4-amino-3-methoxybenzaldehyde, 1909, A., i, 804.

Khotinsky, Eugen, and M. Melamed, action of organo-magnesium compounds on borie esters, 1909, A., i, 864.

Khotinsky, Eugen, and Raphael Patzewitch, condensation of aromatic carbinols with pyrrole, 1909, A., i, 830.

Khotinsky, Eugen, and Amé Pictet, bromo-derivatives of pyrrole-2-carboxylic acid and 1-methylpyrrole-2-carboxylic acid, 1904, A., i, 772.

Khotinsky, Eugen, and Basile Seregenkoff, action of Grignard reagents on ethyl orthosilicate, 1908, A., i, 1032.

Khotinsky, Eugen, and Max Soloweitschik, azopyrroles and their reduction, 1909, A., i, 616.

Khotinsky, Eugen. See also Amé Pictet.

Khouri, Joseph, presence of a glucoside, which is decomposed by emulsin, in the leaves and twigs of Eremostachys laciniata, 1910, A., ii, 151.

presence of stachyose (manneotetrose) and of a glucoside hydrolysed by emulsin in the roots of *Eremostachys* laciniata, 1910, A., ii, 886.

Kickton, A., estimation of sugar in coloured and decolorised solutions and the estimation of levulose and dextrose, 1906, A., ii, 255. Kickton, A., and W. Behncke, fluorine in wines, 1910, A., ii, 889.

Kida, Z., influence of rice bran on the manurial value of phosphoric acid contained in oil cakes, 1912, A., ii, 596.

Kiefer, Albert. See Fritz Fichter.

Kielbasinski, St. See Paul Friedländer. Kien, Peter, flame spectrum of cupric chloride, 1908, A., ii, 1001.

Kienitz, Gustav Adolf. See Walther

Borsche.

Kiesel, Alexander, changes in the nitrogenous constituents of green plants in the absence of light, 1906, A., ii, 882.

Staněk's method for the estimation of

choline, 1907, A., ii, 994.

fermentative cleavage of ammonia in higher plants, 1909, A., ii, 694; 1910, A., ii, 439.

autolytic decomposition of arginine in

plants, 1909, A., ii, 694.

behaviour of asparagine in the autolysis of plants, 1909, A., ii, 694. the behaviour of nuclein bases in the

dark in plants, 1910, A., ii, 800. enzymic degradation of arginine in

plants, 1911, A., ii, 1124. action of different salts on the development of Aspergillus niger, 1912, A., ii, 861.

Kiesel, Karl, acetone in normal horse's urine, 1903, A., ii, 670.

the specificity of certain digestive ferments, 1905, A., ii, 540.

Kieser, August Jean, preparation of crystalline silicon, 1909, A., ii, 41. Kieser, August Jean. See also Wilhelm

Manchot.

Kieser, A. M. See Alfred Thiel. Kieser, Felix. See Hugo Kauffmann. Kiesewetter, Karl. See Emil Abder-

halden.

Walther, condensation of Kiessling, ethyl acetoacetate and phenylcarbamide, 1906, A., i, 946.

Kietreiber, Franz, estimation of man-ganese in cast iron (ferromanganese, spiegeleisen), 1906, A., ii, 494.

analysis of tin alloys, 1911, A., ii,

Kijner, Nicolai M., transformations of amides of a-haloid acids under the action of bromine and alkali hydroxide, 1905, A., i, 332.

cyclobutanone, 1905, A., i, 355; 1907,

A., i, 935.

aminocyclopropane, 1905, A., i, 517. cyclobutyldimethylcarbinol and its transformations, 1905, A., i, 772.

Kijner, Nicolai M., preparation of ethyl tetramethylene-1:1-dicarboxylate. 1905, A., i, 786.

menthazine, 1908, A., i, 91.

conversion of the azine of 1-methylcyclohexon-3-one into 1-methylcyclohexyl-3-hydrazine, 1908, A., i,

transformations of cyclobutyldimethylcarbinol, 1908, A., i, 530; 1911, A., i, 42.

hydrogenation of cyclobutanecarboxylic acid, 1908, A., i, 532.

isomeric changes in the transformation of cyclobutyldimethylcarbinol, 1908, A., i, 864.

bromination of cyclopropanecarboxylic

acid, 1909, A., i, 694.

benzoyl iodide and its relation towards simple ethers, 1909, A., i, 715. diphenylcyclobutylcarbinol and

transformations, 1911, A., i, 43. production of \$B-benzopinacolin, 1911,

A., i, 44.

action of hydrazine hydrate on thujone, 1911, A., i, 71.

action of the chloro-anhydride of cyclopropanecarboxylic acid on benzene in presence of aluminium chloride. 1911, A., i, 989.

transformations of thujane, 1911, A., i, 996.

catalytic decomposition of alkylidenehydrazines. II., 1911, A., i, 1027.

decomposition of alkylidenehydrazines: conversion of ionone and ψ-ionone into the corresponding hydrocarbons, $C_{13}H_{22}$, 1912, A., i, 119.

decomposition of alkylidenehydrazines; conversion of furfuraldehyde into 2-methylfuran, 1912, A., i, 204.

decomposition of alkylidenehydrazines, 1912, A., i, 212.

decomposition of pyrazoline bases as a means of obtaining derivatives of cyclopropane, 1912, A., i, 245,

Kijner, Nicolai M., and W. Amosoff, cyclobutyldiethylcarbinol and its compounds, 1905, A., i, 772.

Kijner, Nicolai M., W. Amosoff, and S. Voznesensky, transformations of cyclobutyldiethylcarbinol, 1911, A., i,

Kijner, Nicolai M., and S. Beloff, action of hydrazine hydrate on cyclohexanone, 1911, A., i, 678.

Kijner, Nicolai M., and W. Klawikordoff, transformations of cyclopropyldimethylcarbinol, 1911, A., i, 635.

Kijner, Nicolai M., and A. Proskurjakoff, catalytic decomposition of alkylidenehydrazines as a method of obtaining hydrocarbons, 1911, A., i, 679.

Kijner, Nicolai M., and A. Zavadovsky, decomposition of alkylidenehydrazines; conversion of pulegone into a bicyclic hydrocarbon, C₁₀H₁₈, 1911, A., i, 1028. Kikina, (Mlle.) Sinaida. See Michael

I. Konowaloff.

Kikkoji, T., an enzyme in Cortinellus edodes which splits nucleic acid,

1907, A., i, 456.

the formation of dextrorotatory lactic acid in the autolysis of animal organs. II., 1907, A., ii, 898.

nucleic acid from the human placenta,

1907, A., ii, 898.

casein and paracasein, 1909, A., i, 685.

autolysis, 1909, A., ii, 1035.

the degradation of the naphthalene ring in the animal body, 1911,

A., ii, 909. Kikkoji, T., and Risaburo Iguchi, purine bases from the human placenta,

1907, A., ii, 799.

Kikkoji, T., and Carl Neuberg, be-haviour of aminoacetaldehyde in the animal organism, 1909, A., ii,

employment of hydrogen peroxide in investigations on oxydases, 1909,

A., ii, 1060. Kilchling, Karl. See Johann Georg Koenigsberger.

See Eberhard

Kilian, Herman F. C.

Rimbach. Kiliani, Heinrich, digitonin, 1905, A., i,

digitalonic acid, 1905, A., i, 859.

digitoxose, 1906, A., i, 66. digitoxin, 1907, A., i, 715.

saccharinic acids, 1908, A., i, 128, 246. C₅ sugars from meta- and para-saccharin, 1908, A., i, 135.

digitoxonic acid, 1908, A., i, 245.

formulæ of polysaccharides, 1908,

A., i, 320.

products of the reaction between lactose and calcium hydroxide, 1908, A., i, 715.

action of thiosulphate on permanganate in alkaline solution, 1908, A., ii,

digitoxonic and digitalonic acids, 1909, A., i, 552.

action of calcium hydroxide on lactose, 1909, A., i, 882.

saccharinic acids, 1911, A., i, 111. milk sap of Antiaris toxicaria, 1911, A., i, 138.

Kiliani, Heinrich, digitonin, digitogenic acid, and their oxidation products. 1911, A., i, 139.

substitute for separating funnels, 1912,

A., ii, 245.

Kiliani, Heinrich, and Fritz Eisenlohr, products of the reaction between lactose and calcium hydroxide, 1909, A., i, 553.

Kiliani, Heinrich, and Fr. Herold, dihydroxypropanetricarboxylic αγ-dihydroxyglutaric acids, 1905, A., i,

Kiliani. Heinrich, and Friedrich Koehler, action of calcium hydroxide on l-arabinose, 1904, A., i, 475.

Kiliani, Heinrich, and Peter Loeffler, decomposition of lactose by calcium oxide; the constitution of parasaccharin, 1904, A., i, 373.

oxidation products of parasaccharin,

1904, A., i, 975.

constitution of metasaccharinic acid, 1905, A., i, 737.

dihydroxyglutaric acids, 1905, A., i,

Kiliani, Heinrich, Peter Loeffler, and

Otto Matthes, derivatives of saccharin, 1907, A., i, 676. Kiliani, Heinrich, and Otto Matthes,

ay-dihydroxyglutaric acids, 1907, A., i,

Kiliani, Heinrich, and Heinrich Naegell, meta- and para-saccharins, A., i, 10.

Kiliani, Heinrich, and Anton Sautermeister, derivatives of the Cs sugars from meta- and para-saccharin, 1907, A., i, 1011.

Kiliani, Heinrich, and Julius Schweisdigitogenic acid and its singer, decomposition products, 1904, A., i,

Kilpi, Sulo, velocity of hydrolysis of the alkyloxy-amides: RO [CH2]n CO NH2, 1912, A., ii, 748.

Kilpi, Sulo. See also Matti Herman Palomaa, and Henrik Wegelius.

Kilroe, J. R., mechanical analysis of soils and sub-soils by centrifugal action; with notes on treatment of samples, 1905, A., ii, 68.

Kilvington, Basil, changes in nerve-cells after poisoning with the venom of the Australian tiger snake (Hoplocephalus

curtus), 1903, A., ii, 92.

Kimley, William S., the mercury cathode in rapid electro-analysis, 1910, A., ii, 654.

Kimpflin, G., presence of formaldehyde in green plants, 1907, A., ii, 289.

Kimura, H., Cryptomeria japonica oil, 1910, A., i, 53.

sesquiterpene alcohols, 1910, A., i, 628. oil of Thea sasangua, 1911, A. si, 388.

Kimura, Masamichi, and Kiyoshi Yamamoto, are characteristics in gases and vapours, 1910, A., ii, 823.

Kimura, Tokuye, human bladder bile,

1904, A., ii, 428.

Kind, Walter. See Robert Stollé. Kinder, Hugo, sources of error in the titration of iron with permanganate, 1906, A., ii, 582.

metallic iron as standard for potassium permanganate, 1907, A., ii, 199.

Kindscher, Erich. See Friedrich Willy Hinrichsen, and Alfred Werner.

King, Arthur Scott, emission spectra of metals in the electric furnace, 1905, A., ii, 217.

King, Albert Theodore. See Walter Haworth, and William Norman

Hughes Perkins.

King, Franklin Hiram, J. A. Jeffery, and A. R. Whitson, development and distribution of nitrates and total water-soluble salts in field soils, 1906, A., ii, 46.

King, Franklin Hiram, and A. R. Whitson, production and distribution of nitrates in cultivated soils, 1903,

A., ii, 570.

King, Harold, chlorination of a-naphthol acetylchloroamino-2:4-dichloro-

benzene, 1911, P., 266:

King, Harold, and Kennedy Joseph Previté Orton, chlorination of acylanilides; effect of the constitution of the acyl group on the proportion of the ortho- and para-derivatives, 1911, T., 1377; P., 196.

King, Harold. See also Arthur James Ewins, and Kennedy Joseph Previté

Orton.

King, I. See Carl Voegtlin.

King, J. T., jun. See C. S. Ketcham. King, Percy Edgar. See Arthur George

King, V. L. See Alfred Werner.

Walter E., and Charles J. T. Doryland, influence of depth of cultivation on soil bacteria and their activities, 1910, A., ii, 231.

King, Walter E. See also James Bert

Garner.

King, William Oliver Redmond.

Joseph Barcroft.

Kingzett, Charles Thomas, and Reginald C. Woodcock, production of formic and acetic acid by the atmospheric oxidation of turpentine, 1912, A., i, 367.

Kinkels, E., detection of rice husk in bran, 1907, A., ii, 516.

Kinoshita, S., spectral-analytical observations on canal rays in compound gases, 1907, A., ii, 151.

condensation of the actinium and thorium emanations, 1908, A., ii, 652. the photographic action of a-particles emitted from radioactive substances. 1910, A., ii, 375.

Kinoshita, S., S. Nishikawa, and S. Ono, the amount of the radioactive products present in the atmosphere.

1912, A., ii, 12. Kinoshita, *Tōsaku*, comparative investigations on various reduction processes for the estimation of dextrose, 1908, A., ii, 437.

a modification of the cryoscopic method for investigating small quantities of

liquid, 1908, A., ii, 810.

the amount of choline in animal tissues, 1910, A., ii, 631.

quantitative occurrence and estimation of trimethylamine in human urine, 1911, A., ii, 343. Kinscher, Max. See Carl Paal.

Kinsky, Jenö, conduction of electricity by metals and amalgams, 1908, A., ii,

Kinziberger & Co., electrolytic preparation of glyoxylic acid, 1909, A., i,

preparation of anthraquinone derivatives, 1910, A., i, 752.

Kionka, Heinrich, gout, 1907, A., ii, 742; 1908, A., ii, 972.

Kionka, Heinrich, and Ernst Frey, gout. VII. Relationship between uric acid and amino-acids, 1907, A., ii, 285.

Kipke, Carl. See Karl Auwers. Kipke, Friedrich. See Max Scholtz. Kippe, Otto. See Richard Stoermer.

Kippenberger, Carl, the volumetric estimation of alkaloids, 1903, A., ii,

estimation of iodides when mixed with other salts, 1903, A., ii, 450.

action of iodine on nicotine, 1903, A., ii, 582.

method of estimating formaldehyde prescribed by the German pharmacopœia, 1904, A., ii, 299.

substitute for burette pinch clamps,

1904, A., ii, 439. burette stands, 1904, A., ii, 440.

new forms of [analytical] laboratory apparatus, 1905, A., ii, 608.

Kippenberger, Carl, and L. von Jakubowski, isolation of the alkaloids in chemico-legal cases, 1904, A., ii, 301. Kipper. Hermann, use of phenyl ether in the Friedel-Crafts' reaction, 1905, A., i, 648.

See also Fritz Kipper. Hermann.

Ullmann.

Kipper, Herman Brunswick. See Henry

Augustus Torrev.

Kipping, Frederic Stanley, isomeric partially racemic salts containing quinquevalent nitrogen. Part VIII. Resolution of the a-modification of hydrindamine bromocamphorsulphonate, 1903, T., 873.

isomeric partially racemic salts conquinquevalent nitrogen. taining Part IX. Resolution of the Bmodification of dl-hydrindamine d-bromocamphorsulphonate, 1903,

T., 889.

isomeric partially racemic salts conquinquevalent nitrogen. taining Part X. The four isomeric hydrindd-chlorocamphorsulphonates, NR₁R₂H₃, 1903, T., 902; P., 164.

isomeric compounds of the type NR₁R₂H₃, 1903, T., 937; P., 166. cis-\u03c4-camphanates of d- and l-hydrind-

amines, 1903, P., 286.

organic derivatives of silicon: preparation of alkylsilicon chlorides,

1904, P., 15.

isomeric salts of the type NR, RoR; a correction; isomeric forms of d-bromo- and d-chloro-camphorsulphonic acids, 1905, T., 628; P., 124.

organic derivatives of silicon, 1905,

P., 65.

isomerism of a-bromo- and a-chloro-

camphor, 1905, P., 125.

organic derivatives of silicon. II. The synthesis of benzylethylpropylsilicol, its sulphonation, and the resolution of the dl-sulphonic derivative into its optically active components, 1907, T., 209; P., 9; discussion, P., 9.

organic derivatives of silicon. Part dl-Benzylmethylethylpropylsilicane and experiments on the resolution of its sulphonic derivative, 1907, T., 717; P., 83.

organic derivatives of silicon. Part VI. The optically active sulphobenzylethylpropylsilicyl 1908, T., 457; P., 47.

a study of some asymmetric compounds, 1909, T., 408; P., 55.

derivatives of silicoethane and silicoethylene, 1911, P., 143.

Kipping, Frederic Stanley, organic derivatives of silicon. Part XV. The nomenclature of organic silicon compounds, 1912, T., 2106; P., 243.

organic derivatives of silicon, XVI. The preparation and pro-perties of diphenylsilicanediol, perties

1912, T., 2108; P., 243.

organic derivatives of silicon. Part XVII. Some condensation products of diphenylsilicanediol, 1912. T., 2125 ; P., 244.

Kipping, Frederic Stanley, and Frederick Challenger, the resolution of asymmetrical derivatives of phosphoric acid, 1911, T., 626; P., 66.

Kipping, Frederic Stanley, and George Clarke, jun., a-amino-\(\beta\)-methylhydrindene, 1903, T., 913.

Kipping, Frederic Stanley, and Harold Davies, organic derivatives of silicon. Part IX. Experiments on the resolution of dl-benzylethylpropylisobutylsilicanesulphonic acid, 1909, T., 69: P., 9.

Kipping, Frederic Stanley, and John Edward Hackford, organic derivatives of silicon. Part XIV. The preparation of tertiary silicols, 1911, T., 138; P., 8.

Kipping, Frederic Stanley, and Albert Edward Hunter, phenocycloheptene,

1903, T., 246; P., 11.

resolution of a-benzylmethylacetic acid, 1903, T., 1005.

l-phenylethylamine, 1905, P., 126. Kipping, Frederic Stanley, and Bernard Dunstan Wilkinson Luff, isomeric derivatives of phosphoric acid, 1909, P., 203.

Kipping, Frederic Stanley, and Geoffrey Martin, the action of fuming sulphuric acid on triphenylsilicol, 1909, T.,

489; P., 66.

Kipping, Frederic Stanley, and William Jackson Pope, crystallisation of externally compensated mixtures, 1909,

T., 103; P., 9.

Kipping, Frederic Stanley, and Arthur Henry Salway, the arrangement in space of the groups combined with the tervalent nitrogen atom, 1904, T., 438; P., 39.

Kipping, Frederic Stanley. See also Marmaduke Barrowcliff, Frederick Challenger, Harold Davies, Albert Edward Hunter, Bernard Dunstan Wilkinson Luff, Herbert Marsden, Geoffrey Martin, Robert Robison, Arthur Henry Salway, Thomas Alfred Smith, George Tattersall, and Frank Tutin.

Kirbach, Hugo, the gradual hydrolysis of the oxyhamoglobin of the horse, 1907, A., i, 265.

Kirby, Oswald Farquhar, substitute for platinum wire in qualitative analysis,

1910, A., ii, 445.

Kirchbaum, Felix M. A., action of potassium carbonate on isobutaldehyde, 1904, A., i, 473.

Kircher, Adolf, alkaloids from certain species of Datura which induce mydriasis, 1905, A., i, 717.

Kircher, Adolf. See also Ernst Sch-

Kircher, Karl. See Heinrich Biltz, and Carl Dietrich Harries.

Kircher, Wilhelm, condensation of methyluracil and formaldehyde, 1912, A., i, 53.

Kirchheim, Ludwig, the toxic action of trypsin and its capacity to digest living tissues, 1912, A., ii, 190.

Kirchhoff, Franz. See Ernest Beck-

Kirchhoff, Georg. See Wilhelm Steinkopf.

Kirchner, Walter. See Chemische Fabrik Grünau, Landshoff, & Mayer. Kirchoff, A., analysis of calcium cyan-

amide, 1912, A., ii, 1111.

Kiréeff, I. See Leo A. Tschugaeff.

Kirkby, Paul Jerome, union of hydrogen and oxygen at low pressures through the passage of electricity, 1905, A., ii, 236.

union of hydrogen with oxygen at low pressures caused by the heating of platinum, 1905, A., ii, 695.

chemical effects of the electric discharge in rarefied hydrogen and oxygen, 1907, A., ii, 221.

theory of the chemical action of the electric discharge in electrolytic gas, 1911, A., ii, 462.

Kirkness, James Mathieson. See Francis Hugh Adam Marshall.

Kirkwood, J. E., and William John Gies, chemical investigations on cocoanuts and remarks on the changes during germination, 1903, A., ii, 172.

Kirmreuther, Heinrich, dichloro-disulphaminoplato-salts; the stereoisomerism of platinum and the transformation of sulphamic acid, 1911, A., ii, 1098.

Kirmreuther, Heinrich. See also Karl Andreas Hofmann.

Kirner, J., the influence of nitrogen in the case-hardening of steel, 1911, A., ii, 494. Kirpal, Alfred, esters of cinchomeronic acid and apophyllenic acid, 1903, A., i, 117.

cinchomeronic acids and their esters, 1903, A., i, 198.

constitution of apophyllenic acid 1903, A., i, 852.

pyridine-2:3:4-tricarboxylic acid, 1905, A., i, 234. 3-benzoylpicolinic acid, 1906, A., i,

694. quinolinic esters, 1906, A., i, 697.

conductivities of the isomeric hydrogen esters of quinolinic and cinchomeronic acids, 1907, A., i, 722.

decomposition of 3-methyl 2-hydrogen quinolinate, 1908, A., i, 565.

new betaines of the pyridine series, 1908, A., i, 679.

quantitative estimation of methoxyland methylimino-groups, 1908, A., ii, 436.

course of the Friedel-Craft reaction with unsymmetrical polycarboxylic acids, 1909, A., i, 509; 1910, A., i, 504.

betaine formation and steric hindrance, 1911, A., i, 156.

Kirpitschnikoff, S., oxidation of the higher homologues of aniline on the fibre, 1905, A., i, 540.
Kirsch, Alexander. See Hans von Hal-

ban.

Kirsch, Wilhelm. See Karl Elbs.

Kirschbaum, G. See Julius von Braun. Kirschbraun, L. See Alfred Holmes White.

Kirschner, Aage, estimation of butter-fat and cocoanut oil in margarine, 1905, A., ii, 213.

estimation of fat in cocoa, 1906, A., ii, 502.

monohydrate of barium chloride, 1911, A., ii, 396.

dimorphism of oleic acid, 1912, A., i, 533.

solubility of silver thiocyanate, 1912, A., ii, 423.

Kirschner, Moriz. See Karl Löffler. Kirschnick, Carl, indicator for the estimation of free acidity in zinc chloride solutions, etc., 1907, A., ii, 910.

Kirschten, Curt. See Hugo Simonis. Kirsten, Arthur. See J. Klein.

Kisch, Bruno, the surface tension of the living plasma membranes of yeasts and moulds, 1912, A., ii, 588.
Kisch, Bruno. See also Joseph Szücs.

Kisch, Bruno. See also Joseph Szücs.
Kisch, Franz, post-mortem disappearance of glycogen in the muscles, 1906, A., ii, 562.

Kishi, Yoshinori. See Mitsuru Kuhara. Kissin, Schmul-Juda. See Richard Mever.

Kissin, Wulf. See Carl Adam Bischoff. Kisskalt, Karl, deodorisation, 1912, A.,

ii, 974.

Kissling, Richard, heating of mineral oils when shaken with concentrated sulphuric acid, 1905, A., ii, 863.

estimation of the volatile organic acids of tobacco and the behaviour of the oxalic acid, 1909, A., ii, 707.

estimation of nicotine in concentrated tobacco juice, 1911, A., ii, 344, 345.

estimation of nicotine in tobacco and in green tobacco leaves, 1912, A., ii,

Kistiakowsky, Wladimir A., a rule for capillary phenomena analogous to Trouton's rule for the latent heat of evaporation, 1906, A., ii, 655.

silver titration voltameter, 1906, A., ii,

measurement of electrode potentials,

1908, A., ii, 249.

electrode potentials and electrochemical reactions, 1910, A., ii, 258.

the passivity of metals, 1911, A., ii, 401.

Kitagawa, F., and Hans Thierfelder, cerebrone. III., 1907, A., i, 168. Kitaj, M. See Erich Beschke.

Kitawaki, Ichitaro, the hydrates of disodium hydrogen phosphate, 1910, A., ii. 846.

Kitchin, Edward Stanhope, and William George Winterson, malacone, a silicate of zirconium, containing argon and helium, 1906, T., 1568; P., 251.

Kitt, Moritz, elæomargaric acid, 1905, A., i, 10.

Kittel, Hans. See Berta Braun.

Kittel, Johann. See Alfred Wogrinz. Kjellin, Carl, melting points of as-diphenylthiocarbamides, 1903, A., i, 287.

Kjellin, F. A., the theory of electrolytic dissociation, taking into account the electrical energy of the ions, 1911, A., ii, 248.

Klaber, William. See Marston Taylor Bogert.

Klages, [Wilhelm] August [Hermann], n-propylbenzene, 1903, A., i, 329. methyleneaminoacetonitrile, 1903, A., i, 469.

syntheses of benzene hydrocarbons by reduction of groupings containing oxygen. I., 1903, A., i, 553. allylbenzene, 1903, A., i, 688. amylbenzenes, 1904, A., i, 27.

Klages, [Wilhelm] August [Hermann], styrenes. VI., 1904, A., i, 567.

reduction of unsaturated phenol ethers by sodium and alcohol. 1904. A., i.

[p-methoxyphenylethylcarbinol], 1905, A., i, 344, 645.

phenylmethylethylene oxide and its conversion into hydratropaldehyde, 1905, A., i, 523.

alkaloidal salts of i-sec-butylbenzenesulphonic acid, 1906, A., i, 568.

hydrobenzoin, 1906, A., i, 674.

optical behaviour of some styrenes, 1907, A., i, 499.

menthatriene; determination of constitution by optical methods, 1907, A., i, 597.

Klages, August, and August Eppelsheim. reduction of unsaturated phenol ethers by sodium and alcohol, 1904, A., i, 45.

Klages, August, and Otto Haack, hippuronitrile and some substituted hippuronitriles, 1903, A., i, 560.

August, and Hugo Haehn, s. V., 1904, A., i, 497. Klages, styrenes.

Klages, August, and Heino Hahn, styrenes. III., 1903, A., i, 19.

Klages, August, and Sebastian Heilmann, arylated ethylenes and their reduction to arylparaffins, 1904, A., i, 487.

Klages, August, and Rudolph Keil, behaviour of the vinyl group on reduction; ethylated benzenes, 1903, A., i, 553.

Klages, August, and Johannes Kessler, unsymmetrical diphenylethylene oxide, 1906, A., i, 498.

Klages, August, and Karl Klenk, attempts to synthesise phenylallene, 1906, A., i, 638.

Klages, August, Ernst Lauck, and Karl Gieser, reduction of aromatic carbinols, 1906, A., i, 661.

Klages, August, and Simon Margolinsky, synthesis of betaines from dialkylated aminonitriles, 1904, A., i, 145.

Klages, August, and Albert Rönneburg, pyrazoles from 1:3-diketones and alkyl

diazoacetates, 1903, A., i, 528. Klages, August, and Richard Sautter, optically active benzene carbons, 1904, A., i, 302; 1906, A., i, 489.

optically active benzene hydrocarbons and phenolic ethers, 1905, A., i, 579.

Klages, August, and Fritz Sommer, reduction of partially hydrogenated benzenes, 1906, A., i, 566.

Klages, August, and Christian Stamm, styrenes. IV. Styrenes derived from mesitylene, 1904, A., i, 302.

Klages, August, and Christian Stamm. synthesis of benzene hydrocarbons by reduction of oxygenated groups, 1904, A., i, 483.

Klages, August, and Friedrich Tetzner, alkylidenedeoxybenzoins, 1903, A., i,

100.

Klappert, Erich, electrolytic reduction of m-nitrophenol in alkaline and in acid solutions, 1903, A., i, 85.

Klapproth, W., analysis of lactic acid, 1911, A., ii, 1038; 1912, A., ii,

211. Klarfeld, Heinrich, action of water on hexylene dibromide (from mannitol), 1905, A., i, 166.

Klarfeld, Heinrich. See also Roman Zaloziecki.

Klason, [Johan] Peter, constitution of platinum bases, 1903, A., i, 224; 1904, A., i, 522.

preparation of potassium platinosochloride, 1904, A., ii, 415.

chemical composition of pine-wood. I., 1908, A., i, 717.

valuation of turpentine oils, 1911, A., ii, 665.

Klason, Peter, and Tor Carlson, thioglycollic acid, 1906, A., i, 232. organic nitrates, 1906, A., i, 787.

volumetric determination of organic hydrosulphides and thio acids, 1906, A., ii, 255.

the alkaline hydrolysis of alkyl nitrates, a contribution to the constitution of nitric acid, 1907, A., i, 1000.

Klason, Peter, and Oscar Fagerlind, chemical composition of pine-wood.

II., 1908, A., i, 717.

Klason, Peter, Gust. von Heidenstam, and Evert Norlin, theoretical investigations on the charring of wood. I. Dry distillation of cellulose, 1908. A., i, 717.

investigations on the charring of wood.

II., 1908, A., i, 955.

Klason, Peter, and John Köhler, estimation of small amounts of arsenic in paints, wall-papers, etc., 1904, A., ii, 208.

chemical investigation of resin from the pine (Pinus abies), 1906, A.,

i, 100.

Klason, Peter, John Köhler, and F. Friedemann, analysis of pine tar, 1907,

A., i, 1029.

Klason, Peter, and Hjalmar Mellquist. iodometric method for the quantitative estimation of small quantities of selenium in sulphur and pyrites, 1912, A., ii, 201.

Klason, Peter, and Hjalmar Mellquist. estimation of selenium in pyrites.

1912, A., ii, 990. Klason, Peter, and Evert Norlin, pre-

paration of chemically pure methyl and ethyl alcohols; their specific

gravities, 1906, A., i, 921. table for determination of the concentration of methyl alcohol in per cent, by weight and volume and in weight per volume from the specific

gravity at 15°/15°, 1907, A., ii, 990. Klason, Peter, and Bror Segerfelt, chemical processes occurring in the preparation of cellulose by the sulphate method, 1911, A., i, 264.

the ethereal oils of the wood of the

spruce, 1912, A., i, 788. Klason, Peter, and J. Wanselin, platophosphineammine compounds, 1903, A., i, 238.

Klassert, Martin, estimation of essential

oils, 1909, A., ii, 271.

Klatt, Hugo F., condensation of dextrose by fusion with ammonium chloride, 1904, A., i, 372.

Klatte, Fritz. See Eduard Buchner.

Klaus, Alfred, absorption of thorium emanation, 1906, A., ii, 416.

Klauser, Oskar. See Herman Decker. Klawikordoff, W. See Nicolai M. Kijner.

Klaye, R. See Ernst Berl.

Kldiaschwili, Alexander, characteristic reactions of ketones, 1903, A., ii, 719.

action of some fatty acids on starch, 1904, A., i, 798.

dichloroacetyldextrin, 1905, A., i, 634.

Kleber, Clemens, estimation of formaldehyde and paraformaldehyde, 1904, A., ii, 371.

Klee, Ph. See Otto Cohnheim.

Klee, Walter. See Johannes Gadamer, and Erwin Rupp.

Kleeman, H. See Ed. Stadler.

Kleeman, Richard Daniel, recombination of ions made by α -, β -, γ -, and X-rays, 1906, A., ii, 720.

ionisation of various gases by a_{-} , β_{-} , and γ-rays, 1907, A., ii, 423.

secondary cathode rays emitted by substances when exposed to the yrays, 1907, A., ii, 923.

different kinds of y-rays of radium and the secondary γ-rays which they produce, 1908, A., ii, 553.

velocity of the cathode rays ejected by substances exposed to the \gamma-rays of radium, 1909, A., ii, 364.

Kleeman, Richard Daniel, ionisation [produced] in various gases secondary y-rays, 1909, A.,

determination of a constant in capillarity, 1909, A., ii, 645.

relations in capillarity, 1909, A., ii,

relations between the critical constants and certain quantities connected with capillarity, 1910, A., ii, 22.

nature of the ionisation of a molecule by an α-particle, 1910, A., ii, 92.

the ionisation of various gases by the B-rays of actinium, 1910, A., ii, 474.

the nature of the forces of attraction between atoms and molecules, 1910,

A., ii, 492.

the total ionisation produced in different gases by the cathode rays ejected by X-rays, 1910, A., ii, 567.

radius of the sphere of action of a molecule, 1910, A., ii, 600.

the shape of the atom, 1910, A., ii,

shape of the molecule, 1910, A., ii, 840.

the equation of continuity of the liquid and gaseous states of matter, 1910, A., ii, 932.

the attraction constant of a molecule of a substance and its chemical properties, 1911, A., ii, 34.

determinations of the law of chemical between atoms from attractions physical data, 1911, A., ii, 97.

relations between the density, temperature, and pressure of substances,

1911, A., ii, 257.

the heat of mixture of substances and the relative distribution of the molecules in the mixture, 1911, A., ii, 371.

molecular attraction and the properties of liquids, 1911, A., ii, 966. nature and velocity of an ion in a gas,

1912, A., ii, 8. the heat of combustion of a molecule and its chemical attraction constant, 1912, A., ii, 21.

law of molecular attraction, 1912, A.,

ii, 443.

the different internal energies of a substance, 1912, A., ii, 535, 901. kinetic properties of a molecule in a

substance, 1912, A., ii, 734. ionisation produced by the collision of positive ions in gaseous mixtures, 1912, A., ii, 883.

Kleeman, Richard Daniel, properties of substances connected with the kinetic properties of the molecules. 1., 1912, A., ii, 901.

exact form of the law of molecular attraction, 1912, A., ii, 1157. Kleeman, Richard Daniel. See

See also William Henry Bragg.

Kleemann, filtering device for the collection of separate liquids, 1912, A., ii,

Kleemann, Andreas, malt diastase, 1906, A., ii, 46.

Kleiber, Alb., estimation of nitrogen in saltpetre by means of stannous chloride and iron filings, 1909, A., ii, 517.

Klein, Artur. See Moritz Kohn.

Klein, A. Albert. See Hermon U. Cooper, and Edward Henry Kraus.

Klein, B., decomposition of carbohydrates by bacteria, 1912, A., ii, 669.

Klein, [Johann Friedrich] Carl, [meteorites of Schafstädt, Pavlovka, and Linum], 1904, A., ii, 351.

[Toke-uchi-mura and Weaver Mtn.] meteorites, 1904, A., ii, 572.

connexion between the optical characters and the chemical composition of vesuvianite, 1904, A., ii, 668.

Klein, David, influence of organic liquids on the interaction of hydrogen sulphide and sulphur dioxide, 1911, A., ii, 200.

apparatus for the estimation of aminogroups, 1911, A., ii, 1143.

Klein, David. See also Louis Kahlenberg, and Azariah Thomas Lincoln. Klein, Emmerich I. See Amé Pictet.

Klein, Frederick, some new tests, 1911, A., ii, 340.

rapid estimation of sulphuric acid with the porous clay crucible, 1911, A., ii, 822.

Klein, Friedrich, acetolytic degradation of cellulose, 1912, A., i, 679.

Klein, Friedrich. See also Hermann Ost. Klein, H. A., and Adolf Magnus-Levy, the resorption of cholesterol and cholesteryl esters, 1911, A., ii, 57.

Klein, J., feeding experiments with fish meal, maize (oil) cakes, and wheat bran, 1903, A., ii, 37.

Klein, J., and Arthur Kirsten, analysis of butter obtained from separate cows, 1903, A., ii, 114.

Klein, Joseph, estimation of formic acid by potassium permanganate, 1906, A., ii, 812.

bromination of santonin, 1907, A., i,

santonin, 1908, A., i, 423.

609

Klein, Oskar, the solubility of zinc hydroxide in alkalis, 1912, A., ii, 351.

Kleine, A., estimation of sulphur in iron or steel; volumetric estimation of arsenic, 1903, A., ii, 694.

apparatus for estimating sulphur in iron and steel, 1905, A., ii, 856. estimation of chromium and man-

ganese, 1906, A., ii, 495.

new apparatus for the estimation of sulphur and carbon, 1906, A., ii, 896.

gas generator, 1907, A., ii, 446.

new apparatus for the estimation of carbon, 1909, A., ii, 437.

new apparatus for the estimation of sulphur and arsenic, 1910, A., ii, 749.

Kleine, Gustav. See Ernst Schmidt.

Kleiner, Israel Simon, the physiological action of some pyrimidine compounds of the barbituric acid series, 1912, A., ii, 667.

Kleiner, Israel Simon, and Samuel James Meltzer, glycosuria produced by subcutaneous and intra-muscular injections of adrenaline, 1912, A., ii,

Kleiner, Israel Simon. See also Lafayette Benedict Mendel, and Frank Pell Underhill.

Kleiner, Rudolf. See Karl Bernhard Lehmann.

Kleinschmitt, Albert, hydrolysis of hordein, 1908, A., i, 69.

Kleinstück, Martin, metal- and metallic oxide-aluminas and their use for catalytic reactions, 1910, A., ii, 715.

estimation of fluorine [in silicates], 1911, A., ii, 1026.

volumetric analysis of cinchona bark, 1912, A., ii, 817.

formaldehyde in the cambial sap of conifers, 1912, A., ii, 1202.

Kleinstück, Martin. See also Ernst von Meyer.

Kleisinger, Emil. See Wilhelm Wislicenus.

Kleist, Georg, analysis of aluminium and its alloys, 1911, A., ii, 772. Kleist, Hans. See Schimmel & Co.

Klemann, Emil. See Carl Bülow.

Klemenc, Alfons, 3:4:5-trinitroveratrole, 1911, A., i, 779.

derivatives of 5-nitroeugenol and of nitrated methoxybenzoic 1912, A., i, 459.

nitration of guaiacol, 1912, A., i, 695. measurement of electrical conductivity, 1912, A., ii, 121.

Klemenc, Alfons. See also Rudolf Wegscheider.

Klemensiewicz, Z., antimony trichloride as ionising solvent, 1908, A., ii, 1043. the formation of positive ions by heated metals, 1911, A., ii, 1050.

Klemensiewicz, Z. See also

Klemm, Arno. See Ernst Deussen. Klemperer, Ralph L. von. See Walther Hempel.

Klenk, Karl. See August Klages.

Klercker, Kj. Otto af, excretion of creatine and creatinine in man, 1906, A., ii, 295. creatine and creatinine in human

metabolism, 1907, A., ii, 186.

Klever, Helmut Wilhelm. See Hermann Staudinger.

Kley, Picter Dirk Cornelis, identification of alkaloids, 1904, A., ii, 99.

Kliegl, Alfred, condensation of benzaldehyde with toluene, 1905, A., i, 186. phenylfluorene, 1905, A., i, 187.

nitro-derivatives of tetramethyldiaminobenzophenone, 1906, A., i, 433.

synthesis of o-nitrotriphenylmethane, 1908, A., i, 82.

condensation of o-nitrobenzaldehyde with aromatic hydrocarbons in presence of concentrated sulphuric acid, 1908, A., i, 549.

new method of formation of acridone,

1909, A., i, 255.

fluorenyl ethers, 1910, A., i, 733. the influence of the nitro-group on the

sulphonation of diphenylmethane, 1912, A., i, 251.

the action of solutions of ethoxides on m-nitrobenzylidene chloride, 1912, A., i, 268.

Kliegl, Alfred, and Karl Haas, aromatic homologues of s-dichlorodimethyl ether, 1909, A., i, 570. oo'-dinitrotolane, 1911, A., i, 433.

Klimenko, D., action of magnesium on a mixture of allyl bromide and benzaldehyde; synthesis of phenylallylcarbinol, 1911, A., i, 444.

Euthyme, detection Klimenko, estimation of hypochlorous acid, 1904,

A., ii, 205.

Klimont, Isidor, composition of Oleum stillingiae, 1903, A., i, 731.

fat of the fruits of the Dipterocarpus species, 1905, A., ii, 126.

composition of solid fats of plants, 1905, A., ii, 475.

refractive constants of vegetable oils, 1911, A., ii, 234.

Klimont, Isidor, the components of animal fats, 1912, A., ii, 580. Klimont, Isidor, and E. Meisels, occur-

rence of mixed glycerides in natural

fats, 1909, A., ii, 597.

Klimont, Isidor, and Wilhelm Neumann. determination of unsaturation in hydroaromatic substances, 1912, A., i, 37.

Klimont, Isidor, Wilhelm Neumann. and Erwin Schwenk, bromine absorptive capacity of organic compounds, 1912, A., i, 933.

Klimosch, K. See Josef Herzig.

Klinckhard. Theodor. See Robert Behrend.

Kling, André, acetol (acetylcarbinol) and its reduction products, 1903, A., i, 138, 223.

action of organo-magnesium compounds on acetol and its esters, 1904, A.,

i, 2, 133.

methyl acetolate, 1904, A., i, 474. oxidation of acetol (acetylcarbinol),

1905, A., i, 3.

chlorination of methyl ethyl ketone,

1905, A., i, 172.

mechanism of the chlorination of mixtures of ketones and water in presence of marble, 1905, A., i, 327.

hydrates of acetol [acetylcarbinol], 1905, A., i, 402.

action of alkalis on aqueous solutions of acetol, 1905, A., i, 503.

propionylcarbinol and its derivatives,

1905, A., i, 503. acetylmethylcarbinol (B-hydroxy-yketobutane), 1905, A., i, 504.

aqueous solutions of acetylcarbinol,

1905, A., i, 625.

ketonic alcohols, 1905, A., i, 732. action of semicarbazide on chloroaldehydes, 1909, A., i, 214.

preparation of ammonium hydrogen

l-tartrate, 1910, A., i, 651. new method for estimating d-tartaric

acid, 1910, A., ii, 359.

influence of catalysts in determinations of vapour density, 1911, A., ii, 371. racemic acid as an analytical reagent,

1911, A., ii, 539.

estimation of tartaric acid in tartrates and wines by precipitation as calcium racemate, 1911, A., ii, 666.

Kling, André, and Daniel Florentin, general method for the estimation of tartaric acid, 1912, A., ii, 1006.
Kling, André, and Paul Roy, action of

magnesium amalgam on aldehydes, 1907, A., i. 586.

estimation of added water in altered

milks, 1909, A., ii, 525.

Kling, André, and Marcel Viard, differentiation between primary, secondary, and tertiary alcohols of the fatty series, 1904, A., i, 545.

Kling, André. See also Maurice Hanriot, and Alexandre Hébert.

Kling, Georg. See Richard Escales. Kling, K., p-tolylacetaldehyde and its derivatives, 1908, A., i, 188.

o-, m-, and p-tolylethyl alcohols, 1908,

A., i, 980.

Kling, Max, and Otto Engels, estimation of potassium in potassium salts and mixed manures by Neubauer's modified Finkener's method, 1906, A., ii, 580.

See also A. Halenke. Kling, Max.

Klingemann, Wilhelm. See Abderhalden.

Klingen, (Mlle.) I. M. P. See Wilhelm

Eduard Ringer.

Klinger, Heinrich, derivatives of benzilic acid and of chlorodiphenylacetic acid, 1912, A., i, 557.

diphenyleneglycollic, a-chlorodiphenyleneacetic, and a-bromodiphenyleneacetic acids, 1912, A., i,

derivatives of alkyloxydiphenylacetic acid and alkyloxydiphenyleneacetic acid, 1912, A., i, 701.

Klinger, Heinrich, and Walter Martinoff, mm'-dinitrobenzil, 1912, A., i, 571.

Klinger, Heinrich, and G. Nickell, derivatives of diphenylbromoacetic acid, 1912, A., i, 699.

Heinrich, and Klinger, Walter Roerdansz, syntheses by means of sunlight, 1911, A., i, 633.

Klinger, Max. See Conrad Willgerodt. Klinkerfues, Friedrich, estimation of potassium, 1905, A., ii, 204, 859. standardising of acids without the aid

of alkali solutions, 1912, A., ii, 87.

Klobb, [Constant] Timothée, anthesterol, a new vegetable cholesterol, 1903, A., i, 165.

preparation of 2:6-diphenylpyridine-3-carboxylic acid, 1903, A., i, 575.

arnisterol, the phytosterol of Arnica montana, 1904, A., i, 410.

a dihydric alcohol related to phytosterol, 1905, A., i, 594.

arnidiol phenylurethane, 1906, A., i, 843.

two new glucosides, linarin, pectolinarin, 1907, A., i, 864. glucosides of Linaria, 1908, A., i,

modifications of anthesterol and its

benzoate, 1909, A., i, 471.

Klobb, [Constant] Timothée, phytosterols in the family of Synantherea; faradiol, a new dihydric alcohol from coltsfoot, 1910, A., i, 31.

dextrorotatory phytosterols of Anthemis nobilis (anthesterols), 1911, A., i,

199.

Klobb, Timothée, and Armand Bloch, phytosterol of the soy bean, 1907, A., i, 521.

Klobb, Timothée, and A. Fandre, chemical composition of Linaria vulgaris,

1907, A., ii, 123.

Klobb, Timothée, Jules Garnier, and R. Ehrwein, hydrocarbons of vegetable

origin, 1910, A., ii, 1100.

l-phytosterols. II., 1911, A., i, 972. Klobbie, Eduard August, and Hendrik Ludwijn Visser, detection of potassium perchlorate in potassium chlorate, 1908, A., ii, 627.

Kloeman, Ludwig, the action of certain medicaments on the healthy alimentary

canal, 1912, A., ii, 965.

Klöcker, Alb., the detection of small quantities of alcohol in fermenting liquids, 1911, A., ii, 941.

Klöffler, Hermann. See Gustav Blume. Klöppel, S., manurial experiments on

mangolds with calcium cyanamide and sodium nitrate, 1908, A., ii, 619.

Klöss, Karl, action of water on methylene

dibromide, 1904, A., i, 1. Klonowski, Sigismund. See Paul

Askenasy.

Klooster. H. S. van, fusions of alkali metaborates and metaphosphates,

1911, A., ii, 110. the binarysystems: Li₂O-SiO₂, Li₂SiO₃-ZnSiO₃, ZnSiO₃-CdSiO₃, Li₂SiO₃-Li-BO₂, Na₂SiO₃-NaBO₂, and Na₂SiO₃-Na₃WO₄, 1911, A., ii, 111.

Klooster, H. S. van. See also Frans

Maurits Jaeger-

Klopfer, Friedr. August Volkmar, preparation of an arsenic-albumin compound, 1910, A., i, 292.

Klopfer, Theodor. See Ernest Beckmann. Kloppe, Kurt. See Johannes Scheiber. Klopstock, Hans, the active substance

of chlorates, 1909, A., ii, 136.

Klopstock, Hans. See also August Michaelis.

Klostermann, Wilhelm. See Karl Fries, and Theodor Zincke.

Klotz, Max, carbohydrate metabolism, 1912, A., ii, 575.

Klotz, Oskar, soaps in certain pathological conditions, 1905, A., ii, 187. the large white or soapy kidney, 1909, A., ii, 507. Klotz, Oskar, and M. F. Manning, fatty streaks in the *Tunica intima* of arteries, 1911, A., ii, 1112.

Klucke, Otto. See Emil Knoevenagel. Klüger, Alfred, ethoxyacetaldehyde and its condensation product with formaldehyde, 1905, A., i, 683.

Klünder, Th. See Max Dennstedt. Klug, Ferdinand, the ferment of the pylorus, 1903, A., ii, 86.

Kluger, Wolfgang. See Josef Herzig.
Klut, Hartwig, preparation, properties,
and desulphuration of ethylenethio-carbamide, 1903, A., i, 327.

o-dianisylthiodicyanodiamine, 1904,

A., i, 114.

treatment of gold, platinum, and silver residues, 1907, A., ii, 275.

estimation of the hardness of water, 1909, A., ii, 183.

estimation of iron in water, 1909, A., ii, 1055.

Knaffl Lenz, Erich von, diamino-acids from koilin, 1907, A., i, 994.

the relations between lipoid liquefaction and cytolysis, 1908, A., ii, 610.

the so-called artificial complements, 1909, A., ii, 904.

Knaffl-Lenz, Erich von, and Wilhelm Wiechowski, action of radium emanation on monosodium urate, 1912, A., ii, 522.

Knaffl-Lenz, Erich von. See also Zdenko

Hanns Skraup.

Knapp, Arthur William, decomposition of water at ordinary temperatures by magnesium, 1912, A., ii, 635.

Knapp, Arthur William. See also Herbert Sutcliffe Shrewsbury.

Knapp, Bernhard, nutritive value of glycerol, 1907, A., ii, 39.

Knapp, Th., the influence of guaiacol derivatives on the exerction of glycuronic acid, 1912, A., ii, 73.

Knapp, Th., and F. Suter, absorption and exerction of certain guaiacol derivatives, 1904, A., ii, 274.

Knauer, E. A., can the small intestine absorb calcium stearate? 1904, A., ii, 673.

Knecht, Edmund, titanium sesquioxide and its salts as reducing agents, 1903, A., ii, 217.

a labile nitrate of cellulose, 1904, A., i, 293.

behaviour of wool fibre to certain acid dyes; contribution to the theory of dyeing, 1904, A., i, 909. reaction of copper salts [with titanous

salts], 1904, A., ii, 448.

Knecht, Edmund, symmetrical trinitroxylenol, 1905, A., i, 53.

constituents of Manchester soot, 1905, A., ii, 703.

analysis of indigo, 1906, A., ii, 910. delicate test for titanium, 1907, A.,

ii, 654. three lecture experiments, 1908, A.,

ii, 270.

volumetric process for the estimation of chlorates, 1908, A., ii, 627. the reduction of perchlorates by

titanous salts, 1909, P., 229. decolorising action of various forms

of charcoal, 1911, A., ii, 471. Knecht, Edmund, and John Allan, cot-

ton wax, 1911, A., ii, 645.

Knecht, Edmund, and Frederick William Atack, volumetric estimation of

molybdenum, 1911, A., ii, 337.

Knecht, Edmund, and John Percy Batey,
condition of some dyes in aqueous
solution, 1909, A., i, 612.

modification of the Beckmann apparatus by which constant readings are obtained in determining the boiling points of aqueous solutions, 1909, A., ii, 791; 1912, T., 1189; P., 142.

condition of indigo-white in aqueous solutions, 1910, A., i, 593.

Knecht, Edmund, and (Miss) Eva Hibbert, use of titanium trichloride in volumetric analysis, 1903, A., ii, 509; 1905, A., ii, 872; 1907, A., ii, 907.

s-trinitroxylenol, 1904, A., i, 871. naphthol yellow-S., 1904, A., i, 872. a volumetric process for the estimation

of tungsten, 1909, P., 227.

titanium chloride in volumetric analysis. IV. Estimation of quinones, 1911, A., ii, 76.

pertitanic acid and its influence on the volumetric estimation of iron in titaniferous minerals, 1911, A., ii, 544.

Knecht, Edmund. See also Spence & Sons.

Knecht, Ernst. See Fritz Ullmann. Knecht, Oskar. See Robert Gnehm.

Kneeland. See Carl Graebe.

Kneip, H., estimation of cantharidin in cantharides and its tineture, 1911, A., ii, 669.

Kneisel, Rudolf. See Heinrich Hörlein. Knesch, Franz, reduction of o-quinones, 1904, A., i, 812.

Knett, Josef, indirect proof of the presence of radium in Carlsbad hot springs, 1906, A., ii, 412.

Knigge, Georg. See Franz Kunckell. Knight, C. W., new occurrence of pseudo-

leucite, 1906, A., ii, 682.

Knight, C. W. See also T. T. Read.

Knight, George W. See William Salant.

Knight, Luther. See William Albert Noves.

Knight, (Miss) Lottie Emily. See John Kenneth Harold Inglis.

Knight, Nicholas, precipitation of magnesium oxalate with calcium oxalate, 1904, A., ii, 368.

dolomites of Eastern Iowa, 1904, A., ii, 744.

estimation of ferrous iron, 1908, A., ii, 323.

decomposition of dolomite, 1908, A., ii, 506.

Knight, Nicholas, and F. A. Menneke, estimation of silica, 1906, A., ii, 803.

Knight, S. S., rapid estimation of sulphur in iron by evolution, 1904, A., ii, 638.

Knight, William Arthur, the chromous chlorides, 1910, P., 47.

Knight, William Arthur, and (Miss) Elizabeth Mary Rich, isomeric chromous chlorides, 1910, P., 47; 1911, T., 87.

Knipp, Charles Tobias, rays of positive electricity from the Wehnelt cathode, 1912, A., ii, 9.

Knoblauch, Adolph Heinrich. See Karl Bernhard Lehmann.

Knoch, Max. See Walter Herz, and Otto Ruff.

Knoche, Walter, measurements of the active emanation of sea-water from the Atlantic Ocean, 1909, A., ii, 287.

the emanation content in the seawater and the active deposit from the air between the Chilian Coast and the East Indies. I. and II., 1912, A., ii, 223.

measurements of induced activity in the Bolivian cordilleras, 1912, A., ii, 619.

Knocke, A., volatilisation of difficultly volatile metals, particularly platinum and iron, in evacuated glass vessels,

1909, A., ii, 211.

Knocke, A. See also Friedrich Krafft.

Knöffler, Georg. See Robert Pschorr.

Knöffler, Georg. See Robert Pschorr.
Knöll, Wilhelm. See Rudolf Friedrich
Weinland.

Knöpfer, Gustav, quinic acid, 1907, A., i, 423.

transformation of azines into hydrazones, 1909, A., i, 188. Knöpfer, Gustav, mutual replacement of semicarbazone and phenylhydrazone, 1910, A., i, 432.

mutual replacement of azines and semicarbazones, 1911, A., i, 1033.

Knöpfle, Franz, estimation of lead in tinned utensils, etc., 1909, A., ii, 702.

Knoevenagel, [Heinrich] Emil [Albert]. δ-(1:5-)diketones, 1903, A., i, 636. nature of double linkings, 1903, A., i. 785.

preparation of salts of dialkylaminomethanesulphonic acids, 1904, A.,

condensing action of organic bases,

1905, A., i, 61.

products from condensation fatty aldehydes and negatively-substituted acetic acids, 1905, A., i, 169. ethyl citrylideneacetoacetate, A., i, 170.

nitriles of hydroxy- and amino-carboxylic acids, 1905, A., i, 179.

condensation of ketones with cyanoacetic and malonic acids, 1906, A., i, 482.

two modifications of o-nitrotoluene, 1907, A., i, 202.

Knoevenagel, Emil, and Friedrich Albert, condensation of vanillin with ethyl acetoacetate and its analogues, 1905, A., i, 62.

Knoevenagel, Emil, and Robert Arnot, condensation of salicylaldehyde with ethyl cyanoacetate, ethyl benzoylacetate, or acetylacetone, 1905, A., i,

Knoevenagel, Emil, and Hans Beer, condensation products of high molecular weight from acetone; acid condensation of acetone, 1906, A., i, 964.

Knoevenagel, Emil, and Bernhard Bergdolt, behaviour of methyl \(\Delta^{2:5}\)-dihydroterephthalate at high temperatures and in presence of spongy platinum, 1903, A., i, 830.

behaviour of B-diphenylsuccinonitrile at high temperatures and in presence of spongy palladium, 1903, A., i,

831.

Knoevenagel, Emil, Konrad Bialon, Walter Ruschhaupt, Gustav Schneider, Fritz Croner, and Wilhelm Sänger, products of the condensation of acetylacetone with aldehydes, 1903, A., i,

Knoevenagel, Emil, and Leo Blach, condensation products of high molecular weight from acetone; alkaline condensation of acetone, 1906, A., i, 964.

Knoevenagel, Emil, and Arthur Erler. action of ammonia on cyclohexenone, 1903, A., i, 636.

condensation of benzoylacetone with benzaldehyde, 1903, A., i, 636.

Knoevenagel, Emil, Arthur Erler, and Ernst Reinecke, synthesis in the pyridine series. VI. Hantzsch's dihydropyridine synthesis and its extension, 1903, A., i, 651.

Knoevenagel, Emil, and Julius Fuchs, behaviour of ethyl 3:5-dimethyldihydropyridine-2:6-dicarboxylate high temperatures and in presence of spongy palladium, 1903, A., i, 852.

Knoevenagel, Emil, and Wilhelm Heckel, behavour of benzhydrol when heated alone and in presence of spongy palladium, 1903, A., i, 819. behaviour of benzhydrol when heated in presence of copper powder, 1903, A., i, 820.

Knoevenagel, Emil, and Friedrich Heeren, action of phenylhydrazine on benzylidenebisacetoacetic ester, 1903,

A., i, 660.

Knoevenagel, Emil, and Albert Herz, condensation of cinnamaldehyde with ethyl malonate and acetylacetone, 1905, A., i, 63.

Knoevenagel, Emil, and James Kenner, preparation of sulphinic acids, 1908,

A., i, 970.

Knoevenagel, Emil, Otto Klucke, and Karl Schleussner, alkylated aminoacetonitriles, 1904, A., i, 989.

Knoevenagel, Emil, and Alfons Erich Lange, action of potassium eyanide on the additive compounds of alkali hydrogen sulphites and unsaturated compounds, 1904, A., i, 1027.

Knoevenagel, Emil, Alfons Erich Lange, R.Morisse, Ernst Reinecke, and Edmund Speyer, addition of alkali hydrogen sulphites and of sulphurous acid to unsaturated compounds, 1904, A., i, 1024.

Knoevenagel, Emil, Alfons Erich Lange, Karl Schleussner, and P. Schlüchtereb. formation of additive compounds of hydrogen cyanide and unsaturated compounds, 1904, A., i, 1028.

Knoevenagel, Emil, and Ernst Langensiepen, condensation of salicylaldehyde and of B-hydroxy-a-naphthaldehyde with ethyl acetonedicarboxylate, 1905,

A., i, 64.

Knoevenagel, Emil, and Hans Lebach, acylaminomethanesulphonic salts and their behaviour towards potassium cyanide, 1904, A., i, 994.

Knoevenagel, Emil, and Ernst Mercklin, alkylated aminoacetonitriles, 1904, A.,

Knoevenagel, Emil, and Siegbert Mottek, condensing action of organic bases, 1905, A., i, 61.

Knoevenagel, Emil, and Leo Polack, sulphinic anhydrides, 1908, A., i, 971.

Knoevenagel, Emil, and Oskar Samel, carvone hydrate, 1906, A., i, 296.

Knoevenagel, Emil, and Fritz Schröder, condensation of \(\beta\)-hydroxy-a-naphthaldehyde with ethyl acetoacetate and its analogues, 1905, A., i, 63.

Knoevenagel, Emil, and Rudolf Schwartz, synthesis of a ketone isomeric with

xvlitone, 1906, A., i, 963.

Knoevenagel, Emil, and Alfred Tomasczewski, behaviour of benzoin at high temperatures and in presence of catalytic agents, 1903, A., i, 837.

Leonhard Knoevenagel, Emil. and Walter, condensation of aliphatic nitro-compounds with aromatic aldehydes by means of organic bases, 1905, A., i, 65.

Knoll & Co., soluble arsenates of albumoses and gelatoses, 1903, A., i,

preparation of the hydrates of unsaturated organic compounds, 1906, A., i, 522.

preparation of normal esters from santal oil, 1906, A., i, 972.

preparation of acetyl derivatives of morphine bases, 1907, A., i, 235.

preparation of cotarnine phthalates, 1907, A., i, 235, 549.

preparation of narceine and homonarceine derivatives, 1907, A., i, 236, 958.

preparation of a-bromoisovalerylcarbamide, 1907, A., i, 1017.

preparation of sulphonic acids of acetyl derivatives of morphine, 1907, A., i,

preparation of additive products of alkylnarceine or alkylhomonarceine and their alkyl ethers, 1907, A., i,

preparation of aponarceine, 1907, A., i,

preparation of narcotine derivatives,

1908, A., i, 285. preparation of α-chloroisovalerylcarb-

amide, 1908, A., i, 399. preparation of a-iodoisovalerylcarbamide, 1908, A., i, 769.

preparation of neutral esters from sandal wood oil, 1908, A., i, 1000.

Knoll & Co., preparation of α-bromoisovalerylquinone, 1908, A., i, 1004.

preparation of esters of cellulose and their transformation products by the action of acid anhydrides in the presence of salts, 1909, A., i, 290.

[preparation of phenolphthalein esters],

1909, A., i, 932.

4-isovalerylaminopreparation of 1-phenyl-2:3-dimethyl-5-pyrazolone and of 4-a-bromoisovalerylamino-1-phenyl-2:3-dimethyl-5-pyrazolone, 1911, A., i, 166.

preparation of organic iodo-compounds from the corresponding chloro- and bromo-derivatives by the action of alkali iodides, 1911, A., i, 432.

preparation of compounds from the interaction of cotarnine and amides, imides, or ureides, 1911. A., i, 670.

preparation of a compound of codeine with diethylbarbituric acid, 1912, A., i, 209.

preparation of diarylamines, 1912, A., i, 345.

preparation of organic compounds containing sulphur, 1912, A., i, 759.

condensation of organic compounds with the aid of iodine, 1912, A., i,

Knoop, Franz, formation of aromatic fatty acids in the animal body, 1905, A., ii, 46.

degradation and constitution of histidine, 1907, A., i, 788.

a colour reaction of histidine, 1908, A., ii, 642.

the oxidation of fatty acids, 1908, A., ii, 720.

physiological degradation of acids and the synthesis of an amino-acid in animals, 1910, A., ii, 880.

Knoop, Franz, and Hans Hoessli, synthesis of a-amino-acids, 1906, A., i,

Knoop, Franz, and Ernst Kertess, behaviour of a-amino- and a-ketonic acids in animals, 1911, A., ii, 514.

Knoop, Franz, and Adolf Windaus, relationships between carbohydrates and the nitrogenous products of metabolism, 1905, A., i, 509.

constitution of histidine, 1905, A., i,

Knoop, Franz. See also Gustav Embden, Yashiro Kotake, and Adolf Windaus.

Knop, Joseph. See Friedrich Kehrmann. Knopf, A., and Waldemar Theodore Schaller, two new boron minerals of contact-metamorphic origin, 1908, A., ii, 507.

Knopp, Otto, thermo-elements, 1909, A., ii. 640.

Knopp, W., solubility of hydrogen and nitrons oxide in water as affected by different dissociated substances, 1904, A., ii, 542.

Knorr, Angelo, new type of quinhydrone compound, 1910, A., i. 324.

constitution of quinhydrone-like substances, 1911, A., i, 654.

See also Wilhelm Knorr, Angelo.

Schlenk. Knorr, Edouard, optically active pmethoxymandelic acids, 1904, A., i,

Franz, detection of carbon disulphide, hydrogen sulphide, and other compounds containing sulphur (albumin) in fats and oils, 1912, A., ii, 990.

Knorr, Josef, assay of fuming sulphuric

acid, 1912, A., ii, 1209.

Knorr, Ludwig, wandering of a methyl group in pyrazole derivatives, 1903, A., i, 528.

morphine. IV. Conversion of codeine into thebenine, morphothebaine, and methylthebaol, 1903, A., i, 849.

constitution of ethyl acetoacetate, 1904, A., i, 846. synthesis of dimethylaminoethyl ether,

1904, A., i, 854.

aminoethyl ether, 1904, A., i, 854. morphine. V. New basic products from methylmorphimethine; tetramethylethylenediamine and methylaminoethyl ether, 1904, A., i, 916.

morphine. VI. Dimethylaminoethyl ether as a decomposition product from thebaine methiodide and codeinone methiodide, 1904, A., i, 916.

synthesis of a piperazine derivative by the polymerisation of chloroethylamine and decomposition of the quaternary salts of piperazine by alkalis, 1904, A., i, 938.

synthetical bases from methylmorphol and thebaol and their behaviour towards reagents which decompose methylmorphimethine, 1905, A., i,

thebainone from codeinone, 1905, A.,

preparation of s-secondary hydrazines from antipyrines, 1906, A., i, 893.

Knorr, Ludwig, and Henry Winder Brownsdon, alcohol bases from ethylenediamine; ethylenebismorpholine, 1903, A., i, 153.

morpholylhydrazine, 1903, A., i, 154.

Knorr, Ludwig, Howard Butler, and Heinrich Hörlein, 4-codeine, 1909, A.,

Knorr. Ludwig, and Hermann Fischer, studies on tautomerism. V. Enolic forms of methyl benzoylacetate and acetylacetone, 1911, A., i, 976.

Knorr, Ludwig, and Walter Hartmann, morphine. XXIII. Preparation and hydrolysis of an iodocodeide, 1912, A., i, 489.

XXIV. Methods morphine. preparation of ethers of \u03c4-codeine,

1912, A., i, 489.

Knorr, Ludwig, and Kurt Hess, synthesis of 2:4-dimethyl-3-ethyl-pyrrole, a contribution to the question of the constitution of hæmopyrrole, 1911, A., i, 1019.

an attempt to synthesise 2:3-dimethyl-4-ethylpyrrole (hæmopyrrole), 1912,

A., i, 900.

acetylpyrroles, 1912, A., i, 900.

Knorr, Ludwig, and William Longton Hicks, a new case of tautomerism,

1906, A., i, 795.

Knorr, Ludwig, and Heinrich Hörlein, the application of Hantzsch's ammonia reaction to the enolic forms of ethyl diacetylsuccinate, 1904, A., i, 846.

morphine. VII. Conversion of thebaine into codeinone and codeine,

1906, A., i, 449. orphine. VIII. Trihydroxyphenmorphine. anthrene from hydroxycodeine, 1906, A., i, 877.

a fifth methylmorphimethine, 1907,

A., i, 151.

chlorocodide into conversion of ψ-codeine, 1907, A., i, 151.

behaviour of chlorocodide on reduc-

tion, 1907, A., i, 235. morphine. IX. isoCodeinone and the isomerism of codeine, isocodeine, and ψ -codeine, 1907, A., i, 547.

morphine. X. 9-Amino-3:4-dimethoxyphenanthrene and 3:4-dimethoxyphenanthrene-9-carboxylic acid,

1907, A., i, 548. orphine. XI. Hydroxymethylmorphine. morphimethine (ketodihydromethyl-

morphimethine), 1907, A., i, 548.
morphine. XII. The point of attachment of the side-ring containing nitrogen in codeine and the constitution of morphine alkaloids, 1907, A., i. 789.

morphine. XVI. New chlorocodide,

1908, A., i, 41.

Knorr, Ludwig, and Heinrich Hörlein, morphine. XVII. Relationship of isocodeine to codeine, 1908, A., i, 42.

morphine. XVIII. Hydrolytic products of α- and β-chlorocodide,

1908, A., i, 361.

synthesis of 3:4:8-trihydroxyphenanthrene derivatives, 1909, A., i, 918.

Knorr, Ludwig, Heinrich Hörlein, and Clemens Grimme, morphine. XIV. allo-ψ-Codeine, a new isomeride of codeine, 1907, A., i, 956.

Knorr, Ludwig, Heinrich Hörlein, and Paul Roth, piperidoethyl ether, 1905, A., i, 821. piperazine derivatives from methyl-

chloroethylamine and chloroethylpiperidine, 1905, A., i, 834.

Knorr, Ludwig, Heinrich Hörlein, and Franz Staubach, morphine. XX. Acetoxyacetylcodeine, 1909, A., i,

morphine, XXI. Acetoxyacetyl derivatives of isocodeine, \(\psi\)-codeine, and allo-\u03c4-codeine, 1909, A., i,

Knorr, Ludwig, and E. Jochheim, 5hydroxy-1-phenyl-3:4:4-trimethylpyrazoline and its conversion into 1phenyl-3:4:5-trimethylpyrazole, 1903, A., i, 528.

Knorr, Ludwig, and Alfred Köhler, s-dimethylhydrazine, 1906, A., i, 817. Knorr, Ludwig, and Georg Meyer, am-

inoethyl ether, 1905, A., i, 747. Knorr, Ludwig, Paul Morentz, and Hermann Pemsel, aminopyrazoles,

1904, A., i, 939. Knorr, Ludwig, and Fritz Müller, pyrazole series. III. Antipyrine,

1903, A., i, 659.

Knorr, Ludwig, and Robert Pschorr, degradation of morphothebaine to non-nitrogenous phenanthrene derivatives, 1905, A., i, 814.

decomposition products of thebainone,

1905, A., i, 922.

Knorr, Ludwig, and Felix Raabe, morphine. XIX. Relationship between ψ-apocodeine and apomorphine, 1908, A., i, 908.

Knorr, Ludwig, and Paul Rössler, ethanolamine, 1903, A., i, 465.

Knorr, Ludwig, and Paul Roth, synthesis and degradation of an octacyclic nuclear-homologue of 1:4dimethylpiperazine dimethochloride,

1906, A., i, 457. morphine. XIII. Action of oxalic acid on codeine, 1907, A., i, 790.

Knorr, Ludwig, and Paul Roth, methyl ether of codeine and its behaviour on exhaustive methylation. Morphine. XII., 1911, A., i, 1014. Knorr, Ludwig, O. Rothe, and H. Aver-

beck, studies on tautomerism. IV. Desmotropy of acetoacetic ester, 1911,

A., i, 516.

Knorr, Ludwig, and Wilhelm Schneider, degradation of hydroxycodeine by exhaustive methylation, 1906, A., i, 449.

Knorr, Ludwig, and Hermann Schubert, studies on tautomerism. VI. Colorimetric method for the estimation of enols in allelotropic mixtures, 1911. A., i, 948.

Knorr, Ludwig, and Rudolf Waentig, morphine. XV. Deoxycodeine and deoxydihydrocodeine, 1907, A., i,

957.

Knorr, Ludwig, and Arno Weidel, hydrazophenylmethyl [s-phenylmethylhydrazine] from phenylpyrazole, 1909, A., i, 965.

Knorr, Ludwig. See also Fritz Ach. Knorre, Georg [Karl] von, preparation of nitrogen from ammonium nitrite,

1903, A., ii, 205.

magnesium carbonate and some of the double compounds which it forms, 1903, A., ii, 370. estimation of manganese in the

presence of iron, 1903, A., ii, 760. separation of chromium from iron and

aluminium, 1904, A., ii, 92.

employment of persulphates for quantitative separations, 1904, A., ii, 213; 1905, A., ii, 285.

separation of iron and zirconium and other metals by means of nitrosoβ-naphthol, 1904, A., ii, 518.

estimation of tungsten, 1905, A., ii, 286.

estimation of sulphuric acid by means of benzidine hydrochloride, and the estimation of sulphur in pyrites, 1905, A., ii, 351.

separation of tungstic acid from phosphoric acid, 1908, A., ii, 231.

separation of tungsten from chromium; estimation of tungsten in steel containing chromium, 1908, A., ii,

analysis of coal-gas and similar gaseous mixtures; estimation of nitrogen in coal-gas, 1909, A., ii, 698.

estimation of sulphuric acid by the "benzidine process," particularly in the presence of chromium, 1910, A., ii, 545.

Knorre, Georg von, and Emil Schäfer, potassium-tungsten bronze, 1903, A., ii, 23.

Knothe, Max. See Johannes Scheiber. Knott, Cargill Gilston, magnetisation

and resistance of nickel wire at high temperatures, 1905, A., ii, 228.

Andrews' measurements of the compression of carbon dioxide and of mixtures of carbon dioxide and nitrogen, 1910, A., ii, 187.

Knowles, George E., alizarin-red IWS as indicator in volumetric analysis,

1907, A., ii, 389.

Knowles, Robert Edward. See Benjamin Moore.

Knowlton, Frank P., the influence of colloids on diuresis, 1912, A., ii, 71.

Knowlton, Frank P., and Ernest Henry Starling, the influence of temperature and blood-pressure on the isolated mammalian heart, 1912, A., ii, 571.

Knowlton, Herbert Stanley. See David

Runciman Boyd.

Knox, G. D. See John Addyman Gardner. Knox, Joseph, ions derived from sulphur and complex ions containing mercury, 1906, A., ii, 608.

sulphur anion and complex sulphur

anions, 1908, A., ii, 830.

the solubility of bismuth trisulphide in alkali sulphides and of bismuth trioxide in alkali hydroxides, 1909, T., 1760; P., 226.

the volumetric estimation of mercury and the estimation of silver in presence of mercury, 1909, T., 1768;

P., 227.

Knox, Joseph. See also Francis Robert Japp.

Knox, Louis. See James R. Bailey. Knudsen, Martin, laws of the molecularand viscosity-diffusion of gases through tubes, 1909, A., ii, 216.

molecular diffusion of gases through pores and [the phenomenon of] effusion, 1909, A., ii, 385.

thermal molecular pressure of gases in tubes, 1911, A., ii, 188.

the molecular heat conduction of gases and the accommodation coefficient, 1911, A., ii, 368.

Knudsen, Peter, preparation of amines by electrolytic reduction, 1903, A., i, 795.

electrolytic reduction of aldehyde ammonias in sulphuric acid solution, 1909, A., i, 890.

Kny, Leopold, physiological meaning of the hairs of Stellaria media, 1910, A., ii, 443.

Kob, Eduard, new wash-bottle, 1904, A., ii, 611.

Kobayashi, Eiichi. See Rikō Majima. Kobayashi, Matsusuke, the alloys of tellurium with cadmium and tin. 1911, A., ii, 40.

the alloys of tellurium with zinc, 1911, A., ii, 1089.

composition of thorianite, 1912, A., ii, 1181.

Kober, Hermann, See Ludwig Medicus. Kober, Max. See August Michaelis. Kober, Paul. See Hermann Staudinger.

Kober, Philip Adolph, apparatus for the quantitative distillation of ammonia, 1908, A., ii, 776.

ammonia distillation in the presence of magnesium or calcium salts, 1908,

A., ii, 893.

preparation and use of asbestos for Gooch crucibles, 1909, A., ii, 610.

quantitative distillation of ammonia by aeration. II., 1910, A., ii, 651. a method for the study of proteoclastic enzymes, 1911, A., i, 824.

Kober, Philip Adolph, William G. Lyle, and J. Theodore Marshall, chemical tests for blood, 1910, A., ii, 910.

Kober, Philip Adolph, and J. Theodore Marshall, phenolphthalein and its colourless salts, 1911, A., i, 300. preparation of tribasic phenolphthal-

ates, 1911, A., i, 984.

Kober, Philip Adolph, J. Theodore Marshall, and E. N. Rosenfeld, phenolphthalein and its colourless salts. III. Preparation of monobasic phenolphthalates, 1912, A., i, 865.

Kober, Philip Adolph, and K. Sugiura, the copper complexes of aminoacids, peptides, and peptones, 1912,

A., i, 952.

copper complexes of amino-acids, peptides, and peptones. II. Their configurations and relation to the biuret reaction, 1912, A., i, 953.

Kober, Philip Adolph. See also Phæbus A. Levene, and K. Sugiura.

Kober, Samy. See Karl Löffler.

Kobert, Karl, reaction of phloroglucinolhydrochloric acid with essential oils, 1908, A., ii, 72.

pharmacological action of certain 2:5pyrines, 1912, A., ii, 472.

Karl. See also Kobert, August

Michaelis.

Kobert, [Eduard] Rudolf, hæmocyanin and hæmerythrin, 1903, A., ii, 741. saponin substances, 1904, A., i, 905. pyrazolone derivatives, 1907, A., i, 1084.

Kobert, [Eduard] Rudolf, saponins, 1911, A., i, 898.

Kobert, Rudolf. See also Julius Wilhelm

Brühl.

Koblenck, A., and Walther Löb, the peptide-splitting enzyme of ovaries, 1910, A., ii, 1088.

Kobozeff, L. D., compounds of trichloroand tribromo-acetates with ketones and aldehydes, 1904, A., i, 223.

decomposition of some trichloro- and tribromo-acetates in acetone, 1904, A., i, 469.

Kobozeff, L. D. See also Wladimir F. Timoféeff.

Koburger, Julius. See Wilhelm Autenrieth.

Kobus, J. D., and Th. Marr, tropical soils, 1903, A., ii, 236.

Koch, Adolf. See Edgar Wedekind, and Rudolf Friedrich Weinland.

Koch, Alfred, accumulation of nitrogen in soils by free bacteria, 1910, A., ii, 60. fixation of nitrogen in the soil with the help of cellulose as source of

energy, 1910, A., ii, 536. production of nitrates in arable soils,

1911, A., ii, 922.

action of ether and carbon disulphide on higher and lower plants, 1911, A., ii, 1124.

Koch, Alfred, J. Litzendorff, F. Krull, and A. Alves, fixation of nitrogen in soil by free bacteria, and its importance for the nutrition of plants, 1908, A., ii, 56.

Koch, Alfred, and G. Lüken, changes in a light sandy soil when sterilised,

1907, A., ii, 647.

Koch, Alfred, and H. Pettit, differences in denitrification in soils and in liquids,

1910, A., ii, 333.

Koch, Alfred, and Siegfried Seydel, cellobiose as a source of energy for nitrogen fixation by azotobacter, 1912, A., ii, 77.

the process of nitrogen assimilation by azotobacter, 1912, A., ii, 77.

Koch, Arthur Alexander. See Gustav Fernekes, and Frederick Pearson Treadwell.

Koch, Arthur E. See F. A. Norton. Koch, Alfred R. See Richard Sidney Curtiss.

Koch, Berthold. See Carl Bülow.

Koch, Carl. See Carl Paal.

Koch, E., changes of phosphatic nutrients in the human body, 1909, A., ii, 162.

Koch, Erich, estimation of the alkalis in drinking waters, 1909, A., ii, 761.

Koch, Erich. See also Karl Lendrich. Koch, Franz. See Alfred Wohl.

Koch, Fred C., histidine in pig's thyreo. globulin, 1911, A., i, 407.

Koch, Hans. See Friedrich Flade.

Hermann, isolation of pure Koch. selenium from the residues of the lead chamber, 1906, A., ii, 609.

absorption spectrum of aniline in the

ultra-violet, 1911, A., ii, 786.

Koch, Hugo, estimation of free acid, copper, and arsenic in [electrolytic] copper lyes, 1907, A., ii, 198.

volumetric estimation of lead [as sulphide], 1908, A., ii, 227.

Koch, John, determination of refractive indices of hydrogen, carbon dioxide, and oxygen in the infra-red, 1905, A., ii. 661.

See Fritz Foerster. Koch, Max. See Herman Decker. Koch, Otto. Koch, P. See Leo A. Tschugaeff. Koch, Peter. See Paul Pfeiffer.

Koch, Waldemar, the lecithans and their function in the life of the cell, 1903.

A., i, 301.

quantitative analysis of brain and spinal cord, 1904, A., ii, 498.

origin of creatinine, 1905, A., ii, 182. excretion of creatinin, 1906, A., ii, 108. metabolism of the nervous system. 1906, A., ii, 182.

the amount of lecithin in milk, 1906,

A., ii, 467.

relation of electrolytes to lecithin and kephalin, 1907, A., i, 573.

estimation of extractive and protein phosphorus, 1907, A., ii, 659. sulphur compounds of the nervous

system, 1908, A., ii, 52.

methods for the quantitative chemical analysis of animal tissues. I. General principles, 1910, A., ii, 78.

the importance of phosphatides for the

living cell. II., 1910, A., ii, 142. sulphur compounds of the nervous system. II. A sulphatide from nerve substance, 1911, A, ii, 129. should the term protagon be retained?

1912, A., i, 233.

Koch, Waldemar, and Emma P. Carr, methods for the quantitative chemical analysis of animal tissues. III. Estimation of the proximate constituents, 1910, A., ii, 79.

Waldemar, and William Koch, Goodson, chemistry of nerve de-

generation, 1906, A., ii, 183.

Koch, Waldemar, and Sidney A. Mann, composition of human brain different ages, 1908, A., ii, 307.

Koch, Waldemar, and Sidney A. Mann, chemical analysis of brain, 1909, A.,

methods for the quantitative chemical analysis of animal tissures. Collection and preservation of

material, 1910, A., ii, 79.
Koch, Waldemar, and Fred W. Upson, methods for the quantitative chemical analysis of animal tissues. IV. Estimation of the elements, with special reference to sulphur, 1910, A., ii, 79.

Koch. Waldemar, and Herbert S. Woods, estimation of lecithins, 1906, A., ii, 136.

Koch, Wilhelm. See Robert Pschorr. Koch, W. F., the occurrence of methylguanidine in the urine of parathyroid-

ectomised animals, 1912, A., ii, 1194. Kochmann, Martin, flesh feeding and gout, 1903, A., ii, 317.

quantitative changes in the composition of the inorganic constituents of tissues in phosphorus poisoning, 1907, A., ii, 902.

influence of ethyl alcohol on yeast fermentation, 1909, A., ii, 336.

- calcium metabolism and its relationship to phosphoric acid and magnesium metabolism, 1910, A., ii,
- the dependence of calcium metabolism on the organic constituents of the food in a grown dog, with some observations on phosphoric acid and magnesium metabolism, 1911, A., ii, 410.

the influence of the various components of diet and of the ingestion of various iron preparations on iron metabolism, 1911, A., ii, 1004.

the action of phosphorus on the calcium metabolism of the dog, 1912, A., ii,

\$ 372.

Kochmann, Martin, and Walter Hall, influence of alcohol on metabolism in animals during inanition, 1909, A., ii, 414.

Kochmann, Martin, and Ernst Petzsch. the dependence of calcium metabolism on the organic constituents of the food in a grown dog, with some observations on phosphoric acid and magnesium metabolism. II. and III., 1911, A., ii, 506.

Wilhelm Martin, and Kochmann, Strecker, a gas-volumetric method for estimation of ether and chloroform vapour in atmospheric air, 1912, A., ii, 1003.

Kock, Arnold Cornelis de, formation and transition of liquid mixed crystals. 1904, A., ii, 548.

Koczirz, Fritz, the estimation of volatile acids in wines, 1912, A., ii, 211.

Koebner, Max, estimation of tannins in white wines, 1908, A., ii, 240.

Köck, G., importance of formaldehyde in protecting plants, 1906, A., ii, 887.

Köckritz, Arno. See Karl Auwers.

Koefoed, R., remarks of the iodometric titration of acids and Kjeldahl's nitrogen estimation, 1911, A., ii. 67.

Kögel, Walter. See Max Busch.

Köhl, Wilhelm, By-diaminoadipie acid and a new method of preparing yamino-acids, 1903, A., i, 234.

Koehler, A. See Edmond Emile Blaise. Köhler, Alfred. See Ludwig Knorr, and Eduard Vongerichten.

Köhler, Albin, Franz Honcamp, and P. Eisenkolbe, assimilation of phosphoric acid and calcium from calcium phosphates by growing animals, 1907, A., ii. 282.

Köhler, Albin, Franz Honcamp, M. Just, Justus Volhard, M. Popp, and Otto Zahn, assimilation of calcium and phosphoric acid from various calcium phosphates by growing animals, 1905, A., ii, 265.

Köhler, Albin, Franz Honcamp, M. Just, Justus Volhard, and G. Wicke, feeding experiments on the utilisation of rye and wheat brans of different degrees, 1903, A., ii, 681.

Friedrich. See Heinrich Koehler,

Kiliani.

Köhler, Fritz. See Ernst Mohr.

Koehler, Fritz C., the [physiological] action of phenolphthalein, 1911, A., ii, 515.

Köhler, Hugo. See Eduard Gildemeister, and Otto Wallach.

Köhler, John, estimation of arsenic, 1904, A., ii, 588.

chemical investigation of resin from the pine (Picea excelsa). II. Leevopimaric acid, 1911, A., i, 295.

occurrence and method of formation of resin-acids. II., 1912, A., i, 638.

chemical examination of pine-resin (from Picea excelsa). III., 1912, A., i, 639.

Köhler, John. See also Peter Klason.

See Du Roi. Köhler, Robert.

Köhres, Georg. See Erich Beschke. Köhres, H. See Richard Möhlau.

Koelichen, Karl. See Friedrich Wilhelm Küster.

Koelker, Arthur Heinrich, the study of enzymes by means of the synthetical polypeptides, 1910, A., i, 794.

preparation of the polypeptolytic ferment of yeast, 1910, A., i, 798.

d-a-aminobutyric acid and aminobutyrylglycine, 1911, A., i, 773.

enzyme of saliva which decomposes di-

and tri-peptides, 1912, A., ii, 181.

Koelker, Arthur Heinrich, and J. Morris Slemons, the amino-acids in the mature human placenta, 1911, A.,

Koelker, Arthur Heinrich. See also

Emil Abderhalden, and Emil Fischer.
Koelker, William F., and B. W.
Hammer, utilisation of amino-acids and polypeptones by the tubercle bacillus, 1910, A., ii, 737.

Koelker, William F. See also Emil

Fischer.

Koelsch, Hermann. See Alfred Thiel. Koenig, Adolf, the diamond problem, 1906, A., ii, 610.

Koenig, Adolf. See also and Wilhelm Holwech. See also Fritz Haber,

König, Berthold, spatial formula for benzene, 1905, A., i, 185.

König, Berthold, and Stanislaus von Kostanecki, leuco-derivatives of hydroxy-ketones, 1907, A., i, 62.

König, C. See Eduard Laubé.

Koenig, Georg August, melanochalcite, keweenawite, etc., 1903, A., ii, 156. artificial production of crystallised domeykite, etc., 1904, A., ii, 491.

König, James. See Lothar Wöhler. König, [Franz] Josef, estimation of cellulose and lignin in foods and fodders, 1903, A., ii, 764.

estimation of the fertility and manurial requirements of soils, 1905, A., ii, 278.

decomposition of vegetable foods by bacteria, 1905, A., ii, 747.

estimation of cellulose, lignin, and cutin in crude fibre, 1906, A., ii, 905.

estimation of crude fibre and separation of cellulose, lignin, and cutin, 1908, A., ii, 236.

König, Josef, and Joseph Bettels, the carbohydrates of marine Algæ and their products, 1905, A., ii, 851.

König, Josef, Ernst Coppenrath, and Julius Hasenbäumer, relation between the properties of the soil and assimilation by plants, 1907, A., ii, 647.

König, Josef, August Fürstenberg, and Rudolf Murdfield, the cell membrane and its constituents, 1906, A., ii, 793.

König, Josef, and Julius Hasenbäumer, effect of sulphurous acid on plants and fishes, 1903, A., ii, 748.

the measurement of osmotic pressure,

1909, A., ii, 555.

König, Josef, Julius Hasenbäumer, and E. Coppenrath, some new properties of soils, 1906, A., ii, 303.

König, Josef, Julius Hasenbäumer, and H. Grossmann, some properties of the organic matter in the soil; the osmotic pressure of the soil moisture, 1908, A., ii, 888.

König, Josef, Julius Hasenbäumer, and Carol Hassler, estimation of colloids in arable soil, 1911, A., ii, 1033.

the treatment of soil with a strong, continuous electric current, 1912,

A., ii, 84.

König, Josef, Julius Hasenbäumer, and Heinrich Meyering, importance of osmotic pressure and of electrolytic conductivity in judging soils, 1910, A., ii, 1104.

König, Josef, and Paul Hörmann, separation of carbohydrates by pure yeasts,

1907, A., ii, 202.

König, Josef, and Fr. Hühn, estimation of cellulose in woods and textile fibres, 1912, A., ii, 1005, 1105.

König, Josef, and P. Rintelen, proteins of wheat gluten. I. Proteins of wheat meal, 1904, A., i, 1066,

proteins of wheat gluten and its relations to the baking properties of wheat flour, 1905, A., ii, 113.

Konig, Josef, Alb. Spieckermann, and Heinrich Kuttenkeuler, decomposition of vegetable foods [by micro-organ-isms] in absence of air, 1906, A., ii, 298.

König, Josef, Alb. Spieckermann, and A. Olig, decomposition of fodder and foods by micro-organisms. IV. Decomposition of vegetable foods by bacteria, 1903, A., ii, 386, 447.

König, Josef, Alb. Spieckermann, and Frédéric Seiler, decomposition of fodder and foods by micro-organisms. V. Composition of the products formed by the bacteria, 1905, A., ii, 472.

König, Josef, Alb. Spieckermann, and Josef Tillmans, decomposition of fodder and foods by micro-organisms. Organisms producing "ropiness" and slime in milk, 1903, A., ii, 169.

König, Josef, and Wilhelm Sutthoff, socalled nitrogen-free extract substances

in foods, 1909, A., ii, 608.

König, Josef. See also Walter Greifenhagen.

Koenig, Paul, employment of chromium salts for combating plague, 1911, A., ii. 311.

an organic reagent for chromium, 1911,

A., ii, 337.

the stimulative and toxic effects of various chromium compounds on plants, 1911, A., ii, 524.

Koenig, Robert. See Louis Kahlen-

berg.

König, Walter, action of nitriles on carboxylic acids, 1904, A., i, 296.

a new class of colouring matters derived from pyridine, 1904, A., i, 449, 816.

formation from furfuraldehyde of colouring matters derived from pyridine, 1906, A., i, 109.

constitution of the cyanine dyes, 1906, A., i, 207; 1912, A., i, 729.

pseudo-bases of the pyridine series, 1911, A., i, 485.

the reactivity of the β-unsubstituted pyrrole ring, 1911, A., i, 808.

interaction of thiocyanates and bromine in aqueous solution, 1912, A., i, 16.

a peculiar auxochrome action, 1912, A., i, 306.

quinoline-indole dyes, 1912, A., i, 654.

König, Walter, and Richard Bayer, rupture of the pyridine ring, 1911, A., i, 399.

König, Walter, and Georg Albert Becker, relation between the colour and constitution on the pyridine dyes from secondary aromatic amines, 1912, A., i, 495.

Koenig, Wilhelm, estimation of nicotine in tobacco extracts, 1911, A., ii,

672, 1143.

the estimation of methyl alcohol in mixtures with ethyl alcohol, especially in brandy, 1912, A., ii, 1003.

König, Wilhelm (Halle). See Daniel Vorländer.

König, Wilhelm (Rostock). See Richard Stoermer.

Koeniger, P. See A. Bezdzik.

Koenigs, Ernst, and Bruno Mylo, some amides of amino-acids, 1909, A., i, 87.

Koenigs, Ernst. See also Emil Fischer.
Koenigs, Wilhelm, β-ethylquinuclidine,
1904, A., i, 925.

Koenigs, Wilhelm, and Alfons von Bentheim, condensation of 2:4:6-trimethylpyridine with benzaldehyde, 1906, A., i, 37. Koenigs, Wilhelm, and Karl Bernhart, reduction of 4-methyl-3-ethylpyridine with sodium and alcohol, 1905, A., i, 824.

3:4-diethylpyridine, 3:4-diethylpiperidine, and 3-ethylquinuclidine, 1905,

A., i, 824.

a tetrahydroaldehydecollidine [2-methyl-5-ethyltetrahydropyridine], 1906, A., i, 36,

1-p-hydroxybenzylpiperidine, 1908,

A., i, 285.

Koenigs, Wilhelm, Karl Bernhart, and Josef Ibele, meroquinenine and the constitution of the cinchona alkaloids, 1906, A., i, 762.
the oxime of 1-methylcinchotoxine

the oxime of 1-methylcinchotoxine and its transformation by the Beckmann reaction, 1907, A., i, 345.

oximes of 1-methylcinchotoxine and 1-methylcinchotintoxine and their transformation by the Beckmann reaction, 1907, A., i, 717.

tetrahydropyridine bases, 1907, A., i,

791.

Koenigs, Wilhelm, and Gustav Happe, piperidyl-2-acetic acid and condensation of γ-picoline [4-methylpyridine] and of 2:6-dimethylpyridine with formaldehyde, 1903, A., i, 850.

Koenigs, Wilhelm, and Alfred Mengel, derivatives of 2:4-dimethylquinoline and 2:4:6-trimethylpyridine, 1904,

A., i, 527.

Koenigs, Wilhelm, and Alfred Müller, 4-quinolylacrylic acid and 4-quinolylpropionic acid, 1904, A., i, 527.

Koenigsberger, Johann Georg, the mineral deposits in the biotiteprotogine of the Aar Massive, Switzerland, 1903, A., ii, 558.

temperature gradients of the earth on the hypothesis of radioactive and chemical processes, 1906, A., ii, 515.

conduction of electricity, 1909, A., ii, 289.

the atomic heats of the elements, 1911, A., ii, 580.

thermal conductivity of graphite and diamond, 1912, A., ii, 231.

electrical behaviour of certain sulphides and oxides and the continuity and reversibility of physical properties in different modifications of solid substances, 1912, A., ii, 419.

the share of the free electrons in the specific heat, 1912, A., ii, 427.

the critical temperature of mercury, 1912, A., ii, 1134.

Koenigsberger, Johann Georg, and Karl Kilchling, behaviour of bound and "free" electrons towards electromagnetic radiation, 1909, A., ii, 367.

behaviour of bound electrons in solid substances towards electromagnetic radiation, 1910, A., ii, 679.

canal rays, 1911, A., ii, 86.

Koenigsberger, Johann Georg, and K. Küpferer, connexion between band spectrum and chemical dissociation, 1910, A., ii, 670.

absorption of light by solid and gaseous substances, 1912, A., ii, 405.

Johann Georg, and Koenigsberger, Wolf Müller, fluid enclosures of Alpine quartz crystals, 1906, A., ii. 235.

formation of quartz and silicates,

1906, A., ii, 553.

Koenigsberger, Johann Georg, and Otto Reichenheim, electrical conductivity and absorptive power for heat radiations of metallic sulphides and oxides occurring naturally, 1905, A., ii,

Koenigsberger, Johann Georg, and Karl Schilling, conduction of electricity in solid elements and compounds. Resistance minima, electronic conduction, and the application of dissociation formulæ, 1910, A., ii, 481.

Koenigsberger, Johann Georg, and J. Weiss, the thermo-electric effects Thomson (thermo-electric forces, effect) and the thermal conductivity of certain elements and compounds and the experimental examination of the electron theories, 1911, A., ii, 578.

Koenigsberger, Johann Georg. See also Wilhelm Autenrieth, J. Weiss, and Wolf Müller.

Koenigsfeld, Harry, the physico-chemical bases of the Seliwanoff lævulose reaction, 1912, A., i, 163.

Koepke, Hans. See Richard Escales. Koepp & Co., Rudolf, preparation of oxalates from formates, 1906, A., i, 4.

Köppe, Ernst. See Herbert Gorke. Köppe, Hans, the laking of red corpuscles, 1903, A., ii, 736.

toxins and antitoxins from the physico-chemical point of view, and the laking of red corpuscles, 1904, A., ii, 650.

laking of red corpuscles; estimation of the volume of the blood-corpuscles, 1905, A., ii, 331.

Köppen, A. See Alfred Wohl.

Koeppen, Albert, betaine ethyl ester hydrochloride, 1905, A., i, 176.

preparation of trimethylamine by methylation of ammonia by means of formaldehyde, 1905, A., i, 328.

Köppen. Karl von. See Guido Bodländer.

Koepsel, Adolf, a new electrical method for the continuous analysis of gas mixtures, and its application to the measurement of the velocity of gas currents, 1909, A., ii, 89, 610.

Körber, Friedrich, influence of pressure on the electrolytic conductivity of

solutions, 1909, A., ii, 719.

influence of pressure and temperature on the electrolytic conductivity of solutions, 1911, A., ii, 863; 1912, A., ii, 889.

the two limiting volumes of liquids at the absolute zero of temperature and at infinitely large pressure, 1912,

A., ii, 538.

Körber, Heinrich, behaviour of formaldehydes towards various solvents, 1904. A., i. 852.

Koerber, U. See Carl Johann Blacher. Körbs, A., differences in the rate of solution on different crystal-faces. 1907, A., ii, 787.

variation of crystal-habit in sodium chloride, 1907, A., ii, 787.

Körner, H., derivatives of dithiocarbaminoacetic acid, 1908, A., i, 509.

Körner, J. A., clays of Alsace, 1903, A., ii, 30.

Körner, Theo., a new centrifugal apparatus for laboratory use, 1907, A., ii, 161.

preparation of alcohol from substances containing cellulose, 1908, A., i, 955.

Körner. Wilhelm, so-called aromatic substances containing six atoms of carbon, 1906, A., i, 640.

congratulatory address to, 1910, P.,

Körner, Wilhelm, and Belasio, iodination of m-nitroaniline by means of iodine and potassium iodate, 1908, A., i, 778.

Körner, Wilhelm, and Angelo Contardi, the sixth dibromonitrobenzene,

1906, A., i, 641.

the sixth di-iodonitrobenzene, 1907, A., i, 117.

the sixth tribromonitrobenzene and some of its derivatives, 1907, A., i, 118.

the four dinitro-derivatives of o-dibromobenzene, 1907, A., i, 690.

Körner, Wilhelm, and Angelo Contardi, action of bromine or of sodium hypobromite on m-nitroaniline and some of its halogen substitution derivatives, 1908, A., i, 523.

action of calcium hypochlorite on mnitroaniline, 1909, A., i, 220.

Körner, Wilhelm, and Bartolo Lino Vanzetti, olivil, its composition and constitution, 1903, A., i, 430. olivil, 1912, A., i, 352.

Korosy, Kornél von, absorption of pro-

tein, 1908, A., ii, 960.

parenteral administration of protein, 1910, A., ii, 1084.

radioactivity and ferment action, 1911,

Körösy, Kornél von. See also Emil Abderhalden.

Köster. J., electrolytic separation of iron and manganese, 1903, A., ii, 760.

electrolytic estimation of manganese, 1904, A., ii, 781.

deposition of metallic chromium in the electrolytic estimation of manganese by Engel's method, 1911, A., ii, 230.

Koestler, Guido, chemical composition of the whey and curd during the manufacture of Emmentaler cheese, 1906, A., ii, 485.

See Daniel Vor-Köthner. Franz. lander.

Köthner, Paul, probable atomic weight of tellurium, and atomic weight calculations in general, 1903, A., ii. 360.

atomic weight of iodine, 1905, A., ii, 310.

Köthner, Paul, and Ernst Aeuer, atomic weight of iodine, 1904, A., ii, 556; 1905, A., ii, 81, 156.

Köthner, Paul. See also Theodore William Richards.

Koetschau, Rudolf. See Carl Dietrich

Harries. Kötz, [Friedrich] Arthur, [formation of carbon rings], 1903, A., i, 700.

fission phenomena in the trimethylene (cyclopropane) group, 1903, A., i, 742.

formation of dichloroacetic acid from trichloroacetaldehyde by Wallach's method, 1910, A., i, 151.

preparation of di- and tetra-hydro-Bketonic acids or their esters, 1910,

A., i, 258.

preparation of a-monohalogen-substitution products of hydroaromatic B-ketonic-carboxylic esters, 1910, A., i, 258.

Kötz, [Friedrich] Arthur, reactivity of atomic groups containing sulphur, 1912, A., ii, 1157.

Kötz, Arthur, and Erwin Anger, o-menth-

ene-5-one, 1911, A., i, 309.

Kötz, Arthur, Arthur Bieber, Albert Harzer, Gustav Kayser, and Paul Schüler, syntheses by means of the carboxylic esters of cyclic ketones. VI. Dicarboxylic esters of cyclic monoketones, 1907, A., i, 59.

Kötz, Arthur, Arthur Bieber, Ludwig Hesse, and Adolf Schwarz, syntheses by means of the carboxylic esters of cylic ketones. VII. Influence of the alkyl groups on the synthesis and degradation of 1-alkylcyclohexane-2one-1-carboxylic esters, 1908, A., i,

Kötz, Arthur, Arthur Bieber, and Paul Schüler, ay-diketocarboxylic esters of the cyclopentane and bicyclo-(0:1:3)hexane groups, 1906, A., i, 668.

Kötz, Arthur, and C. Götz, transitions from hydroaromatic to aromatic compounds. I. Phenol and salicylic acid from hydrobenzene derivatives, 1908, A., i, 173.

Kötz, Arthur, and Th. Grethe, A1:5-dihydrophenol or A2-cyclohexenone,

1910, A., i, 24.

Kötz, Arthur, and Ludwig Hesse, synthesis by means of the carboxylic esters of cyclic ketones; synthesis of menthone from methylhexanone, 1906, A., i, 88.

Kötz, Arthur, and Gustav Kayser, synthesis by means of the carboxylic esters of cyclic ketones. III. Dicyclic systems of indirectly connected six-atom rings, 1906, A., i, 676.

Kötz, Arthur, Gustav Kayser, Adolph Kempe, and Johannes Sielisch, cyclotrimethylene compounds. III. Synthesis of cyclopropanecarboxylic acids,

1907, A., i, 705.

Kötz, Arthur, and B. Merkel, action of ammonia and amines on tetrahydrosalicylic esters, 1909, A., i, 157. Kötz. Arthur, and Albert Michels, syn-

thesis by means of the carboxylic esters of cyclic ketones. II. Synthesis of m-methane-2-one and of mmethane-4-one from 1-methylcyclohexane-2-one and 1-methylcyclohexane-4-one, 1906, A., i, 666.

syntheses by means of the carboxylic esters of cyclic ketones. IV. Synthesis of 1-isopropyl-2-cyclohexanone and of m-menthane-2-one from cyclo-

hexanone, 1907, A., i, 58.

Kötz, Arthur, and Richard Rosenbusch. constitution of tropilen, 1911, A., i,

Kötz, Arthur, and Ernst Schaeffer. reduction of hydroxymethylene com-

pounds, 1912, A., i, 603.

Kötz, Arthur, and Paul Schüler, syntheses by means of the carboxylic esters of cyclic ketones. V. Synthesis of 1-methyl-3-isopropyl-2-cyclopentanone (dihydrocamphophorone or dihydropulegone) from ethyl 2-cyclopentanone-1-carboxylate, 1907, A., i, 58.

Kötz, Arthur, and Adolf Schwarz, syntheses of optically active p-menthone,

1908, A., i, 37.

Kötz, Arthur, and Paul Spiess, formation of cyclopentane compounds, 1903, A.,

Kötz, Arthur, and Gerhard Stalmann, cyclotrimethylene compounds, 1903,

A., i, 741.

ötz, Arthur, and H. Steinhorst, halogenated alicyclic ketones. I. Monohalogenides of cyclohexanones, 1911, A., i, 210.

Kötz, Arthur, and Willy Zörnig, be-haviour of chloroform towards methylene and methenyl groups, 1907, A.,

i, 111.

Kof, Karl, and Hugo Haehn, production of images on photographic plates by the action of the vapours arising from dissolved mercuric chloride; a case of reaction radiation, 1907, A., ii, 732.

detection of very small quantities of mercuric chloride, 1908, A., ii, 69.

Kof, Karl. See also Theodor Curtius. Kofler, Martin, measurements of the absorption coefficients of radium emanation in solutions and mixtures, 1908, A., ii, 80.

Kogan, D. See Fritz Ullmann.

Kohan, Marie, mercury poisoning with the simultaneous action of hirudin, 1909, A., ii, 902.

Kohl, Friedrich Georg, pigments of diatom-chromatophores, 1906, A.,

assimilative function of carotin and the second assimilative maximum at F., 1906, A., ii, 792.

reversibility of enzyme actions and the effect of external factors on enzymes (invertase, maltase), 1910, A., i, 82.

Kohler, Elmer Peter, diphenylstyryl-carbinol, 1903, A., i, 483.

addition of acid sulphites to cinnamylidenemalonic acid, 1904, A., i, 320.

Kohler, Elmer Peter, reaction between unsaturated compounds and organic magnesium compounds, 1904, A., i,

action of organo-magnesium pounds' on cinnamylideneaceto-

phenone, 1905, A., i, 358.

reaction between unsaturated pounds and organic magnesium compounds. VI. Reactions with ethyl benzylidenemalonate, 1905, A., i, 700.

reaction between unsaturated compounds and organic magnesium compounds. VIII. Reactions with aBunsaturated nitriles, 1906, A., i, 427.

reaction between unsaturated compounds and organic magnesium compounds. IX. Reactions with stereoisomerides, 1906, A., i, 753.

reaction between unsaturated compounds and organic magnesium compounds. X. Reactions with amethylcinnamic acid, 1907, A., i, 139.

reaction between unsaturated compounds and organic magnesium compounds. XII. Aldehydes and ketones, 1907, A., i, 1050.

triphenylindene and some of its derivatives, 1908, A., i, 777.

action of alkali hydroxides on a-bromoketones, 1909, A., i, 394.

phenyl vinyl ketone and some of its homologues, 1909, A., i, 938. unsaturated 8-ketonic acids, 1911, A.,

i, 984.

Kohler, Elmer Peter, and M. Cloyd Burnley, reaction between unsaturated compounds and organic magnesium compounds. XIII. Derivatives of cyclohexane, 1910, A., i, 391.

Kohler, Elmer Peter, and (Miss) Mary Violet Dover, reaction between unsaturated compounds and organic XI. Cyclic magnesium compounds.

ketones, 1907, A., i, 535.

Kohler, Elmer Peter, and Gertrude L. Heritage, reaction between organic magnesium compounds and unsaturated compounds. II. Reactions with derivatives of cinnamic acid, 1905, A., i, 207.

reaction between unsaturated compounds and organic magnesium IV. Reactions with compounds. esters of a-phenylcinnamic acid,

1905, A., i, 208.

reaction between organic magnesium compounds and unsaturated com-VII. Complex products pounds. from cinnamic esters, 1906, A., i, 96. Kohler, Elmer Peter, and Gertrude L. Heritage, reaction between unsaturated compounds and organic zinc compounds, 1910, A., i, 484.

Kohler, Elmer Peter, Gertrude L. Heritage, and M. Cloyd Burnley, the Freidel-Crafts' reaction with chlorides of unsaturated acids, 1910, A., i, 562.

Kohler, Elmer Peter, Gertrude L.
Heritage, and (Miss) Annie Louise
Macleod, reaction between unsaturated
compounds and organic zinc compounds, II., 1911, A., i, 862.

Kohler, Elmer Peter, and Ruth M. Johnstin, reactions between organic magnesium compounds and unsaturated compounds. III. Reactions with compounds containing bromine, 1905, A., i, 215.

Kohler, Elmer Peter, and (Miss) Marie Reimer, additive reactions of sulphinic acids, 1904, A., i, 233.

reaction between unsaturated compounds and organic magnesium compounds. V. Reactions with αcyanocinnamic acid, 1905, A., i, 347.

Kohler, Rudolf, quadriurates, 1911, A., i, 243, 690.

1, 243, 690. Kohlhaas, Jacob. See Karl Fries. Kohlhaus, Wilhelm. See Gustav Schultz. Kohlmann, Curt. See Hans Stobbe.

Kohlmann, Paul. See Hans Stobbe. Kohlmeyer, Ernst J., the fusion of ferric oxide, 1909, A., ii, 581.

solubility of silver oxide in litharge, 1912, A., ii, 1054.

Kohlmeyer, Ernst J. See also Siegfried Hilpert.

Kohlrausch, Arnt, the behaviour of betaine, methylpyridinium hydroxide, and trigonelline in the animal organism, 1909, A., ii, 918; 1912, A., ii, 74.

Kohlrausch, Friedrich [Wilhelm Georg], behaviour of water relatively to air, 1903, A., ii, 125.

resistance of the ions and the mechanical friction of the solvent, 1903, A., ii, 403.

[solubility and size of grain], 1904, A., ii, 321.

action of Becquerel rays on water, 1904, A., ii, 692; 1906, A., ii, 717.

solubility of some sparingly soluble salts in water at 18°, 1905, A., ii, 152.

variation in the conductivity of a solution with temperature, 1907, A., ii, 328.

Kohlrausch, Friedrich [Wilhelm Georg], ionic mobilities in water, 1907, A., ii, 600.

conductivity of dilute acids, 1907, A., ii, 840.

temperature-coefficients of ionic mobilities in water as a function of the mobilities, 1908, A., ii, 264.

electrochemical equivalent of silver, especially in reference to the socalled anode liquid, 1908, A., ii, 657.

saturated aqueous solutions of sparingly soluble salts. II. The amounts dissolved and their alteration with temperature, 1908, A., ii, 814.

practical rules for correcting numbers, especially in changing to another system of atomic weights, 1910, A., ii, 403.

Kohlrausch, Friedrich, and Eduard Grüneisen, conductivity of aqueous solutions of electrolytes with bivalent ions, 1904, A., ii, 700.

Kohlrausch, Friedrich, and Fritz Henning, conductivity of aqueous solutions of radium bromide, 1904, A., ii, 700; 1906, A., ii, 717.

Kohlrausch, Friedrich, and Franz Mylius, aqueous solutions of magnesium oxalate, 1904, A., i, 850.

Kohlrausch, Friedrich, Friedrich Rose, and Friedrich Dolezalek, saturated aqueous solutions of difficultly soluble salts. I. Electrical conductivity, 1903, A., ii, 528.

Kohlrausch, Friedrich, and Rudolf H.
Weber, electrochemical equivalent and

temperature, 1908, A., ii, 82.

Kohlrausch, F. L., and Errich Plate, the ingestion and exerction of radium emanations by the human organism, 1909, A., ii, 913.

Kohlrausch, F. L. See also Franz Nagelschmidt.

Kohlschütter, [Johannes] Volkmar, metallic derivatives of thiocarbamide, 1903, A., i, 468.

the action of nitric oxide on chromous salts, 1904, A., ii, 737.

cathodic evaporation of metals in attenuated gases, 1907, A., ii, 7; 1908, A., ii, 799, 800; 1909, A., ii, 639.

the reduction of silver oxide by hydrogen; colloidal silver, 1908, A., ii, 182.

chemical or physical theory of volatilisation (of cathodes), 1908, A., ii, 925.

volatilisation of cathodes. VI., 1910, A., ii, 96. Kohlschütter, [Johannes] Volkmar, chemical action of canal rays, 1911, A., ii, 683.

pulverisation by cathode rays, 1912,

A., ii, 719.

influence of the nature of the gas on pulverisation by canal rays, 1912, A., ii, 1030.

Kohlschütter, Volkmar, and Cecil Brittlebank, salts of cuprothiocarbamides,

1906, A., i, 812.

Kohlschütter, Volkmar, and Curt Ehlers, condensation of metallic vapours, 1912, A., ii, 739.

Kohlschütter, Volkmar, and E. Eydmann, modifications of silver. II. Hair-silver, 1912, A., ii, 845.

Kohlschütter, Volkmar, and Emilie Fischmann, modifications of silver. I. Mirror silver, 1912, A., ii, 253.

Kohlschütter, Volkmar, and Th. Goldschmidt, cathodic pulverisation of metals in attenuated gases, 1908, A., ii. 457.

Kohlschütter, Volkmar, and Michael Kutscheroff, metallic nitroso-compounds, 1904, A., ii, 734.

ferronitroso-compounds, 1907, A., ii,

267.

Kohlschütter. Volkmar, and Rudolf Müller, cathodic evaporation of metals in attenuated gases, 1906, A., ii, 418.

Kohlschütter, Volkmar, and Alfred Noll, finely divided metals, 1912, A., ii, 731. Kohlschütter, Volkmar, and Paul Pud-

schies, complex copper compounds,

1904, A., ii, 338.

Kohlschütter, Volkmar, and P. Sazanoff, metal-nitroso-compounds, 1911, A., ii, 730.

Kohlschütter, Volkmar, and Kurt Vogdt, solid solutions of indifferent gases in uranium oxide, 1905, A., ii, 394, 826.

Kohn, Eduard, and Friedrich Czapek, formation of acid and alkali in artificial culture media of moulds, 1906, A., ii, 790. Kohn, Franz, See Arthur Rosenheim.

Kohn, Moritz, diacetone alcohol and mesityl oxide, 1904, A., i, 15.

derivatives of diacetonalkamines, 1904, A., i, 378, 932, 933; 1905, A., i, 928; 1907, A., i, 338, 693.

hydroxy-\(\beta\)-isohexylamine, 1905, A., i. 929.

reduction of blue iron-cyanogen compounds, 1906, A., i, 562.

precipitated basic carbonates of zinc and cadmium, 1906, A., ii, 754.

preparation of amino-alcohols from unsaturated methyl ketones. 1907, A., i, 679.

Kohn, Moritz, diacetoneamine, 1907, A., i. 899.

amino-lactones from diacetone alcohol, 1908, A., i, 819.

aminopyrrolidone derivatives from mesityl oxide and from benzylideneacetone, 1908, A., i. 829.

new double salt of thallium, 1908,

A., ii, 696.

two observations relating to the decomposition of mercuric iodide, 1908,

A., ii, 696.

simple method for the estimation of the halogen in mercuric chloride and mercuric bromide, 1908, A., ii,

a peculiar method of formation of nitrobenzene from m-dinitrobenzene,

1909, A., i, 561.

the lactones of ay-dihydroxy-ay-dimethylvaleric acid and a-methylamino-y-hydroxy-ay-dimethylvaleric acid, 1909, A., i, 599.

the solubility of cuprous iodide, 1909,

A., ii, 891.

formation of o-nitrotoluene from 2:4dinitrotoluene, 1910, A., i, 660.

new group of substituted dioxindoles, 1910, A., i, 697.

a red compound of cuprous iodide with quinoline methiodide, 1912, A., i, 801.

Kohn, Moritz, and Friedrich Bum, aminopyrrolidone derivatives from mesityl oxide and amino-lactones from diacetone alcohol, 1910, A., i,

action of tribromophenol and p-bromophenol on toluene in the presence of aluminium chloride, 1912, A., i,

Kohn, Moritz, and Jakov Giaconi, preparation of amino-alcohols from unsaturated methyl ketones. II., 1907, A., i, 680.

Kohn, Moritz, and Artur Klein, reactions of the isatins, 1912, A., i,800. preparation of the hydrochlorides of quinoline- and pyridine-iodochlor-ides, 1912, A., i, 1017. Kohn, Moritz, and Gustav Lindauer,

oxime of diacetone alcohol and a

hydroxyhexylamine, 1903, A., i, 73. Kohn, Moritz, and Otto Morgenstern, derivatives of diacetonalkamine. VI. and VIII., 1907, A., i, 681, 683. δ-amino-β-methylamino-β-methylpen-

tane, 1908, A., 1, 769.

Kohn, Moritz, and Noe L. Müller, behaviour of tribromophenol towards benzene in the presence of aluminium chloride, 1909, A., i, 567.

Kohn, Moritz, and Alfons Ostersetzer, new derivatives of dioxindole, 1912, A., i, 50.

Kohn, Moritz, and Karl Schlegl, derivatives of diacetonalkamine. VII.,

1907, A., i, 682.

Kohn, Moritz, and August Schmidt, aminotrimethylacetic [β-amino-ααdimethylpropionic] acid, 1907, A., i, 901.

Kohn, Moritz, and Franz Wenzel, nitroso-derivatives of cyclic acetone bases, 1907, A., i. 237.

Kohn, Moritz. See also Adolf Franke and Armin Hochstetter.

Kohn, Richard. See Josef Herzig.

Kohn, Rudolf, the formation of glycine from leucine in the body, 1903, A., ii, 164.

Kohn, Siegfried, action of dilute sulphuric acid on propionepinacone, 1905, A., i, 167.

assay of sodium silicofluoride, 1907,

A., ii, 814.

possibility of determining the mass of suitable precipitates by observation of their rates of settling, 1908, A., ii, 92.

titration of phosphoric acid in superphosphates, 1908, A., ii, 531, 895.

Kohn, Siegfried, and Leo Wessely, estimation of hydrofluosilicic acid in presence of hydrochloric acid and sodium chloride in sewage, 1907, A., ii, 300.

Kohn-Abrest, Émile, aluminium powder and the oxidation of aluminium, 1904, A., ii, 261.

the atomic weight of aluminium, 1904,

A., ii, 820.

estimation of metallic aluminium in aluminium powder, 1904, A., ii, 844. different states of oxidation of aluminium powder, 1905, A., ii, 637.

cyanogenetic principles of Phaseolus

lunatus, 1906, A., ii, 625.

estimation of hydrocyanic acid in the seeds of *Phaseolus lunatus*, 1907, A., ii, 313.

aluminium; analysis of aluminium powder, 1909, A., ii, 146.

apparatus for estimating hydrogen given off on treating metals with acids, 1909, A., ii, 617.

action of hydrogen chloride on aluminium; method of estimation of metallic aluminium, 1909, A., ii, 735.

action of heat on aluminium in a vacuum, 1910, A., ii, 212.

action of mercuric chloride on aluminium, 1910, A., ii, 506.

Kohn-Abrest, Émile, nitrides and oxides from aluminium heated in air, 1910, A., ii, 506, 715.

new applications of amalgamated aluminium in analyses, 1911, A., ii,

673

extraction and estimation of alkaloids in syrups and saccharine liquids, 1912, A., ii, 398.

action of water on aluminium "activated" by mercury, 1912, A., ii,

768.

rapid estimation of the impurities contained in paints made with zinc

oxide, 1912, A., ii, 867.

Kohn-Abrest, Emile, and J. Carvallo, thermal phenomena which accompany the action of water on aluminium powder, 1909, A., ii, 316.

Kohn-Abrest, Émile, and Rivera-Maltes, influence of various impurities on the activity of aluminium, 1912, A., ii,

648.

Kohn-Abrest, Emile. See also Jules Ogier.

Kohnstamm, Lothair. See Marston

Taylor Bogert.

Kohnstamm, Philipp [Abraham], the equations of Clausius and van der Waals for the mean length of path and number of collisions, 1904, A., ii, 473.

van der Waals' equation of state, 1904,

A., ii, 473.

vapour pressures of binary mixtures in the light of van der Waals'

theory, 1911, A., ii, 93.

Kohnstamm, Philipp, and J. R. Kats, vapour pressure lines of binary systems with widely divergent values of the vapour pressures of the components, 1912, A., ii, 780.

Kohnstamm, Philipp, and L. S. Ornstein, Nernst's theorem of heat and chemical facts, 1912, A., ii,

328.

Kohnstamm, Philipp, and Johan Christiaan Reeders, phenomena of condensation for mixtures of carbonic acid and urethane in connexion with double retrograde condensation, 1909, Λ., ii, 546.

phenomena of condensation for mixtures of carbonic acid and nitrobenzene in connexion with double retrograde condensation, 1911, A.,

ii, 1077.

Kohnstamm, Philipp, and Jean Timmermans, vapour pressures in binary systems with partial miscibility of the liquids, 1911, A., ii, 370. Kohnstamm, Philipp. See also Jean Timmermans.

Kohr. Donald A. See Arthur Amos

Noyes.

Kojo, Kenji, differences in the urine of health and carcinoma, 1911, A., ii, 909.

chemistry of the hen's egg, 1911, A., ii, 1110.

the nitrogen and sulphur content of human blood, 1912, A., ii, 180.

the influence of sulphur and thiocarbamide on the excretion of phenol,

1912, A., ii, 187.

the biological action of mesothorium; the biological action of thorium emanation on men after administration by the alimentary canal, 1912, A., ii, 964.

Kok. B. R. See Conrad Willgerodt. Kolasius. Friedrich. See Ludwig

Wolff.

Kolb, Adalbert, action of hydrogen peroxide on the sulpho-salts of tin, antimony, and arsenic, 1904, A., ii,

action of hydrochloric acid on potassium chlorate, 1906, A., ii, 15.

the calcium silicides and their absorptive power for nitrogen, 1910, A., ii, 35.

[calcium silicides], 1910, A., ii, 1064.

Kolb, Adalbert, and Hermann Ahrle, use of organic acids for the precipitation and separation of thorium dioxide from cerium, lanthanum, and didymium oxides, 1905, A., ii, 288.

Kolb, Adalbert, and Emil Davidson, action of hydrochloric acid on potassium chlorate, 1905, A., ii, 59.

Kolb, Adalbert, and A. Feldhofen, estimation of mercury by reduction with hydrogen peroxide, 1908, A., ii,

Kolb, Adalbert, and R. Formhals, action of potassium iodide and hydrochloric acid on antimonic acid, 1908, A., ii,

volumetric estimation of antimony,

1908, A., ii, 636.

Kolb, Adalbert, G. Melzer, A. Merckle, and C. Teufel, double nitrates and double sulphates of the rare earths, 1909, A., i, 16.

Kolb, Rudolf, comparison of anhydrite, celestine, barytes, and anglesite in respect to the change of their geometrical and optical characters with

temperature, 1911, A., ii, 295. Kolb, Rudolf. See also Fritz Rinne. Kolbe, Gustav, receiver for vacuum distillation, 1908, A., ii, 575.

Kolbeck, Friedrich, an old occurrence of argyrodite at Freiberg, 1908, A., ii,

Koleniew, Alexandre. See Jean Bielecki. Kolhörster, Werner, the radioactive properties of the Carlsbad spring, 1912, A., ii, 524.

Kolker, Max. See Stanislaus von Kos-

tanecki.

Kollegorsky, (Mllc.) E., and (Mllc.) O. Zassouchine, influence of carbohy-drates on the relations of the gas-exchange in yeast, 1904, A., ii,

Koller, Gustav, substitution derivatives of diacylated benzenoid diamines with different acid radicles. 1903, A., i, 281.

preparation of substituted succinimides in aqueous solution, 1904,

A., i, 478.

phthalic anhydride on action of aromatic diamines, 1904, A., i, 778.

Kollisch, Anton. See Otto Diels.

Kollmeyer, Fritz, biological differentiation of milk and milk proteins, 1910, A., ii, 633.

Kollo, Constantin, potassium hydrogen tartrate as standard substance, 1909,

A., ii, 516.

Kollock, (Miss) Lily Gavit, and Edgar Fahs Smith, use of the rotating anode and mercury cathode in electro-analysis, 1905, A., ii, 1906, A., ii, 194.

effect of sulphuric acid on the deposition of metals when using a mercury cathode and rotating anode, 1907,

A., ii, 719.

estimation of indium with the use of a mercury cathode, 1910, A., ii, 1000.

Kollock, (Miss) Lily Gavit. See also Edgar Fahs Smith.

Kolm, Richard, new halogen derivatives of cholesterol, 1912, A., i, 554.

Kolmer, Walter. See Walther Hausшели:

Kolowrat, Léon, disengagement of emanation from radium salts, 1907, A., ii, 729; 1910, A., ii, 91,

tables of radioactive constants, 1910, A., ii, 249.

the slow precipitation of radium sulphate, 1910, A., ii, 767.

the B-rays of radium at its minimum activity, 1910, A., ii, 815.

Kolowrat, Léon, an attempt made to detect the electric conductivity of radium-D, 1912, A., ii, 117.

Kolossovsky, Nicholas de, influence of dissolved salts on the distribution of a substance between two solvents, 1911, A., ii, 591.

law of moduli in the variation of the coefficient of distribution, 1911, A.,

Kolshorn, Erich, amino-ketones, 1904, A., i, 675.

Koltonski, A., the influence of an electric current on the assimilation of carbon dioxide by water plants, 1910, A., ii, 333.

Komar, V., formation of a new salt of the formula Fe'''H(SO₄)₂,4H₂O or Fe₂O₃,4SO₃,9H₂O, 1906, A., ii, 170.

Komarowsky, Abrum, furfuraldehyde and some aromatic aldehydes as a test for fusel oil or isoamyl alcohol in spirits of wine, 1903, A., ii, 700.

volumetric estimation of [combined] sulphuric acid in waters, 1907, A., ii, 577.

rapid estimation of sulphur in coals, 1908, A., ii, 892.

Komatsu, Shigeru, amine salts of phthalamic, phenylphthalamic, and phenylsuccinamic acids, 1909, A., i, 483.

synthesis of thiohydantoin, 1911, A., i, 683.

Komatsu, Shigeru. See also Mitsuru Kuhara.

Komnenos, Telemachos, interchange of alkyl groups in acid esters, 1910, A., i, 361; 1911, A., i, 260.

new synthetical passage from the aliphatic to the aromatic series, 1910, A., i, 362.

by-products obtained during the replacement of the alkyl groups in ethyl malonate, 1910, A., i, 541.

synthetic preparation of esters of αβdiphenylsuccinic acid, 1910, A., i, 672.

action of sodium alkyloxides on ethyl acetoacetate, 1910, A., i, 708.

Komnenos, Telemachos, Ánastase Dambergis, and Basil Aeginitis, the radioactivity of Greek medicinal springs, 1910, A., ii, 678.

Komnenos, Telemachos. See also Anastase Dambergis.

Komp, Rudolf, the green carbon band $\lambda = 5635$, 1911, A., ii, 1041.

Komppa, Gustav, complete synthesis of camphoric acid and dehydrocamphoric acid, 1904, A., i, 141. Komppa, Gustav, dimethylcampholide, 1908, A., i, 352.

complete synthesis of camphor, 1909, A., i, 110.

the camphenilone group. I. Camphenilol, 1909, A., i, 500.

syntheses in the camphor and terpene series. I. Complete synthesis of apocamphoric acid and its derivatives, 1909, A., i, 726.

synthesis of camphoric acid, 1910, P., 328; 1911, T., 29.

syntheses in the camphor and terpene series. II. Complete synthesis of camphoric acid and camphor, 1910, A., i, 51.

oxidation of camphene, 1911, A., i, 388.

complete synthesis of pinophanic acid and the constitution of ketopinic and tricyclenic acid, 1911, A., i, 642.

4:4-dimethylpiperidine, 1912, A., i, 580.

Komppa, Gustav, and S. V. Hintikka, dehydrocamphenylic acid, 1908, A., i, 852.

synthesis of dimethylnoreampholide, 1909, A., i, 301.

Komppa, Gustav, and Tavi Hirn, synthesis of a dicyclic ring-compound, 1904, A., i, 60.

Komppa, Gustav, and Oskar Routala, complete synthesis of ethylapocamphoric acid, 1911, A., i, 381.

Komppa, Gustav. See also S. V. Hintikka.

Kon, Norbert. See Hermann Staudinger.

Kondakoff, *Iwan L.*, fenchene, 1903, A., i, 353.

bornylene, 1903, A., i, 505. phellandrene, 1903, A., i, 845.

[carone and fenchyl alcohol], 1904,

history of the dicyclic thujenes, 1904, A., i, 756.

stereoisomeric menthols, 1905, A., i,

chemistry of bornyl and fenchyl alcohols, 1906, A., i, 520.

hols, 1906, A., i, 520. nomenclature of derivatives of camphane and feuchane, 1907, A., i, 24. buchucamphor, 1907, A., i, 144.

isofenchyl alcohol and its derivatives, 1907, A., i, 713.

thujene and carvestrene dihydrohaloids, 1908, A., i, 195.

phellandrene from water fennel oil, 1908, A., i, 665. fenchyl derivatives, 1909, A., i, 311. Kondakoff, Iwan L., terpinenes, 1909,

A., i, 502.

history of the terpenes, 1909, A., i, 942.

pinene hydro-haloids and their transformation into hydrocarbons of the santene and cyclene types, 1910, A., i, 327.

santene and its hydro-haloids, 1911,

A., i, 998.

Kondakoff, Iwan L., and Iwan Schindelmeiser, derivatives of menthol, 1903, A., i, 350.

fenchyl derivatives, 1903, A., i, 711. synthetical and natural phellandrenes,

1905, A., i, 801; 1907, A., i, 329. Swedish turpentine oil, 1906, A., i,

bornyl and fenchyl derivatives, 1907, A., i, 712.

isolaurolene, 1911, A., i, 998.

Kondakoff, Iwan L., and W. Skworzoff, thujene, 1903, A., i, 642.

thuiyl derivatives, 1904, A., i, 438. some thujene derivatives, 1910, A., i, 754.

Kondo, H., allyloxanthranol and some of its derivatives, 1911, A., i, 67.

Kondo, K. See Katsuji Inouye.

Kondo, Kenro, the constituents of animal organs soluble in ethyl acetate, and their behaviour during autolysis. I. Does the liver contain cholesterol esters? 1910, A., ii, 791.

the constituents of animal organs soluble in ethyl acetate, and their behaviour during autolysis. Does the liver contain an enzyme capable of splitting cholesterol

esters? 1910, A., ii, 791.

the constituents of animal organs soluble in ethyl acetate, and their behaviour during autolysis. The formation of hydroxy-fatty acids during autolysis of the liver, 1910, A., ii, 791.

ethyl acetate extracts of organs and their behaviour in autolysis.

and V., 1910, A., ii, 978.

Kondo, Kura, chondroitinsulphuric acid, 1910, A., i, 600.

the excretion of organically united phosphorus in urine, 1910, A., ii, 1091.

the synthetic formation of amino-acids in the liver. III. The formation in the liver of amino-acids not obtainable by protein hydrolysis, 1912, A., ii, 279.

lactic acid formation in blood.

1912, A., ii, 1063.

Kondo, Kura, lactic acid formation in expressed muscle juice. II., 1912, A., ii, 1072.

Konek-Norwall, Fritz (Edler) von, estimation of sulphur in coals, petroleums, bitumens, and organic substances, 1903, A., ii, 572.

estimation of phosphorus and nitrogen in organic substances, 1904. A., ii.

peroxide in sodium qualitative organic analysis, 1904, A., ii,

estimation of organic carbon by means of sodium peroxide, 1904, A., ii,

electrical elementary analysis, 1906, A., ii, 583.

thio-derivatives of homoantipyrine,

1911, A., i, 505.

Konek-Norwall, Fritz (Edler) von, and Arthur Zöhls, estimation of organic nitrogen by sodium peroxide, 1904, A., ii, 775.

sodium peroxide in organic analysis,

1905, A., ii, 60.

Konen, Heinrich Mathias, spectroscopic

methods, 1903, A., ii, 122.

Konen, Heinrich Mathias, and Hermann Finger, the spectra of spark discharges in liquids, 1909, A., ii, 357.

Konen, Heinrich Mathias, and August Hagenbach, line spectra of the alkalis,

1904, A., ii, 153.

Koninck, Lucien Louis de, new reaction for manganese, nitrates, chlorates, lead peroxide, etc.; composition of perchlorides of lead and manganese, 1903, A., ii, 21.

preparation of pure iodine; action of dry potassium dichromate on alkali bromides, 1903, A., ii, 751.

estimation of nitrates in waters by the Schulze-Schlesing method, 1903,

A., ii, 754.

apparatus for the gasometric evaluation of zinc dust and similar work, 1903, A., ii, 758.

reaction of iron salts with sodium sulphide, 1906, A., ii, 397.

estimation of lead as sulphate, 1907, A., ii, 506.

safety apparatus for ovens, baths, etc., 1908, A., ii, 681.

precipitation of cobalt by potassium nitrite, 1909, A., ii, 269.

precipitation of arsenic by hydrogen sulphide, 1909, A., ii, 345.

precipitation of Fischer's salt (potassium cobaltinitrite), 1909, A., ii, Koninck, Lucien Louis de, preservation of filter-paper; its influence on certain estimations, 1909, A., ii, 611.

iron-alum as a standard in titrations,

1909, A., ii, 611.

cleaning of platinum wires for flame coloration experiments, 1910, A., ii,

modification of Nowicki's gas-absorption pipette, 1910, A., ii, 648. modification of the Winkler-Hempel

gas burette, 1910, A., ii, 648.

Koninck, Lucien Louis de, and M. Grandry, estimation of zinc by Cohn's method, 1903, A., ii, 105.

Koninck, Lucien Louis de, and J. Lebrun, reaction between potassium iodide and mercuric chloride and its analytical application, 1903, A., ii, 42.

Koninck, Lucien Louis de, and Albert Lejeune, use of pinchcock burettes for titrations with iodine and permangan-

ate, 1909, A., ii, 341.

Koninck, Lucien Louis de, and E. von Winiwarter, estimation of carbon in irons, 1908, A., ii, 320.

assay of zinc ores; separation of iron by ammonia, 1912, A., ii, 808.

Koning, Cornelis Johan, biological and biochemical studies on milk, 1905, A., ii, 273.

the decomposition phases of milk,

1905, A., ii, 473.

the acidity of milk, 1905, A., ii, 647. estimation of diastase in milk, 1910, A., ii, 667.

the apparent diastase reaction of water on starch, 1910, A., ii, 667.

Koning, D. A. Wittop. See Jacob Böeseken.

Konjukoff-Dobrynia, P. See A. Sementsoff.

Konowaloff, Dimitri P., determination of the reciprocal actions of substances in solutions by their vapour pressures, 1907, A., ii, 334, 602.

the catalytic action of acids, 1907,

A., ii, 854.

Konowaloff, Iwan, various relations between calcium and magnesium in nutritive solutions, 1909, A., ii, 695.

calcium requirements of plants; different relations of the calcium and magnesium in nutritive solu-

tions, 1911, A., ii, 222.

Konowaloff, Michael I., action of nitric acid on cyclic ketones. I. Action of nitric acid on the ketones, C₁₀H₁₆O, of the terpene series, 1904, A., i, 257.

Konowaloff, Michael I., action of dilute nitricacid on haloid compounds, 1904, A., i, 495, 657; 1907, Â., i, 271.

synthesis of alcohols by means of organo-magnesium compounds. II.,

1904, A., i, 496.

nitro-compounds of the menthane series. II. and III., 1904, A., i, 513; 1907, A., i, 203.

resemblance between iron salts of organic acids and salts of nitro-

derivatives, 1905, A., i, 8.

nitrating action of nitric acid on saturated hydrocarbons. IX. Nitration of o-xylene and its products, 1905, A., i, 762.

new isomeride of heptane; s-tetra-[βδ-dimethylpentmethylpropane

ane], 1906, A., i, 129.

action of nitric acid on saturated hydrocarbons; nitration of saturated hydrocarbons containing two isopropyl groups. XIII., XIV. and XV., 1907, A., i, 1; 1908, A., i, 241.

some derivatives of dehydrocamphol-

enic acid, 1907, A., i, 279.

Konowaloff, Michael I., and Stanislaw Dobrowolsky, diphenylpropanes, especially aa-diphenylpropane, 1905, A., i, 763.

nitrating action of nitric acid on saturated hydrocarbons. XII. Nitration of homologues of diphenylmethane in the side-chain, 1905, A., i, 764.

Konowaloff, Michael I., and Finoguéeff, action of aluminium bromide on

ketones, 1903, A., i, 264.

Konowaloff, Michael I., and Ch. Gurewitsch, nitrating action of nitric acid on saturated hydrocarbons. X. Nitration in acetic acid solution, 1905, A., i, 763.

Konowaloff, Michael I., and M. G. Jatzewitsch, nitrating action of nitric acid on saturated hydrocarbons. XI. Non-nuclear nitration of homologues of diphenylmethane, 1905, A., i, 763.

Konowaloff, Michael I., and (Mlle.) Sinaida Kikina, action of nitric acid on saturated hydrocarbons and their derivatives. VIII. Nitration of dihydrocamphene and of pinene hydrochloride, 1903, A., i, 269.

Konowaloff, Michael I., and N. Manewsky, action of nitric acid on alcohols.

II., 1904, A., i, 496.

Konowaloff, Michael I., and K. Miller, spontaneous transformation of benzophenoneoxime, 1908, A., i, 277.

Konowaloff, Michael I., K. Miller, and Timtschenko, synthesis of alcohols by means of organo-magnesium compounds. III., 1907, A., i, 170.

pounds. III., 1907, A., i, 170.

Konowaloff, Michael I., and Orloff, acids obtained on nitration with dilute nitric acid. I. 3-Methyl-5-tert.-butylbenzoic acid (1:3:5), 1904, A., i, 499.

Konowaloff, Michael I., and Sentsch-

Konowaloff, Michael I., and Sentschikovsky, nitration of p-tolylnitromethane [ω-nitro-p-xylene], 1904, A., i, 657.

Konowaloff, Michael I., and S. Woinitsch-Sianoschensky, preparation of new polymethyleneimines by Ladenburg's method, 1905, A., i, 826. Konowaloff, R. See Alex. Orechoff.

Konowaloff, W. K, See Wladimir W.

Tschelinzeff.

Konschegg, Artur, a new methyleneindoline base, 1905, A., i, 924.

constitution of the indoline base formed from the p-tolylhydrazone of methyl isopropyl ketone, 1906, A., i, 452.

the estimation of the total sulphur in

urine, 1908, A., ii, 628.

behaviour of elementary sulphur in the animal organism, 1910, A., ii, 637.

the reaction between humin and potassium hypobromite, 1911, A., i,

Konschegg, Artur, and Hans Malfatti, soluble iron sulphide, 1907, A., ii, 93. Konschin, Alexander. See Pavel Iw.

Petrenko-Kritschenko.

Konsortium. See Consortium.

Konstantinoff, Nicolaus S., alloys of cobalt and copper, 1907, A., ii, 779. phosphorus compounds of nickel, 1908, A., ii, 855.

phosphorus compounds of iron, 1910,

A., ii, 130.

Konstantinoff, Nicolaus S., and Wladimir A. Smirnoff, alloys of tin and antimony, 1911, A., ii, 1096.

Konstantinoff, Nicolaus S. See also Nicolai S. Kurnakoff, and Richard

Lorenz.

Konto, K., reaction for indole, 1906,

A., ii, 712.

Kontor Chemischer Präparate Ernst Alexander, preparation of menthyl acetylsalicylate [o-acetoxybenzoate], 1912, A., i, 556.

Konwaldt, Adolf. See Rudolf Nietzki.
Koolman, F. C. ten Doornkaat, two new
forms of apparatus for extraction of
liquids with organic solvents, 1911,
A., ii, 877.

Koopal, S. A. See Pieter J. Montagne.

Kooper, W. D. See August Hesse, and Richard Otto.

Kopaczewski, Ladislas, hydrolysis of maltose by dilute acids, 1912, A., i, 751.

influence of different acids on the hydrolysis of maltose by maltase, 1912, A., i, 751.

the influence of antiseptics on the action of maltase, 1912, A., i, 927.

Kopaczewski, Ladislas. See also J. Gaube du Gers.

Kopeć, T. See Jussuf Ibrahim.

Kopenhague, R., new test paper for the volumetric estimation of zinc [with sodium sulphide], 1911, A., ii, 155.

analysis of white metals containing copper, antimony, tin, lead, iron, and zine, 1912, A., ii, 868.

Kopetschni, Eduard. See Fritz Ullmann,

Victor Villiger, and Otto Nikolaus Witt.
Kopetzki, O., movement of nitrogenous
compounds and pentoses in beet

products during fabrication, 1905, A., ii, 194.

Kopiermann, F. See Adolf Heydweiller. Kopitzsch, Hans. See Ludwig Wolff.

Kopp, C. See Herman Decker. Kopp, Émile. See Emilio Noelting.

Koppe, Paul. See Erich Müller.
Koppel, Iwan, formation and solubility relations of copper sodium sulphate, 1903, A., ii, 78.

stability and solubility relations of the hydrates of ceric sulphate, 1904,

A., ii, 819.

chromous sodium thiocyanate, 1905, A., i, 638.

solubility and solution equilibrium of chrome ammonium alum, 1906, A., ii, 860.

the heat of hydration and vapour pressure of the hydrates of thorium sulphate, 1910, A., ii, 691.

Koppel, Iwan, and Emil C. Behrendt, compounds of quadrivalent vanadium, 1903, A., ii, 551.

Koppel, Iwan, and Richard Blumenthal, equilibrium in the system: potassium oxide, chromic acid, and water, 1907, A., ii, 356.

Koppel, Iwan, and M. Cahn, equilibrium in the system: potassium oxalate, oxalic acid, and water, 1908, A., i, 852.

Koppel, Iwan, and Reszö Goldmann, compounds of quadrivalent vanadium. II., 1904, A., i, 7; ii, 41.

Koppel, Iwan, Reszö Goldmann, and A. Kaufmann, compounds of quadrivalent vanadium. III., 1905, A., ii, 593. Koppel, Iwan, and Heinrich Holtkamp, theory of the preparation of thorium salts. I. Purification by means of the sulphate, 1910, A., ii, 717.

Koppel, Iwan, and A. Kaufmann, the preparation of metallic vanadium and some vanadium compounds, 1905,

A., ii, 593.

Koppel, Iwan, H. Wetzel, and Alfred Gumperz, formation and solubility of analogous double salts, 1905, A., ii, 689.

Koppel, Max. See Léon Blum.

Koppeschaar, W. F., new method of estimating magnesium carbonate in limestone, 1905, A., ii, 421.

Koraen, Gunnar, carbon dioxide production in muscular work, 1905, A., ii,

329

Korányi, Sándor, and Gyula Bence, physico-chemical investigation on the action of carbon dioxide on blood, 1906, A., ii, 97.

Korbuly, Michael. See Koloman Farkas,

and Franz Tangl.

Korchow, A. P. See Efim Semen London.

Korczyński, Antoni von, abnormal salts, 1908, A., i, 977; 1909, A., i, 639.

addition of hydrogen ehloride to organic bases and azo-compounds, 1909, A., i, 123.

chromoisomeric salts of o-nitrophenols,

1909, A., i, 148.

addition of hydrogen chloride to substituted anilines at low temperatures, 1910, A., i, 550.

mitrophenol salts, 1911, A., i, 276.

Korczyński, Antoni von. See also
Arthur Hantzsch, and Léon March-

lewski.

Koref, Fritz, the equilibrium in the formation of carbon disulphide, 1910, A., ii, 289.

measurements of specific heat at low temperatures with the copper calorimeter, 1911, A., ii, 964.

characteristic vibration frequencies of elements in compounds, 1912, A.,

ii, 328.

Koref, Fritz, and Hermann Braune, heat of formation of lead iodide and lead

chloride, 1912, A., ii, 1041.

Koref, Fritz. See also Walther Nernst. Korentschewsky, W., comparative pharmacological experiments on the action of poisons on unicellular organisms, 1903, A., ii, 313.

Koritschoner, Franz, abietic acid, 1907,

A., i, 532.

Koritschoner, Franz. See also Alexander Tschirch.

Korjukin, N. D., action of magnesium on a mixture of allyl bromide and piperonal, 1911, A., i, 445.

Korn, Arthur, and Eduard Strauss, the rays emitted by radioactive lead, 1903, A., ii, 463.

relation between the solution pressure and the heat of ionisation of metals, 1904, A., ii, 379.

Korn, Franz. See Paul Praetorius.

Korn, O., estimation of phenol and thiocyanic acid in sewage, 1906, A., ii, 808.

Korndoerfer, A., inversion of sucrose by bees, 1911, A., ii, 1008.

Korndörfer, Georg, isocreatinine, 1904, A., i, 768.

sulphur bromide, 1904, A., ii, 250.

glycocyamine and glycocyamidine, 1905, A., i, 29.

creatinine, 1905, A., i, 152.

Korneck, Otto, analytical methods employed in the estimation of caoutchouc; the estimation of caoutchouc as tetrabromide, 1911, A., ii, 545.

Korsakoff, Marie, action of sodium selenite on the production of carbon dioxide from living and dead yeast, 1910, A., ii, 989.

the influence of cell lipoids on the autolysis of wheat seedlings, 1910, A., ii, 990.

Korsakoff, Marie. See also Wladimir I. Palladin.

Korschun, Georgi Vasiljevitsch, synthesis of trialkylpyrrolemonocarboxylic compounds, 1904, A., i, 264.

action of hydrazine on ethyl asdiacetylpropionate (ethyl 2:5-hexadione-3-carboxylate), 1904, A., i,

action of phenylhydrazine on ethyl aß-diacetylpropionate (ethyl 2:5-hexadione-3-carboxylate), 1904, A., i, 615.

synthesis of methyl 2:5-dimethylpyrrole-3-carboxylate, 1904, A., i,

615.

synthesis of 2:3:5-trimethylpyrrole, 1905, A., i, 373.

preparation of methyl a-chloropropyl ketone, 1908, A., i, 502.

synthesis of ethyl 2:5:-dimethyl-3ethylpyrrole-4-carboxylate, 1908, A., i, 564.

Korschun, Georgi Vasiljevitsch, and C. Roll, interaction of ethyl diacetyl-butyrate and hydrazine, 1911, A., i, 502.

Korschun, Georgi Vasiljevitsch, and Ippolit Alexejevitsch Trefilieff, synthesis of ethyl 1:2:5-trimethylpyrrole-3-carboxylate, 1904, A., i, 264.

Korschun, Georgi Vasiljevitsch. See also

Iwan Pavlovitsch Osipoff.

Korschun, S. W., estimation of oxygen in water, 1907, A., ii, 576.

estination of small quantities of nitrogen and its application to water analysis, 1907, A., ii, 821.

Korschun, S. W. See also Paul Nawiasky.

Korselt, Johannes. See Fritz Ullmann. Korte, Reinhold, quantitative analysis of German silver and similar alloys, 1911, A., ii, 155.

Korte, Reinhold. See also Theodor

Curtius

Korte, Reinhold Frederick, solid solutions, 1905, T., 1503; P., 229.

Korten, Friedrich. See Eberhard Rimbach.

Kosaroff, P., action of carbon dioxide on the movements of water in plants, 1903, A., ii, 94.

Kosegarten, Theodor. See Heinrich

Kosinenko, Wladislaus. See Georg Berju.

Koss, A. K., presence of cholesterol in petroleum, 1911, A., i, 761.

borislav ozokerite, 1911, A, i, 761.

Koss, A. K. See also Wilhelm Steinkopf.

Koss, Morduch, a new reagent for thorium, 1912, A., ii, 809.

Koss, Morduch. See also Richard Josef

Meyer, and Arthur Rosenheim.

Kóssa, Julius von, estimation of uric
acid in bird's urine, 1906, A., ii,

formation of nitrogen trioxide; new test for alcohol, 1906, A., ii, 497.

Kossel, Albrecht [Carl Ludwig Martin Leonhard], preparation and constitution of histidine, 1903, A., i, 784. salmin, 1904, A., i, 211.

formation of protamines in the animal body, 1905, A., ii, 467.

agmatine, 1910, A., i, 500.

synthesis of agmatine, 1910, A., i, 655.

protamines, 1910, A., i, 906.

Kossel, Albrecht, and Alexander Thomas Cameron, free amino-groups of the simplest proteins, 1912, A., i, 326.

Kossel, Albrecht, and Henry Drysdale Dakin, the group of simplest proteins (protamines), 1904, A., i, 355. salmin and clupein, 1904, A., i, 702.

Kossel, Albrecht, and Henry Drysdale Dakin, formation of carbamide by fermentations, 1904, A., i, 840.

arginase, 1904, A., ii, 425.

further researches on protamines, 1905, A., i, 620.

Kossel, Albrecht, and N. Gawrilow, the free amino-groups of the proteins, 1912, A., i, 1041.

Kossel, Albrecht, and Ernest Laurence Kennaway, nitroclupeine, 1911, A., i,

667

Kossel, Albrecht, and Andrew J. Patten analyses of hexone bases, 1903, A., ii, 582.

Kossel, Albrecht, and Harold Pringle, protamines and histones, 1907, A., i, 266.

Kossel, Albrecht, and Hermann Steudel, a basic constituent of the animal cell, 1903, A., i, 303.

cytosine, 1903, A., i, 451, 667.

occurrence of uracil in the animal system, 1903, A., ii, 311.

Kossel, Albrecht, and Franz Weiss, clupeone, 1909, A., i, 344.

action of alkalis on protein, 1909, A., i, 542; 1910, A., i, 791.

detection of ornithine in the cleavage products of proteins, 1910, A., ii, 909.

sturine, 1912, A., i, 591.

Kossel, Walther, secondary radiation in gases for primary rays in the neighbourhood of the optimum velocity, 1912, A., ii, 315.

Kossonogoff, J. J., investigation of electrolysis with the ultramicroscope,

1910, A., ii, 97.

Kossowicz, Alexander, behaviour of yeasts in mineral solution, 1903, Δ., ii, 386.

influence of mycoderma on the reproduction and fermentation of the yeasts. I., 1906, A., ii, 699.

Kossowitsch, Petr S., the rôle of plants in dissolving the undissolved nutritive substances of the soil, 1903, A., ii, 234.

mutual action of salts in the mineral nutrition of plants, 1905, A., i, 548.

estimation of the carbon dioxide given off by roots during their development, 1905, A., ii, 549.

Kossowitsch, Petr S., and J. Tretjakoff, influence of calcium carbonate in the decomposition of organic matter, 1904, A., ii, 142.

Kost, Julius. See Erwin Rupp.
Kostalek, John A. See Richard Sidney
Curtiss.

Kostanecki, Stanislaus von, degradation of brazilin, 1903, A., i, 193.

[2-hydroxydibenzyl], 1905, A., i, 433.

Kostanecki, Stanislaus von, J. W. Engelsohn, and M. Wurzelmann, two monohydroxy-a-naphthaflavonols, 1908, A., i, 359.

Kostanecki, Stanislaus von, Max Kolker, Alfred Tobler, Jacob Rabinowitsch, and Gustav Stenzel, further synthesis in the flavone group, 1907, A., i, 952.

Kostanecki, Stanislaus von, and Stefan Kugler, synthesis of an isomeride of fisetin, 1904, A., i, 440.

Kostanecki, Stanislaus von, and Victor Lampe, synthesis of 2-hydroxyflavonol, 1904, A., i, 440.

a second synthesis of chrysin, 1904, A., i, 911.

catechin, 1907, A., i, 73; 1908, A., i,

maclurin, 1907, A., i, 73.

rupture of the furan ring in catechin, 1907, A., i, 334.

elimination of the methoxy-group, 1908, A., i, 442.

studies in the coumaran group. 1908, A., i, 442.

brazan from naphthalene, 1908, A., i, 671.

brazanquinones, 1908, A., i, 907.

Victor Kostanecki, Stanislaus von, Lampe, and Charles Marschalk, synthesis of leuco-coumaranketones, 1907, A., i, 950.

Stanislaus von, Victor Kostanecki, Lampe, and Josef Tambor, synthesis of fisetin, 1904, A., i, 441.

synthesis of quercitol, 1904, A., i, 517. synthesis of kaempferol, 1904, A., i, 607.

synthesis of galangin, 1904, A., i,

synthesis of morin, 1906, A., i, 301.

Kostanecki, Stanislaus von, Victor Lampe, and S. Triulzi, dyeing properties of 7:2':4'-trihydroxyflavonol, 1906, A., i, 202.

Kostanecki, Stanislaus von, and Lorenzo Lloyd, transformation Lyddon product of the parent substance of brazilin, 1903, A., i, 645.

coloured transformation products of brazilin, 1903, A., i, 645.

Kostanecki, Stanislaus von, and Stanislaus Nitkowski, synthesis of fisetin, 1905, A., i, 915.

Kostanecki, Stanislaus von, and Adolf Ottmann, synthesis of 6:3'-dihydroxyflavonol, 1904, A., i, 442.

Kostanecki, Stanislaus von, and Arnold Rost, naphthalene from the transformation products of hæmatoxylin, 1903, A., i, 646.

Kostanecki, Stanislaus von, Arnold Rost, and Władislaus Szabrański, 2hydroxydibenzyl, 1905, A., i. 341.

Kostanecki, Stanislaus von, and Friedrich Rudse, an isomeride of quercitol, 1905, A., i, 367.

Kostanecki, Stanislaus von, and Otto Schleifenbaum, 7:8:3'-trihydroxyflavonol, 1904, A., i, 683.

Kostanecki, Stanislaus von, and Berthold Schreiber, an isomeride of kaempferol, 1905, A., i, 808.

Kostanecki, Stanislaus von, and Mario L. Stoppani, synthesis of 2:4'-dihydroxyflavonol, 1904, A., i, 441.

synthesis of 7-hydroxyflavonol, 1904, A., i. 443.

Kostanecki, Stanislaus von, and Jacob Sulser, stilbene derivatives, 1905, A., i, 352,

Kostanecki, Stanislaus von, and Wladislaus Szabrański, synthesis of flavonone, 1904, A., i, 684.

synthesis of flavonol, 1904, A., i, 764. Kostanecki, Stanislaus von, and Anton von Szlagier, 7:2'-dihydroxyflavonol, 1905, A., i, 77.

Kostanecki, Stanislaus von, and Josef Tambor, synthesis of vellow vegetable

dyes, 1904, A., i, 426. synthesis of maclurin pentamethyl ether, 1907, A., i, 75.

2-hydroxystilbene, 1909, A., i, 225. studies in the coumaran group. 1909, A., i, 319.

Kostanecki, Stanislaus von, and Albert Widmer, 7:3'-dihydroxyflavonol, 1905, A., i, 78.

Kostanecki, Stanislaus von. See also J. Abelin, Isaac Bernstein, Paul Bigler, Max Blumberg, E. Bonifazi, Marie Brager, Salomon S. Cohen, Etienne Courant, S. Czaplicki, Elkan David, Felix Dobrzyński, H. Dumont, Anna Edelstein, Salomon Fainberg, Casimir Funk, A. von Graffenried, A. Grafmann, Abraham Gutzeit, J. Heller, Edgar Jochum, Carl Juppen, Alex. Katschalowsky, Berthold König, Tadeusch Milobendzki, (Frl.) Gertrud Woker, and Felicia Zwayer.

Kostytscheff, S., thymonucleic acid, 1904, A., i, 127.

respiration-enzymes of moulds, 1904, A., ii, 633.

alcoholic fermentation of Aspergillus niger, 1907, A., ii, 381.

Kostytscheff, S., excretion of hydrogen by seed-bearing plants, 1907, A., ii, 385.

production of hydrogen during the respiration of fungi, 1907, A., ii,

anaerobic respiration without production of alcohol, 1907, A., ii, 571; 1908, A., ii, 416.

the relation between plant respiration and alcoholic fermentation, 1909,

A., ii, 84.

the rôle of zymases in the respiratory processes of seed-plants, 1909, A.,

ii. 173.

the influence of fermented sugar solutions on the respiration of wheat seedlings, 1910, A., ii, 148.

a peculiar type of plant respiration,

1910, A., ii, 532.

the mechanism of the oxidation of sugar in plant respiration, 1910, A., ii, 740.

formation of acetaldehyde in the alcoholic fermentation of sugar, 1912,

A., ii, 589.

Kostytscheff, S., and Elise Hübbenet, alcoholic fermentation. II. The conversion of acetaldehyde into ethyl alcohol by living and dead yeast, 1912, A., ii, 860.

Kostytscheff, S., and Scheloumoff, action of fermentation products and phosphates on the respiration of plants,

1912, A., ii, 1202. Kostytscheff, S. See also Wladimir I. Palladin.

Kotake. Yashiro, fate of vanillin in the animal body, 1905, A., ii, 645. decomposition of caffeine by extract of

ox-liver, 1908, A., ii, 1055.

1-hydroxyphenyl-lactic acid and its occurrence in the urine of dogs suffering from phosphorus poisoning, 1910, A., i, 384.

isolation of erythrodextrin from the urine of a dog, 1910, A., ii, 528.

the behaviour of p-hydroxyphenyllactic acid and p-hydroxyphenylpyruvic acid in the animal body, 1911, A., ii, 59. Kotake, Yashiro, and Franz Knoop,

crystalline protein from the latex of Antiaris toxicaria, 1912, A., ii, 81.

Kotake, Yashiro, and Y. Sera, does a change of fat into glycogen occur in the silk-worm during metamorphosis? 1909, A., ii, 912.

Kotake, Yashiro. See also Alexander Ellinger, Katsuji Inouye, and Junichi

Mochizuki.

Kotelmann, Paul. See August Michaelis. Kotschubey, A., composition of benzidine chromate, 1905, A., i, 549.

Kotukoff, I. I. See Alexander M.

Nastukoff.

Kouznetzow. See Kusnetzoff. Kovačević, J. See Adolf Franke.

Kovách, Laura, electric potential of cyanogen iodide, 1912, A., ii, 728.

Kovache, A. See Alfred Guyot.

Kovacs, A. See Philippe Auguste Guye. Kovář, František, mineral analysis, 1903, A., ii, 553.

analyses of Moravian minerals, 1903,

A., ii, 556.

composition of minerals of the bole group, 1903, A., ii, 557.

[graphite from Moravia; nigrine (?) from Bohemia], 1905, A., ii, 173. [meerschaum and jarosite], 1905, A.,

ii, 175.

Kovarik, Alois F., absorption and reflexion of the B-particles by matter, 1910, A., it, 1021.

the half-period of actinium-C, 1911,

A., ii, 173.

mobility of the positive and negative ions in gases at high pressures, 1912, A., ii, 221.

recoil atoms in ionised air, 1912, A.,

ii, 1121.

Kovarik, Alois F., and W. Wilson, the reflexion of homogeneous β-particles of different velocities, 1910, A., ii, 1022.

Kovarik, Alois F., and C. Zakrzewski, the influence of changes of temperature and pressure in gases on the movement of the ions shown by ultraviolet light, 1911, A., ii, 572.

Kovarik, Alois F. See also Hans Geiger. Kowalewsky, Katharina, the fate of histidine in the body of the dog, 1910, A., ii, 147.

composition of nucleic acid from yeast,

1910, A., i, 906.

Kowalewsky, Katharina, and M. Markewicz, the fate of ammonia in the dog when ammonium carbonate is injected into the blood, 1907, A., ii, 569.

Kowalewsky, Katharina. See also Sergei

Salaskin.

Kowalski[-Wierusz], Joseph de, phos-phorescence at low temperatures, 1908, A., ii, 79; 1910, A., ii, 1016.

decline of low-temperature phosphorescence, 1909, A., ii, 282.

luminescence. III. Deviations from Stokes' law, 1910, A., ii, 371.

luminescence. IV. Absorption and phosphorescence of certain organic compounds, 1910, A., ii, 371.

Kowalskif-Wierusz], Joseph de, phosphorescence of organic compounds at low temperatures, 1912, A., ii, 217.

Kowalski, Joseph de, and E. Banasinski, absorption of light by solutions of benzene and some of its derivatives at low temperature, 1912, A., ii, 1019.

Kowalski, Joseph de, and J. de Dzierzbicki, spectrum of progressive phosphorescence of organic compounds at low temperatures, 1911, A., ii, 3.

influence of substituent groups on the spectrum of progressive phosphorescence, 1911, A., ii, 84.

Kowalski, Joseph de, and Charles Garnier, phosphorescence of rare earths. 1907, A., ii, 418.

optimum of phosphorescence, 1907,

A., ii, 727.

Kowalski, Joseph de. See also J. de Dzierzbicki.

Kowarski, S. See Otto Kym.

Kowerski. Karol. See Carl Adam Bischoff.

Kowski, Eugen. See Wilhelm Lossen. Kozai, Yoshinao, natural curdling of milk, 1903, A., ii, 446.

bactericidal action of sodium phenylpropiolate, 1906, A., ii, 380.

soils of acid reaction, 1909, A., ii, 87. Kozaī, Yoshinao, and Oscar Loew, fungicide actions of cultivations of fungi, 1904, A., ii, 764.

Kozak, Jun, derivatives of o- and ptert.-butyltoluenes, 1907, A., i,

403.

action of potassium hydroxide on acetyl-\psi-isatindioxime, 1909, A., i,

Kozak, Jan. See also Ludwik Bruner. Kozłowski, Stanislas, the ratio of in-organic bases to acids in normal human urine, 1909, A., ii, 505.

a new spectro-colorimetric method of estimating indican in the urine,

1911, A., ii, 553.

Koźniewski, Tadeusz, iodine derivatives of cinchona alkaloids, 1909, A., i, 826.

alkaloids in the roots of Sanguinaria canadensis, 1910, A., i, 874.

Koźniewski, Tadeusz, and Léon Marchlewski, studies in the chlorophyll group, 1907, A., i, 866.

Pechmann's dye [from benzoylacrylic acid]. I., 1906, A., i, 759.

conversion of phyllotaonin into phytorhodins, 1908, A., i, 668.

Kozniewski, Tadeusz. See also Józef Buraczewski, and Léon Marchlewski. Kraale, G. See Wladimir I. Palladin.

Kraemer, Adolf, oxalylaminoacetic acid: a product of the oxidation of glycylglycine, 1907, A., i, 114. Kraemer, Adolf. See also Emil Fischer.

Kraemer, Gustav [Wilhelm], decomposition of polymeric compounds: truxene from coumarone-tar, 1903, A.,

Krämer, Hans. See Hermann Grossmann.

Kraemer, Henry, the copper treatment of water, 1905, A., ii, 108; 1906, A., ii. 302.

Kraencker, Jacob. See Rudolph Fittig. Kränzlein, Georg, preparation of nitrobenzaldehyde sulphides, 1910, A., i, 390.

Kränzlein, Georg. See also Wilhelm Manchot.

Krafft, Erhard von. See Carl Bülow. [Wilhelm Ludwig] Friedrich [Emil], evaporation and boiling of metals in quartz-glass and in the electric oven in the vacuum of the cathode-light, 1903, A., ii, 479.

purification of esters of high molecular weight by vacuum distillation, 1904,

A., i, 136.

production of high vacua without the use of mercury pumps or liquid air, 1904, A., ii, 164.

boiling point vacuum; a new constant and its meaning, 1905, A., ii, 144.

derivatives of sebacic acid, 1906, A., i,

significance of water in the formation of colloidal "bubbles" from soaps, 1906, A., ii, 276.

fractional distillation of higher normal paraffins from lignite in the vacuum of the cathode light, 1908, A., i, 1.

use of a vacuum for drying salts containing water of crystallisation, 1908, A., ii, 29.

vacuum distillation and the effect of gravity on the boiling point, 1909,

A., ii, 969.

effect of gravity on the boiling point; determination of the boiling point under the ordinary pressure, 1909, A., ii, 969.

Rechenberg's views as to the vaporisation occurring in the cathode light vacuum as a proof of the new theory of volatilisation, 1910, A., ii, 484.

boiling in a vacuum regarded as the formation of an atmosphere, 1910,

A., ii, 485.

Krafft, Friedrich, and Ludwig Bergfeld, lowest temperature of evaporation of metals in the vacuum of the cathode light, 1905, A., ii, 144.

Krafft, Friedrich, and A. Knocke, volatility of arsenic and thallium in vacuum and a method of calculating the boiling points of metals, 1909, A., ii. 211.

Krafft, Friedrich, and Paul Lehmann. molecular weight determination by the rise of the boiling point in the cathode light vacuum, 1905, A., ii, 143.

Krafft, Friedrich, and Ludwig Merz, boiling of sulphur, selenium, and tellurium in the vacuum of the cathode

light, 1904, A., ii, 114. Krafft, Friedrich. See also F. Damm.

and Max Stoecker.

Krafft, Peter. See Heinrich Ley. Kraft, F. See Rudolf Weissgerber. Kraft, Friedrich, filmarone, the active

constituent of Filix extract, 1903, A., i, 571; 1904, A., i, 1039.

ergot, 1906, A., i, 979.

crystalline hydroergotinine sulphate, 1908, A., i, 203.

glucosides from the leaves of Digitalis purpurea, 1911, A., i, 734; 1912, A., i, 373.

Kraft, Fritz. See Hartwig Franzen.

Kraft, Hermann. See Carl Graebe. Kraft, Karl. See F. Kellenberger, and Wilhelm Muthmann.

Kraft, L. See Adolf Beythien.

Kraft, Wilhelm, hordein and bynin, a contribution to our knowledge of the alcoholic extracts of barley and malt albumin, 1910, A., i, 792.

Kraft, Willy. See Franz Sachs.

Krailsheimer, Robert, estimation of the [physiological] activity of certain members of the digitalin group, 1910, A., ii, 530.

Krainsky, A., accumulation of nitrogen

in soils, 1910, A., ii, 236. Kramer, Erwin. See Antoine Nicolas Franchimont, and Paul Pfeiffer.

Kramer, S. P., the function of the choroid glands and its relation to the toxicity of cerebro-spinal fluid, 1911, A., ii, 1006.

Kramers, Gerard Hendrik. See Amé Pictet.

Kramm, Friedrich. See Emil Abderhalden.

Krammer, A., aromatic carbamides, 1912, A., i, 916.

Krampera, J. See Julius Toth.

Kramszky, Ludwig, composition of the dried grapes used in the preparation of Tokay wine, 1906, A., ii, 119. estimation of tannin in wine, 1906,

A., ii, 134.

Kranendieck, Franz. See Max Bodenstein.

Krantz, L. See Eduard Vongerichten. Krapf, Hermann. See Max Busch.

Krapiwin, Sergei G., action of acetyl haloids on unsaturated hydrocarbons in the presence of aluminium haloids, 1910, A., i, 349.

rate of formation of sodium acetothiosulphate, 1912, A., ii, 926.

Kraske, Brigitte, lactic acid formation in blood. II., 1912, A., ii, 1063.

Krasnoselskaya, T. See O. Walter. Krasnosselsky, T., respiration and fermentation of mould fungi in roll cultures, 1905, A., ii, 108.

formation of respiration enzymes in injured bulbs of Allium 1906, A., ii, 572.

histopeptone, 1907, A., i, 267.

Krasowsky, N., fatty oils from the seeds of the berries of Rhamnus cathartica, 1906, A., ii, 883.

berries of Rhamnus cathartica and the methods of separating the substances contained therein, 1909, A., ii, 174.

Krasowsky, N. See also Nicolai A. Waljaschko.

Krassa, P., passivity of iron, 1909, A.,

ii, 738; 1910, A., ii, 129. Krassa, P. See also Friedrich Epstein.

Krasser, J. M., estimation of phosphoric acid by Neumann's method, 1911, A., ii. 333.

Krassusky, Konstantin, formation of aldehydes and ketones from a-glycols and from a-oxides, 1903, A., i, 8. mechanism of the isomerisation of a-

oxides, 1903, A., i, 8.

addition of hydrogen chloride to isobutylene oxide, 1907, A., i, 459.

ψ-butylene chlorohydrin, OH CHMe. CHMe Cl, 1907, A., i, 999.

the order of the addition of ammonia to organic as-a-oxides, 1908, A., i,

Krassusky, Konstantin, and L. Duda, action of ammonia on the oxides and chlorohydrins of hexylene and tetramethylethylene $[\beta \gamma$ -dimethyl- $\Delta \beta$ butylene], 1907, A., i, 1013.

Kratter, Julius, the value of the guaiacum reaction for the forensic detection

of blood, 1910, A., ii, 664.

Kratz, G. D., colloidal ferric oxide, 1912, A., ii, 353.

Krauch, R. See Robert Stollé.

Kraule, Y. A. See Wladimir I. Palladin.

Kraus, Charles August, solutions of metals in non-metallic solvents. I. General properties of solutions of metals in liquid ammonia, 1907, A., ii, 935.

solutions of metals in non-metallic solvents. II. Formation of compounds between metals and am-

monia, 1908, A., ii, 486.

solutions of metals in non-metallic solvents. III. Apparent molecular weight of sodium dissolved in liquid ammonia, 1908, A., ii, 834.

solutions of metals in non-metallic solvents. IV. Material effects accompanying the passage of an electric current through solutions of metals in liquid ammonia; migration experiments, 1908, A., ii. 835.

Kraus, Charles August. See also Edward Curtis Franklin, and Gilbert

Newton Lewis.

Kraus, Emil. See Eugen Bamberger.
Kraus, Edward Henry, and C. W.
Cook, datolite from Westfield, Massachusetts, 1906, A., ii, 684.

iodyrite from Tonopah, Nevada, 1909,

A., ii, 324.

Kraus, Edward Henry, Hermon C. Cooper, and A. Albert Klein, optical characters of some lead silicates, 1912, A., ii, 645.

Kraus, Edward Henry, and W. F. Hunt, occurrence of sulphur and celestite at Maybee, Michigan, 1906, A., ii, 290.

Kraus, Edward Henry, and I. D. Scott, American pyrites crystals, 1908, A., ii, 115.

Kraus, Edward Henry. See also Hermon

C. Cooper.

Kraus, Friedrich. See Gustav Embden.
Kraus, Friedrich, jun., formation of sugar in the perfused liver, 1903, A., ii, 740.

Kraus, Paul. See Rudolph Fittig.

Kraus, Richard. See Wilhelm Manchot.
Kraus, Rudolf, and C. Levaditi, the origin of precipitins, 1904, A., ii, 423.

Kraus, Rudolf. See also Arthur Biedl. Krause, E., valyl-leucine anhydride, 1909, A., i, 87.

Krause, E. See also Zdenko Hanns Skraup.

Krause, Max. See Ludwig Brieger.

Krause, R. A., the excretion of creatine in diabetes, 1910, A., ii, 982.

the urine of women under normal conditions, with special reference to the presence of creatine, 1911, A., ii, 1116.

Krause, R. A., and Wilhelm Cramer, the occurrence of creatine in diabetic urine, 1910, A., ii, 793.

sex and metabolism, 1911, A., ii,

752

the effects of thyroid feeding on nitrogen and carbohydrate metabolism, 1912, A., ii, 659.

Krause, R. L. See Erich Ebler.

Krauskopf, Francis Craig, vapour pressure of water and aqueous solutions of sodium chloride, potassium chloride, and sucrose, 1910, A., ii, 688.

action of the oxides of lead on potassium tartrate, 1911, A., i, 519.

Krauskopf, Francis Craig. See also Louis Kahlenberg.

Krauss, *Ludwig*, the iodine reaction of adrenaline, 1910, A., ii, 82.

iodometric estimation of acetone, 1910, A., ii, 465.

Krauss, Ludwig. See also Erwin Rupp, and Ernst Schmidt.

Krauss, M. See Aladar Skita.

Krauss, Rudolph, halogen substitution products of α- and γ-truxillic acid, 1904, A., i, 248.

Krauss, Rudolph. See also Carl Lieber-

Krausz, Moritz, reversibility of the enzymatic action of castor oil seeds, 1911, A., ii, 526.

Kraut, Karl, distribution of nickel and cobalt in nature, 1906, A., ii, 858.

Krauz, Cyrill, additive products of hydrogen cyanide with rhodeose, 1910, A., i, 224.

Krauz, Cyrill. See also Emil Votocek. Krauze, L., iodine derivatives of strychnine, brucine, and some other alkal-

oids, 1911, A., i, 1016.

Krauze, L. See also Józef Buraczewski.

Krawkoff, S., action on the soil of the mineral constituents of plant residues

soluble in water, 1905, A., ii, 606. Krebs, Paul. See Heinrich Biltz. Krebs, Reinhold. See Rudolf Friedrich Weinland.

Krech, Rudolph, dephlegmator, 1912, A., ii, 1049.

Krech, Rudolph. See also Robert Pschorr. Krécsey, Béla, apparatus for preparing liquid sulphur dioxide, 1905, A., ii,

312. Kreglinger, G. See Otto Cohnheim.

Kreglinger, Gustav. See Otto Cohnheim. Kregten, J. R. N. van. See Frans Maurits Jaeger.

Kreider, David Albert, iodine titration voltameter, 1905, A., ii, 569.

Kreider, Henry R., and Harry Clary Jones, dissociation of electrolytes in non-aqueous solvents as determined by the conductivity and boilingpoint methods, 1911, A., ii, 362.

conductivity of certain salts in methyl and ethyl alcohols at high dilutions,

1912, A., ii, 120.

Kreider, Joseph Lehn, apparatus for estimating volatile substances by loss of weight, 1905, A., ii, 280.

behaviour of typical hydrated bromides when heated in an atmosphere of hydrogen bromide, 1905, A., ii, 636. Kreider, Joseph Lehn. See also Andrew

Lincoln Winton.

Kreidl, Alois, physiology of the digestive

tract. I., 1907, A., ii, 107.

Kreidl, Alois, and Emil Lenk, estimation of the specific gravity of very small quantities of milk, 1911, A., ii, 947. the behaviour of sterile and boiled milk towards rennet and acid, 1911, A., ii, 1114.

Kreidl, Alois, and Alfred Neumann, milk curdling in the infant's stomach,

1908, A., ii, 606. Kreis, Hans, colour reaction of oils, 1903, A., ii, 114.

sesame oil, 1904, A., ii, 75.

colour reactions of fatty oils. III., 1904, A., ii, 790.

Kreis' reactions for the detection of stale oils, 1906, A., ii, 403.

testing the purity of salicylaldehyde, 1908, A., ii, 234.

colour reactions [for fusel oil, etc.] with salicylaldehyde and sulphuric

acid, 1910, A., ii, 552. Hans, and August Hafner, natural and synthesised palmityldistearins, 1903, A., i, 457.

natural and synthetical mixed glycerides of fatty acids, 1903, A., i, 788. fats with double melting points, 1903, A., ii, 190.

estimation of stearic acid, 1903, A., ii, 339.

Kreiten, Jos. See Friedrich Wüst.

Krejčí, Augustin, [alteration product of topaz], 1905, A., ii, 177.

Krell, Albrecht. See Alexander Gutbier.

Krell, Louis. See Paul Nicolardot.

Kremann, Robert [Konrad], migration experiments to determine the constitution of salts, 1903, A., ii, 54,

influence of the electrolyte and the electrodes on ozone formation, 1904, A., ii, 24.

Kremann, Robert [Konrad], melting point curve for mixtures of anthracene and picric acid, 1905, A., i, 270.

fusion of dissociating compounds and the degree of dissociation of the fused substance, 1905, A., ii, 76.

influence of substitution in the components on the equilibrium binary solutions, 1905, A., ii, 77.

additive compounds of nitrosodimethylaniline, 1905, A., ii, 78.

kinetics of reactions in mixtures of water and alcohol, 1905, A., ii, 307.

kinetics of reactions in heterogeneous systems; hydrolysis in non-homogeneous systems, 1905, A., ii, 307.

catalytic ester exchanges. I. Contribution to the theory of saponification, 1905, A., ii, 630.

hydrolysis of esters in heterogeneous

systems, 1905, A., ii, 688.

molecular compounds of nitro-derivatives with amines, 1906, A., i, 347.

solution equilibrium between 2:4-dinitrophenol and aniline, 1906, A., i,

equilibrium of binary solutions of phenols and amines, 1906, A., ii,

dissociation of fused compounds, 1906, A., ii, 332.

kinetics of the splitting-off of the acyl groups of the esters of polyhydric alcohols by hydroxyl ions in aqueous homogeneous systems, 1906, A., ii, 731.

two cases of catalysis which are in agreement with Euler's theory.

1907, A., i, 8.

a new exception to Carnelley and Thomson's rule; solution equilibrium between aniline and o-chloronitrobenzene, 1907, A., i, 311.

binary solution equilibrium between carbamide and the three isomeric

Oresols, 1907, A., i, 912.

kinetics of the formation of ethers by the action of absolute alcohol on alkyl sulphates, 1907, A., ii, 157.

peculiar action of hydrogen ions in the formation of alkyl hydrogen sulphates by means of water in heterogeneous systems, 1907, A., ii, 241.

hydrolysis of esters of multivalent

alcohols, 1907, A., ii, 611. application of van Laar's formula to the determination of the degree of dissociation of compounds which dissociate in the liquid phase, 1907, A., ii, 747.

Kremann, Robert [Konrad], catalytic ester exchanges. II., 1908, A., i, 120.

saponification of glycerides during ester exchanges in homogeneous systems, 1908, A., ii, 1021.

isomorphous mixtures; the systems o-, m-, and p-chloronitrobenzene and o-, m-, and p-bromonitrobenzene, 1909, A., ii, 986.

existence of double salts, in particular of carnallite and schoenite, in aqueous solution, 1909, A., ii,

1000.

theory of the formation of ethylene,

1910, A., i, 453.

energy changes in binary systems. I. Confirmation of the existence of the compound phenol-aniline in the liquid state, 1910, A., ii, 581.

rate of decomposition of barium ethyl sulphate in acid and alkaline solutions at different temperatures, 1910, A., ii, 596.

dynamics of the reaction between alcohol and sulphuric acid, 1910, A. ii, 700; 1911, A., ii, 28.

quaternary and quinternary systems: the system: alcohol, ether, water, sulphuric acid, and ethyl sulphuric acid at 0°, 1910, A., ii, 701.

kinetics of the formation of ethyl ether from alcohol and ethyl hydrogen sulphate, 1910, A., ii, 945.

the rapid electro-analytical separation of copper from nickel or zinc, 1912,

A., ii, 1213.

Kremann, Robert, Erwin Benesch, Willy Decolle, P. Dolch, Karl Kaas, Fritz Pilch, and Peter Scherenziss, influence of substitution in the components on the equilibrium of binary solutions. III., 1909, A., ii, 28.

Kremann, Robert, Erwin Benesch, Adolf Floch, and Fritz Kerschbaum, binary solution equilibrium between formic acid and water, and between acetic acid and water, 1907, A., i, 818.

Kremann, Robert, and Walter Brassert, degree of ionisation of sulphuric acid in mixtures of alcohol and water, 1910, A., ii, 603.

Kremann, Robert, Josef Daimer, and Erwin Benesch, the system CrO₃-H₂O,

1911, A., ii, 898.

Kremann, Robert, Josef Daimer, Franz Gugl, and Hans Lieb, influence of substitution in the components on the equilibrium in binary solutions. IV. Phenol and the methylcarbamides, 1910, A., ii, 943. Kremann, Robert, and Willy Decolle, dibasicity of hydrogen fluoride, 1907, A., ii, 756.

Kremann, Robert, Otto Dischendorfer, Vladimir Frankovic, Isaak Hauser, Herbert Hönel, Romeo Schoulz, and Paul Valenta, influence of substitution in the components on the equilibrium of binary solutions. V. Fluorene and polynitrobenzenes, 1911, A., ii, 871.

Kremann, Robert, and Rudolf Ehrlich, continued existence of molecular compounds and crystalline hydrates in the liquid phase, 1907, A., ii, 747.

Kremann, Robert, Josef Geba, and Felix Noss, binary solution equilibria of the three isomeric nitroanilines, 1910, A., ii, 930,

Kremann, Robert, and Robert von Hofmann, the limit of stability of additive compounds in the solid state and the divergence of the same from Kopp and Neumann's law, 1906. A., ii, 267.

Neumann's law, 1906, A., ii, 267. Kremann, Robert, and Fritz Hofmeier, hydrates of selenic acid, 1909, A.,

ii, 138.

solubility equilibrium between phenanthrene and 2:4-dinitrophenol, 1910, A., i, 471.

the electromotive behaviour of ternary alloys; the ternary system: zincsilver-lead, 1911, A., ii, 848.

the ternary system: silver-zinc-lead; the theory of the Parkes process, 1911, A., ii, 884.

Kremann, Robert, and Karl Hüttinger, kinetics of the formation of sodium thiosulphate from sodium sulphite and sulphur, 1907, A., ii, 758.

solubility of aluminium hydroxide in solutions of aluminium sulphate and artificial production of alumian, 1909, A., ii, 1015; 1912, A., ii, 163.

Kremann, Robert, and Emmerich Janetzky, influence of substitution in the components on the equilibrium of binary solutions. VI. Naphthalene and the three isometic dihydroxybenzenes, 1912, A., ii, 1151.

Kremann, Robert, and Fritz Kerschbaum, heat of formation of the system H_oSO₄, H₂O, 1907, A., ii, 737.

solubility of potassium iodide in water, and of water in potassium iodide at low temperatures, 1908, A., ii, 37.

Kremann, Robert, and Heinrich Neumann, kinetics of the formation of methyl hydrogen sulphate and of methyl ether, 1911, A., ii, 28.

Kremann, Robert, and Felix Noss, [theory of the electrolytic thermo-cell Sn CrClal, Pt.], 1912, A., ii, 1130.

Kremann, Robert, and Emil Philippi, temperature co-efficient of the molecular surface energy of equimolecular mixtures of aniline and the three isomeric nitrophenols, 1909, A., ii,

Kremann, Robert, and Oreste Rodinis, influence of substitution in the compounds on the equilibrium of binary solutions. II., 1906, A., ii, 268.

Kremann, Robert, and Romeo Schoulz, synthesis of the natural fats from the point of view of the phase rule. I. The ternary system: tristearintripalmitin-triolein, 1912, A., ii, 1152.

the polyiodides. I. Thermal investigation of the system KI-I2, 1912,

A., ii, 1167.

Kremann, Robert, and Artur Zitek, formation of potassium nitrate from sodium nitrate and potassium carbonate from the standpoint of the phase rule, 1909, A., ii, 572.

Kremann, Robert. See also Karl Elbs, and Friedrich Wilhelm Küster.

Kremers, Edward, isoterpenes of Flawitzky, 1908, A., i, 434.

Kremper, August. See Roland Scholl. Krenner, Josef [Alexander], manganspinel in a furnace slag, 1907, A., ii, 790.

Krepelka. See Karl Bernhard Lehmann. Kresling, Karl J., fat of tubercle bacilli, 1903, A., ii, 504.

Kress, K., action of certain poisons on the isolated small intestine of dogs and rabbits, 1905, A., ii, 847.

Kress, Otto, and Floyd Jay Metzger, does thorium exist as thorium silicate in monazite? 1909, A., ii, 588.

Krestovnikoff, Alexander. See Herbert Freundlich.

Kretschmer, A., composition of fahlerz, 1911, A., ii, 119.

Kretschmer, Erich. See Carl Neuberg. Kretschmer, Franz, leptochlorites from

Moravia, 1906, A., ii, 458.

Kretschmer, Friedrich, Hermann Roemer, Hans C. Müller, Paul Baessler, and M. Hoffmann, field manurial experiments on the action of ammonium sulphate as compared with sodium nitrate, 1907, A., ii, 809.

Kretschmer, W., physiological action of

adrenaline, 1908, A., ii, 55.

Kretzler, Amalie, the spectrum of antimony, 1910, A., ii, 87.

Kretzschmar, Georg. See Gustav Heller.

Kretzschmar, Horst, action of bromine on alkali hydroxides and the electrolysis of alkali bromides, 1904, A.,

Kreutz, Adolf, new method for the estimation of fat in cocoa, 1908, A., ii. 641.

the theobromine-content of cocoa and a new method for the estimation of theobromine, 1909, A., ii, 193.

the theobromine-content of cocoa beans, 1909, A., ii, 606.

Kreutz, Adolf. See also Emil Erlen-

meyer, jun.

Kreutz, Stefan, optical characters of minerals of the amphibole group and their relation to the chemical composition, 1909, A., ii, 154.

parallel growths of different substances,

1909, A., ii, 667.

crystallisation of ammonium chloride, 1909, A., ii, 731.

alstonite, 1910, A., ii, 306.

piezo-optical behaviour of ammonium chloride, 1911, A., ii, 352.

Kreutzer, Chr. See Alfred Werner. Krey, H., pyridine bases in brown-coal

tar, 1904, A., i, 615. Kreybig, Ludwig von, pyknometer for density determinations, 1911, A., ii, 967.

Krieble, Vernon K., amygdalins and their inter-reactions with emulsin, 1912, A., i, 482.

Krieble, Vernon K. See also James Wallace Walker.

Krieger, apparatus for the estimation of nitrogen by Kjeldahl's method. 1911, A., ii, 1027.

examination of ferric oxide in the presence of alumina, 1911, A., ii, 1034.

Krieger, Albert. See Roland Scholl.

Krieger, J. See Nicolai Alexandrovitsch Menschutkin.

Krier, Jean B. See Fritz Straus.

Krietemeyer, Ludwig. See August Michaelis.

Krimberg, R., extractives of muscle. IV. Occurrence of carnosine, carnitine, and methylguanidine in flesh, 1906, A., ii, 781.

extractives of muscle. V. Carnitine. 1906, A., ii, 872.

extractives of muscle. VII. Compounds of carnitine, 1907, A., i, 264.

extractives of muscle. IX. Constitution of carnitine, 1908, A., i, 41. extractives of muscle; relationship of

oblitine to carnitine, 1908, A., i, 842. extractives of muscle. X., 1908, A., ii, 609.

643

Krimberg, R., constituents of meat extract. 1909, A., i, 950.

Krimberg, R. See also Wladimir von Gulewitsch.

Krische, Paul. See Wilhelm Manchot. Krishnayya, H. V., volumetric estimation of manganese in manganese ores,

1910, P., 129. Kristeller, Leo. See Oscar Emmerling, Phæbus A. Levene, and Florentin

Medigreceanu.

Kröber, Eduard, action of bacteria and veasts in rendering soluble the phosphoric acid of compounds insoluble in water, 1909, A., ii, 510.

Kröhnke, Otto, the structure of cast iron in the graphitic condition, 1910, A.,

ii, 1070.

Kröhnke, Otto. See also Wilhelm Biltz. Kröner, A., methods of preventing superheating, 1909, A., ii, 544.

Kroener, Emanuel. See Albert Laden-

burg.

Kröner, J. F. See Ernst Cohen.

Krönig, Georg, the morphological detection of methæmoglobin in the blood, 1910, A., ii, 623.

Krog, Karl, and John Sebelien, estimation of nitrates in vegetable matter,

1911, A., ii, 227.

Krogh, August, tension of carbon dioxide in sea water and the reciprocal influence of the carbon dioxide of the sea and of the atmosphere, 1905, A., ii, 26.

[alleged] formation of free nitrogen during intestinal putrefaction, 1907,

A., ii, 188.

expiration of free nitrogen by animals,

1907, A., ii, 366.

the mechanism of gas exchange. II. Oxygen metabolism of the blood, 1910, A., ii, 512.

the mechanism of gas exchange. The gas exchange in the lungs of the tortoise, 1910, A., ii, 512.

the mechanism of gas exchange. The combination of hæmoglobin with mixtures of oxygen and carbon monoxide, 1910, A., ii, 512.

the mechanism of gas exchange. The invasion of oxygen and carbon monoxide into water, 1910, A., ii,

512.

the mechanism of gas exchange. VII. The mechanism of gas exchange in the lungs, 1910, A., ii, 512.

Krogh, August, and Marie Krogh, the mechanism of gas exchange. I. The tensions of gases in arterial blood, 1910, A., ii, 512.

Krogh, August, and Marie Krogh, the mechanism of gas exchange. The rate of diffusion of carbon monoxide into the lungs of man, 1910, A., ii, 512.

Krogh, M. von. See Cl. Schilling. Krogh, Marie. See August Krogh. Krohn, Dankert. See Johannes Herzog. Krolikowski, M. See Ludwik Bruner.

Kroll. See Erwin Rupp. Victor Marie, Adolphe crystallography of the iron-carbon

system, 1910, A., ii, 1070.

ultraphosphates. I. Some salts of the least hydrous phosphoric acid. 1912. A., ii, 755.

thermal investigation of phosphates of lead; the constitutional formulæ of the phosphates and their derivatives in the form of complex salts, especially those of Thomas slag, 1912, A., ii, 1056. ultraphosphates. II. Thermal investi-

gation of the glassy lead phosphates,

1912, A., ii, 1173. Kron, Arthur. See Walter Dieckmann. Kroneberg, P. M. See Alexander M. Nastukoff.

Kronik, M., o-tolylacetaldehyde and its derivatives, 1911, A., i, 210.

Kronstein, Abraham, polymerisation. I. Polymerisation of styrene and of cyanic acid, 1903, A., i, 80.

polymerisation. II. Mesomorphous

polymerisation (styrene), 1903, A.,

i. 80.

Kropat, K. See Erwin Rupp.

Kropatschek, Wilhelm, estimation of methoxyl groups, 1904, A., ii, 686. Kropf, Fritz, condensations with cotar-

nine, 1904, A., i, 766.

Kropf, Fritz.

See also Carl Liebermann.

Kropff, Alfred H. See Marston Taylor Bogert.

Kropp, Walter, and Herman Decker, constitution of the fluorescein and quinolphthalein dyes, 1909, A., i,

Kropp, Walter, Herman Decker, and Clemens Zoellner, derivatives benzylphenaceturic acid, 1909, A., i, 388.

Walter. See also Herman Kropp, Decker, and Emil Fischer.

Kroseberg, W. See Julius Tröger. Krotov, Petr . Ivanovič, wolchonskoite from Russia, 1904, A., ii, 420.

Kroupa, Gustav, electrolytic estimation of mercury, using the rotating anode, 1906, A., ii, 581.

Kroupa, Gustav, Carl Luckow, and Emile Campagne, electrolytic preparation of copper sulphate, 1906, A., ii, 449.

Krshischanowsky, W. Y., Barbet laboratory rectifying apparatus, 1912, A., ii, 444.

Kršnjavi, B. See Karl Drucker, and Robert Luther.

Kruber, Otto. See Julius von Braun. Krüche, R. See Ludwig Wolff.

Krügener, R. See Theodor Zincke. Krüger, Friedrich (Berlin), action of chloroform on hæmoglobin, 1903. A., i, 216.

leucocytes and blood clotting, 1904.

A., ii, 747.

the change produced in milk by sodium or potassium hydroxide, 1907, A., ii. 187.

Krüger, Friedrich (Göttingen), polarisation capacity, 1903, A., ii, 707.

application of the Wehnelt interrupter in the measurement of dielectric constants by Nernst's method, 1905, A., ii, 432

numerical values of electrode poten-

tials, 1906, A., ii, 5.

nature of electrolytic dissociation and solution pressure, 1911, A., ii, 789.

Kruger, Friedrich, and M. Moeller, the absorption of ultra-violet radiation by ozone and its application to the estimation of small quantities of ozone, 1912, A., ii, 821.

formation of ozone by the silent electric discharge and the estimation of ozone by absorption measurements in the ultra-violet, 1912, A.,

ii, 1126.

Krüger, Friedrich. See also Friedrich Dolezalek.

Krüger, Martin, the purine substances normally excreted in man (when neither tea nor coffee have been taken), 1909, A., ii, 166.

Krüger, Martin, and Peter Bergell, synthesis of choline, 1903, A., i, 795.

Krüger, Martin, and Otto Reich, estimation of ammonia in urine, 1903, A., ii, 688.

Krüger, Martin; and Alfred Schittenhelm, amounts and origin of purine bases in human fæces. II., 1905, A., ii, 645.

Krüger, Martin, and Julius Schmid, estimation of uric acid and of purine bases in human urine, 1905, A., ii, 776. Krüger, Paul. See Vincent Schenke.

Krüger, Theodor Richard, tryptic fermentation of gelatin, 1903, A., i, 723. Krüger, Wilhelm, and Berthold Heinze, fallow, 1908, A., ii, 61.

Wilhelm. See also Gustav Krüger, Wimmer.

Krüse, Karl. See Max Bamberger.

Krüss, Paul, ultra-violet absorption of organic dyes, 1905, A., ii, 293.

Krützfeld, Hermann. See Carl Dietrich Harries.

Krug, Carl. See August Michaelis. Krug, Otto, amount of sodium salts naturally occurring in wine, 1905, A.,

Krull, F. See Alfred Koch.

Krull, R., a property of adrenaline, 1907, A., ii, 316.

Krulla, Rudolf, two new arrangements for producing emission spectra, 1909.

A., ii, 358.

crystal-like arrangement of fine solid particles, 1909, A., ii, 389.

adsorption with special reference to the ascent of salt solutions in filter paper, 1909, A., ii, 469.

quantitative relations in the distribution of a substance between two phases; adsorption, 1911, A., ii,

the direct measurement of alterations in vapour pressure, and the vapour pressure method for showing, as a lecture experiment, the existence of compounds, 1911, A., ii, 480.

Krulla, Rudolf. See also Edward Charles

Curil Balv.

Krumbhaar, Wilhelm. See Adolf Sieverts.

Krumbiegel, E. See Reinhold Walther.

Krummacher, Otto, calorific value of oxygen, 1903, A., ii, 384.

sulphur in gelatin, 1904, A., i, 125. solubility and heat of solution of carbamide; energy equilibrium, 1905, A., i, 266,

estimation of the sugar group in proteins, 1906, A., i, 391.

Krummacher, Otto, and Ernst Weinland, sugar formation in pupæ, 1909, A., ii, 419.

Kruyff, E. de, composition of the milk and ferments of the fruit of Cocos nucifera, 1908, A., ii, 526.

Kruys, Marinus Johannes van't, estimation of calcium carbonate in marl, 1907, A., ii, 197.

estimation of barium sulphate in presence of interfering substances, 1909, A., ii, 939.

Kruys, Marinus Johannes van't. also J. Hudig, and Bouwe Sjollema. Kruyt, Hugo Rudolph, dynamic allotropy of sulphur. I., 1908, A., ii, 1028.

dynamic allotropy of sulphur. II. [Binary] systems containing sulphur, 1909, A., ii, 228.

dynamic allotropy of sulphur. The system: sulphur-benzoic acid, 1909,

A., ii, 802. the dynamic allotropy of selenium, 1910, A., ii, 28.

the equilibrium solid-liquid-gas in binary systems which present mixed crystals, 1910, A., ii, 195, 837; 1912, A., ii, 632.

kinds of isomerism, 1910, A., ii, 285. nomenclature of pseudo-systems, 1910, A., ii, 400.

transformations of cis-cinnamic acid,

1911, A., i, 975.

recognition of racemic compounds, 1911, A., ii, 477.

relation between the three triple points of sulphur, 1911, A., ii, 879. nicotine and water, 1912, A., i, 897.

physical constants of sulphur and their connexion, 1912, A., ii, 1051.

Kruyt, Hugo Rudolph. See also Ernst Cohen, P. J. H. van Ginneken, and Jacob Olie, jun.

Kryloff, J. de, steels containing phos-

phorus, 1908, A., ii, 698.

Kryloff, N. W., influence of morphine on the movements of the alimentary canal in rabbits during inanition, 1904, A., ii, 431.

Krym, R. S., chemistry of digestion and absorption in the animal body. XLI. The digestion of a mixed diet in dogs and men, 1911, A., ii, 999.

Krym, R. S. See also Efim Semen

London.

Krym, W. S., conditions of solubility of silver iodide in sodium iodide solutions, 1909, A., ii, 574.

Krzemecki, A., action of bromine and iodine on proteins, 1912, A., i, 57.

Krzemecki, A. See also Josef Buraczewski.

Krzemieniewska, (Mme.) Hélène, nutrition of nitrogenous bacteria, 1908, A., ii, 722.

influence of the mineral constituents of nutritive solutions on the development of Azotobacter, 1910, A., ii, 987.

Krzemieniewski, Severin, Azotobacter chroococcum, 1909, A., ii, 335.

Krźiżan, Richard, estimation of talc, 1906, A., ii, 582. raspberry-seed oil, 1907, A., i, 821. Krźiżan, Richard, use of nickel crucibles for quantitative work, and the composition of the so-called "nickelsoot," 1907, A., ii, 390.

blackberry-seed oil, 1908, A., ii, 239. Kubinsky, Josef. See Hermann Staud-

inger.

Kubler, Konrad, chemistry of Condurange bark, 1909, A., i, 40.
constituents of Vincetoxicum root,

1909, A., i, 41.

Kubler, Konrad. See also Rudolf Boehm.

Kubli, Heinrich. See Richard Willstätter.

Kubo, O., grayanotoxin, the poisonous constituent of Leucothoe grayana max, 1912, A., ii, 281.

Kučera, Bohumil, ionisation produced in various gases by the secondary 8and \(\gamma\)-rays of radium, 1906, A., ii, 140.

scattering of α-rays in metals, 1907,

A., ii, 219.

Kučera, Bohumil, and B. Mašek, radiation of radiotellurium, 1907, A., ii, 4.

Kuchenbecker, Adolf. See Theodor Zincke.

Kuczyński, T., assay of high grade alloys of tungsten, 1912, A., ii, 208. Kudielka, H., α-amino-n-hexoic acid

[leucine], 1908, A., i, 511.

Kudo, T., the influence of acids, alkalis, neutral salts, and carbonydrates on trypsin, 1909, A., i, 124.

Kudo, T., and Alb. Jodlbauer, action in the dark of fluorescent substances on proteins, toxins, and ferments, and its reversibility, 1908, A., ii, 867.
 Küchler, Hans. See Alfred Stock.

Kuchler, Hans. See Alfred Stock.
Kügelgen, Franz von, the equation representing the reducing action of calcium carbide, 1903, A., ii, 76.

the combustion of carbon in reductions by calcium carbide, 1903, A., ii, 475.

preparation of alkaline-earth metals, 1908, A., ii, 379.

Kühl, Hans, kinetics of the reaction between carbon monoxide and oxygen, 1903, A., ii, 639.

Kühl, Heinrich. See Walther Borsche. Kühl, Hugo, phenol, 1906, A., i, 495.

compounds of antimony sulphate with sulphates of the alkaline earths and with silver sulphate, 1907, A., ii, 627.

compounds of arsenic sulphates with potassium, calcium, and lead sulphates, 1908, A., ii, 36.

stannic acids, 1908, A., ii, 198.

Kühl, Hugo, Uffelmann's lactic acid reaction, 1910, A., ii, 359.

Kühl, Hugo. See also Rudolf Friedrich

Weinland.

Kühling, [Friedrich Theodor] Otto, relative strengths of hydrochloric and nitric acids, and the behaviour of latter towards solutions of potassium iodide, 1903, A., ii, 203.

potassium tetroxalate in volumetric

analysis, 1904, A., ii, 80.

behaviour of manganous salts towards silver peroxide, 1904, A., ii, 122.

electrolysis of glycine, 1905, A., i, 417. action of dilute nitric acid on guaiacolsulphonic acid, 1905, A., i, 888.

condensation products of alloxan with saturated ketones, 1905, A., i, 944.

products formed from carbon, nitrogen, and carbonates of the alkaline earths, 1907, A., ii, 166.

phenacyl-dialuric acid, -tartronuric acid, and -isohydantoic acid, 1908,

A., i, 571.

condensation products of alloxan, 1910, A., i, 780.

action of phenylhydrazine on ethyl benzoylactate, 1911, A., i, 87.

Kühling, Otto, and O. Berkold, influence of addition of chloride on the reaction between barium carbonate, carbon, and nitrogen, 1908, A., i, 143.

action of nitrogen on commercial barium carbide, 1909, A., i, 140.

Kühling, Otto, and Franz Falk, lactam formation from y-lactones and the stability of the pyrrolidone nucleus, 1905, A., i, 372.

Kühling, Otto, and Louis Frank, ketones of the pyrrolidone series, 1909, A., i,

954.

Kühling, Otto, and Oscar Kaselitz, condensation products of N-substituted o-diamines with alloxan and its derivatives, 1906, A., i, 463.

Kühling, Otto, and Bruno Schneider. condensation products of alloxan,

1909, A., i, 424.

Kühn, Alfred. See Gustav Heller.

Kühn, Bernhard, detection and estimation of very small quantities of lead in water, 1906, A., ii, 493.

Kühn, E., the extraction of silver from its ores by means of cyanides, 1911, A., ii, 884.

Kühn, Gustav. See Carl Paal. Kühne, Georg, band spectrum of boron, 1906, A., ii, 821.

Kühne, Hans. See Aktien-Gesellschaft fur Chemische Industrie.

Kühne, Karl August, preparation of crystalline silicon and boron, 1904, A., ii, 331.

Kühnel, Theodor. See Fritz Fichter.

Küllenberg, Albert. See Hans Stobbe. Külümow, Chr. See Paul N. Raikow.

Kümmell, Gottfried, determination of the nature of the dissociation of ternary electrolytes by means of isohydric solutions, 1904, A., ii, 111.

dissociation of ternary electrolytes, 1905, A., ii, 226, 502.

acceleration of the bleaching of colouring matters by aromatic compounds. 1910, A., ii, 916.

active state of chlorine produced by

light, 1911, A., ii, 796.

acceleration of the bleaching of dyes, 1912, A., ii, 616.

Kümmell, Gottfried, and E. Remy, electrolytic reduction of a nitro-derivative

of pyrazolone, 1909, A., i, 422.

Kümmell, Gottfried, and F. Wobig,
molecular condition of chlorine exposed to light, 1909, A., ii, 476.

Kuenen, Johan Pieter, critical phenomena of partially miscible liquids; ethane and methyl alcohol, 1903, A., ii, 410.

miscibility of liquids, 1912, A., ii, 239. Küng, Albert. See Ernst Winterstein.

Künkler, A., and H. Schwedhelm, behaviour of fats and oils towards calcium carbonate, 1908, A., i, 494.

formation of mineral oils from the salts of fatty acids and the metals of the alkaline earths, 1909, A., i, 281.

Künzel, A. See Roland Scholl. Küpferer, K. See Johann Georg Koenigsberger.

Küppers, Ernst. See Heinrich Biltz. Küppers, Gustav. See Theodor Curtius. Kürschner, F. See Paul Bohrisch.

Küspert, Franz, colloidal copperacetylide, 1903, A., i, 406.

colloidal silver. II., 1903, A., ii, 76. colloidal silver and gold, 1903, A., ii,

chemical lecture experiments; [reduction of calcium carbonate; ignition of calc spar; oxidation of iron; carbon dioxide], 1906, A., ii, 661.

Kuessner, Hans, anodic behaviour of molybdenum, manganese, chromium, and tantalum, 1910, A., ii, 927.

Küstenmacher, M., the chemistry of honey formation, 1911, A., ii, 127.

Küster destruction of bacteria [in water] by aeration and by hydrogen peroxide, 1904, A., ii, 632.

Wilhelm [Albert], Friedrich hydrates of nitric acid, 1904, A., ii, 26. estimation of sulphuric acid in presence of iron, 1904, A., ii, 774.

preparation of pure sodium hydroxide for laboratory purposes, 1904, A.,

ii, 815.

polysulphides. II., 1905, A., ii, 387. the explosion of a Küster apparatus, 1906, A., ii, 850.

Küster, Friedrich Wilhelm, and Fritz Abegg, volumetric estimation zinc, 1903, A., ii, 182.

hydrogen chloride generating appara-

tus, 1906, A., ii, 348.

Küster, Friedrich Wilhelm, and Georg Dahmer, action of hydrogen sulphide on arsenious oxide in aqueous solu-

tion, 1903, A., ii, 74, 364.

determination of molecular weight in solid solutions. IV. Vaporisation of isomorphous mixtures of p-dichlorobenzene and p-dibromobenzene, 1905, A., ii, 230.

solubility of barium sulphate, 1905,

A., ii, 248.

Wilhelm, Küster, Friedrich Erich Franke, and Wilhelm Geibel, contact method for the manufacture of sul-

phuric acid, 1905, A., ii, 82.

Küster, Friedrich Wilhelm, and Max Grüters, decomposition of dissolved sodium carbonate into sodium hydroxide and carbon dioxide, 1903, A., ii, 289.

determination of the neutralisation point of conductivity measurement,

1903, A., ii, 611.

titrimetric estimation of potassium as potassium bismuth thiosulphate,

1904, A., ii, 87.

Friedrich Wilhelm. Max Grüters, and Wilhelm Geibel, determination of the neutralisation point by conductivity measurement. 1905, A., ii, 55.

Küster, Friedrich Wilhelm, and Eduard Heberlein, polysulphides. I., 1905,

A., ii, 156.

Küster, Friedrich Wilhelm, and Karl Koelichen, polysulphides. III. Periodic phenomena during the electrolysis of polysulphides, 1905, A., ii, 698.

Küster, Friedrich Wilhelm, and Robert Kremann, hydrates of nitric acid.

1904, A., ii, 726.

Küster, Friedrich Wilhelm, and Siegmar Münch, table for the preparation of normal solutions of hydrochloric acid according to the density, 1905, A., ii, 198.

Küster, Friedrich Wilhelm, and Siegmar Münch, density determinations with a pipette; adjustment of titrimetric solutions by volume weight, 1905, A., ii, 232.

attempts to prepare absolute nitric acid, 1905, A., ii, 243.

Küster, Friedrich Wilhelm, and Ph. Siedler, preparation of normal solu-

tions, 1903, A., ii, 98.

Küster, Friedrich Wilhelm, and Alfred Thiel, equilibrium phenomena in precipitation reactions. III. The precipitation of mixed bromide and thiocyanate solutions by silver, 1903, A., ii, 136.

separation of bromine and the thiocvanate radicle, 1903, A., ii, 510.

Küster, Friedrich Wilhelm, and Walter Würfel, determination of molecular weights in solid solutions, 1905, A., ii, 80.

Küster, William, theory of the carbohydrates, 1903, A., i, 402.

toxicological detection of blood, 1903, A., ii, 252.

hæmin from different sources, dehydro-

chlorohæmin and hæmatin, 1904, A., i, 357. action of boiling aniline on hæmin,

1904, A., i, 358.

hæmatin, 1905, A., i, 622; 1909, A., i, 749

bile pigments, 1906, A., i, 468. hæmopyrrole, 1907, A., i, 572.

bile pigments: bilirubin, biliverdin, and their fission products, 1909, A., i, 319.

blood colouring matter, 1910, A., i, 210, 529.

dianilino-p-benzoquinoneanil, 1911, A., i, 69.

hæmin dimethyl ether, 1911, A., i,

the valency of iron in blood pigment, 1911, A., i, 409.

the occurrence of deoxycholic acid in gall stones, 1911, A., ii, 57.

Küster, William, P. Deihle, and Alfred Greiner, constitution of hæmin, 1912, A., i, 670.

Küster, William, and Karl Fuchs, a new crystalline derivative of hæmin, 1907, A., i, 572.

hæmatin, 1908, A., i, 585. Küster, William, H. Galler, Karl Haas, and Otto Mezger, constitution hematic acid, 1906, A., i, 337.

Küster, William, and Alfred Greiner, oxidation of dimethylhæmin, 1912, A., i, 923.

Küster, William, and Karl Haas, hæmatin, 1904, A., i, 647.

constitution of hæmopyrrole, 1906,

A., i, 693.

Küster, William, Felix Lacour, and A. Nicole, hæmatin; salts, esters, and aniline derivatives of the hæmatic acids, and condensation products of the esters, 1908, A., i, 303.

Küster, William. See also Gustav von

Hüfner.

Küttner, Siegmund, influence of lecithin on digestive ferments, 1907, A., ii,

Volhard's method of estimating pepsin,

1907, A., ii, 660.

peptic digestion of casein from the standpoint of the acidity of its cleavage products, 1909, A., ii, 905.

Küttner, Christoph Siegmund, and Ulrich, new [centrifugal] method for estimating fat in milk; Wendler's method, 1906, A., ii, 313.

composition of lemon juice, 1906,

A., ii, 573.

Küylenstjerna, A. K. Gustav von. See Alexander Tschirch.

Kufferath, August, reduction of indigotin with zinc dust and ammonia, 1903, A., i, 33.

electrolytic estimation of copper, 1905,

A., ii, 64.

Kufferath, August. See also Arthur Binz.

Kugel, W. See Hugo Kauffmann.

Kugler, Stefan. See Stanislans von Kostanecki.

Kuhara, Mitsuru, molecular rearrangement of N-benzylaldoxime, 1908, A., i, 900.

Kuhara, Mitsuru, and Tadaka Kainoshô, Beckmann's rearrangement, 1907, A., i, 1027.

Kuhara, Mitsuru, and Yoshinori Kishi, action of ammonia and of amines on

chloral, 1905, A., i, 861.

Kuhara, Mitsuru, and Shigeru Komatsu, isomeric phenylphthalimides and some allied compounds, 1909, A., i, 484; 1911, A., i, 205.

Kuhara, Mitsuru, and Motooki Matsui, formation of amines from halogen imino-ethers, 1907, A., i, 1015.

Kuhara, Mitsuru, and Yoshinori Todo, the Beckmann rearrangement. II., 1911, A., i, 213.

Kuhles, Jakob. See Karl Bernhard Lehmann.

Kuhn, Emil. See Fritz Ullmann. Kuhn, Eugen. See Andreas Lipp. Kuhn, Friedrich Gustav. See Walter Herz.

Kuhn, Otto, are the stoicheiometrical laws intelligible without the atomic hypothesis? 1907, A., ii, 678; 1908, A., ii, 98, 826.

Volhard's copper titration, 1908, A., ii, 1072.

iron phosphides, 1910, A., ii, 131. weighing, 1910, A., ii, 947.

Kuhn, Otto. See also Georg Fendler. Kuhtz, Erich. See Robert Pschorr.

Kuklin, E., volumetric estimation of tungsten-steel and ferrotungsten, 1904, A., ii, 294.

Kukuritschkin, Constant, preparation and properties of s-dimethylallene,

1904, A., i, 213.

Kuliga, Erich. See Paul Rabe. Kulikoff, J. See Nicolai D. Zelinsky. Kulka, Otto, trialkyl ethers of hydr-

oxyquinol, 1903, A., i, 625.

Kulka, Wilhelm, an apparatus extraction by hot ether, 1908, A., ii, 937.

Kulka, Wilhelm. See also Richard Ehrenfeld, and Josef Habermann.

Kullberg, Sixten. See Hans von Euler. Kullgren, Carl Fredrik, change in the rate of inversion with temperature, 1903, A., ii, 535.

velocity of change in catalytic re-

actions, 1905, A., ii, 237.

influence of sulphuric acid in nitration; especially of cellulose, 1908, A., i, 768.

action of atmospheric moisture on the moisture content and on the velocity of combustion of black powder, 1912, A., ii, 154.

estimation of sulphur in nitrocellulose,

1912, A., ii, 682.

Kultascheff, N. V., the melting point of calcium silicate (CaSiO₃), sodium silicate (Na2SiO3), and of their mixtures, 1903, A., ii, 545.

Kumagai, T., and Richard Wolffenstein, action of potassium persulphate on p-cresol, 1908, A., i, 159.

Kumagawa, Muneo, and Kenzo Suto, estimation of fat in animal fluids, 1903, A., ii, 702.

estimation of fat and unsaponifiable matter in tissues, together with a critical examination of the methods now in use, 1908, A., ii, 331.

Kumm, Aug., a new valve, 1910, A., ii,

Kummerell, V., supercooling of water, 1909, A., ii, 307.

Kummert, essential oil of wallflowers, 1911, A., i, 658.

Kunckell, Franz [Eduard], homologues of propenyl- and butenyl-benzenes, 1903, A., i, 617.

allylbenzene and its homologues, 1903,

A., i, 806.

5-acetylamino-2-hydroxybenzylidene-

acetophenone, 1904, A., i, 750. derivatives of 2:4-diketotetrahydro-quinazoline, 1905, A., i, 382.

p-chloroacetylphenoxyacetic acid and ethyl. p-chloroacetylphenylacetate, 1905, A., i, 646.

1-chloroacetyl-2:4-dichlorobenzene,

1907, A., i, 537.

3-chloro-6-chloroacetyltoluene 15chloro-o-tolyl chloromethyl ketonel and two chlorodinitrotoluic acids, 1908, A., i, 729.

3:5-dibromoaceto-p-toluidide and its nitro-derivatives, 1909, A., i, 20.

derivatives of tetrahydroquinoline, 1910, A., i, 429.

3-aminotetrahydroquinazoline-2:4dione or 3-aminobenzoylenecarbamide, 1910, A., i, 438. constitution of 3-aminotetrahydro-

quinazoline-2:4-dione and some of its derivatives, 1910, A., i, 439.

derivatives of tetrahydroquincline.

III. Ketones and acids of tetrahydroquinoline and of tetrahydro-oand p-toluquinoline, 1910, A., i,

aromatic amino-ketones, 1911, A., i,

new method for the preparation of hydrocarbons of the styrene group. II. α-Phenyl-Δα-butylene and its homologues, 1912, A., i, 432.

1:5-naphthylenediamine, 1912, A., i,

Kunckell, Franz, and Carl Blumenreuter, aromatic amino-ketones, 1912, A., i, 268.

Kunckell, Franz, and Wilhelm Dettmar, allylbenzene and allyl-p-xylene,

1903, A., i, 331.

new method for the preparation of hydrocarbons of the styrene group. I. Allylbenzene and its homologues, 1912, A., i, 431.

Kunckell, Franz, and Kurt Eras, pmethoxyphenylacetylene and its deriv-

atives, 1903, A., i, 413.

Kunckell, Franz, and Friedrich Flos, action of acetyl bromide on benzyl cyanide, 1906, A., i, 848.

the three chloroacetylbenzyl cyanides [chloroacetylphenylacetonitriles] and their derivatives, 1908, A., i, 890.

Kunckell. Franz, and Albert Fürstenberg, o-hydroxyacetophenone, 5-chloro-ohydroxyacetophenone, and chlorochalkones - and chloroflavones, 1912, A., i, 118.

Kunckell, Franz, and Willy Kesseler, 4-amino-1-benzoyl-2-methylcoumarone and its derivatives, 1903, A., i, 509.

Kunckell, Franz, and Georg Knigge, bromo- and bromonitro-derivatives of o-benzoylbenzoic acid, 1906, A., i, 180.

Kunckell, Franz, and Richard Lillig, a red indigotin, 5:5'-dichloro-4:4'-dimethylindigotin, 1912, A., i, 1027.

Kunckell, Franz, and Alfred Richartz, 1-chloroacetyl-2-chloro-4-aminobenzene [\omega:2-dichloro-4-aminoacetophenone] and its derivatives, 1907, A., i, 937.

Kunckell, Franz, and Hans Schneider, 1:5-naphthylenediamine, 1912, A., i. 811.

4:5:4':5'-tetramethylindigotin, 1912, A., i, 914.

Kunckell, Franz, and Karl Siecke, 11butenylbenzene [-a-phenyl-\Delta-butylene], 1903, A., i, 331.

Kunckell, Franz, and Karl Arthur Stahel, isoamenyl-benzene and -tolu-

ene, 1904, A., i, 386.

Kunckell, Franz, and L. Szulc, halogen nitro- and nitroamino-benzophenones, 1904, A., i, 898.

Kunckell, Franz, and Wilhelm Theopold, bromotetrahydroquinoline, A., i, 297.

derivatives of tetrahydroquinoline.

II., 1910, A., i, 506. Kunckell, Franz, and Ernst Vollhase,

acetylchloroacetyltetrahydroquinoline, 1909, A., i, 834.

Kunkel, Adam Josef, so-called normal arsenic, 1905, A., ii, 542.

Kunkler, Max. See Adolf Kaufmann. Kunschert, Franz, complex zinc salts,

1904, A., ii, 817. solutions of copper in potassium

cyanide, 1904, A., ii, 818. Kunst, J. See Garmt van Dyk.

Kuntner, J. See Paul Pfeiffer. Kuntze, Fritz, chloral alcoholates; connexion with the constitution of ψ -ammonium bases, 1908, A., i, 322.

See also Johannes Kuntze. Fritz. Gadamer.

Kuntze, Max, essential oil of Brassica rapa var. rapifera, 1908, A., i, 196. essential oil of Cardamine amara, 1908, A., i, 196.

volumetric estimation of mustard oil,

1908, A., ii, 440.

Kuntze, W., thermostat for low temperatures, 1907, A., ii, 72.

Kuntze-Fechner, Johannes Martin, preparation of adjacent (ααα) triphenyl-

ethane, 1903, A., i, 244. Kuntzen, Harold. See Raphael Meldola.

Kunz, E. See Felix Kaufter.

Kunz, George Frederick, idocrase ("californite") as an ornamental stone, 1904, A., ii, 50.

See

Kunz, George Frederick. Charles Baskerville.

Kunz, Jakob, conductivity of solutions at low temperatures, 1903, A., ii, 54. variation of electrolytic conductivity with temperature below 0°, 1903, A., ii, 261.

Kunz, Jukob, and Jakob G. Kemp, distribution of the light in the stratified discharge in vapours of the alkali metals, 1912, A., ii, 725.

Kunz, Johannes, reduction of nitrocompounds to amines, 1903, A., i. 813. Kunz, Johannes. See also Alfred

Werner.

Kunz, Ludwig, specific heat of carbon at high temperatures, 1904, A., ii, 466.

Kunz, Max Albert. See Roland Scholl. Kunz, Rudolf, estimation of succinic acid in wine and some remarks on the estimation of malic and lactic acids in wine, 1903, A., ii, 701.

source of the succinic acid formed during alcoholic fermentation, 1907,

A., ii, 121.

Kunze, Gerhard, methyl-, dimethyl-, and trimethyl-creatinines, 1911, A., i, 21.

Kunze, Gustav, separation of acids by roots and mould hyphæ and its signification, 1906, A., ii, 480.

Kunze, Hugo, estimation of manganese in pig iron by the persulphate method, 1909, A., ii, 186.

Kunze, R. See Paul Wagner.

Kunz-Krause, [Johann Wilhelm]

Hermann, occurrence of aliphatic
alicyclic compounds in plants, 1904,
A., ii, 508.

Kunz-Krause, Hermann, and Paul Manicke, some salts of gallipharic acid, a fatty acid obtained by the oxidation of cyclogallipharic acid, 1910, A., i, 458.

degradation of cyclogallipharic acid by oxidising agents, 1910, A., i, 677. pyrogenetic decomposition of cyclogallipharic acid, 1911, A., i, 130.

Kunz-Krause, Hermann, and Rudolf Richter, salts of cyclogallipharic acid, 1907, A., i, 419. Kunz-Krause, Hermann, and Paul Schelle, cyclogallipharic acid, 1904, A., i, 587.

Kupfer, Otto. See Martin Freund, and Hermann Staudinger.

Kuphal, Reinhold. See Carl Mannich. Kuraéeff, Dmitr., plastein of egg-

albumin, 1904, A., i, 126.

Kuratorium der Georg und Franziska Speyerschen Studienstiftung, preparation of acyl derivatives of paminophenylarsinic acid, 1908, A., i, 591.

preparation of derivatives of p-aminophenylarsinic acid, 1908, A., i, 747.

Kurbatoff, Vladimir J., determination of the specific heat and latent heat of evaporation of aniline, 1903, A., i, 246.

latent heat of evaporation of mercury,

1903, A., ii, 130.

Trouton's law and other constants observed at the boiling point, 1903, A., ii, 710.

structure of hardened steel, 1905, A., ii, 392.

dependence of colour on temperature, and the importance of this phenomenon for the theory of colours and of radiation, 1908, A., ii, 4.

new polymorphous forms of iodine,

1908, A., ii, 31.

significance of the atomic hypothesis, 1908, A., ii, 97.

the solid state, 1908, A., ii, 660.

specific heat of mercury, 1908, A., ii, 807.

the Avogadro-Guldberg law, 1908, A., ii, 812.

concerning the [luminiferous] ether, 1909, A., ii, 109.

variation of Trouton's constant in a given homologous system, 1909, A., ii, 117.

latent heat of evaporation of isoamyl ether, 1909, A., ii, 119.

latent heat of evaporation and specific heat of naphthalene, 1909, A., ii, 120.

latent heat of vaporisation of benzoin isobutyl ether, 1909, A., ii, 120.

latent heat of vaporisation of acetic anhydride and determination of the association of liquids, 1909, A., ii, 120.

has the crystallising force any influence on properties in the amorphous condition? Latent heat of vaporisation of p-toluidine, 1909, A., ii, 132.

specific heats of non-metals: sulphur, 1909, A., ii, 465.

Kurbatoff. Vladimir J., conception of the element, 1909, A., ii, 475.

Kurbatoff, Vladimir J., and G. Eliséeff, asssociated liquids, 1910, A., ii, 102.

urbatoff, Vladimir J., and M. M. Matvéeff, the structure of hardened Kurbatoff.

steel, 1909, A., ii, 241. Kurbatoff, Vladimir J. See also G. G.

Eliséeff, and Iwan I. Shukoff. Kuriloff, Basil B., zinc peroxide, 1904,

A., ii, 36.

the transition from crystalline to colloid substances, 1906, A., ii, 343. theory of ammoniacal compounds, 1906, A., ii, 349.

principle of evolution in chemistry,

1908, A., ii, 477.

grading of the intensity in the properties of chemical compounds and additive products, 1911, A., ii, 873.

Kurlbaum, Ferdinand, and Günther Schulze, temperature of non-luminous flames coloured by metallic salts, 1906, A., ii, 726.

Kurnakoff, Nicolai S., composition of fire-damp from the coal-mines of the Donetz, 1903, A., ii, 156. new form of pyrometer, 1905, A., ii,

Kurnakoff, Nicolai S., and Nicolaus S., Konstantinoff, antimonides of iron and cadmium, 1908, A., ii, 391.

Kurnakoff, Nicolai S., and Alexander N. Kusnetzoff, cadmium-sodium alloys,

1907, A., ii, 171.

Kurnakoff, Nicolai S., and Nicolaus Ivan Podkopajeff, cobalt ores from New Caledonia, 1903, A., ii, 434. Kurnakoff, Nicolai S., and Nicolai A.

Pushin, alloys of lead with thallium and indium, 1907, A., ii, 262.

Kurnakoff, Nicolai S., Nicolai A. Pushin, and N. Senkowsky, the electrical conductivity and hardness of alloys of silver and copper, 1910, A., ii, 925.

Kurnakoff, Nicolai S., and Sergius F. Schemtschuschny, isomorphism of potassium and sodium compounds,

1906, A., ii, 443.

alloys of copper with nickel and with gold: electro-conductivity of solid metal solutions, 1907, A., ii, 525.

hardness of solid solutions of metals and of definite chemical compounds,

1908, A., ii, 932.

electrical conductivity and plasticity of isomorphous mixtures of lead with indium and thallium, 1909, A., ii, 855.

Kurnakoff, Nicolai S., and Gregor von Schukowsky, cæsium and rubidium mercurides, 1907, A., ii, 345.

Kurnakoff, Nicolai S., and Nicolaus J. Stepanoff, alloys of magnesium with

tin and with lead, 1905, A., ii, 710. Kurnakoff, Nicolai S., and I. B. Vrshesnevsky, simplest example of the diagram of hardness [system KBr-KF]. 1912, A., ii, 136.

Kurnakoff, Nicolai S. See also Nicolai N. Nagornoff, and Wladimir I. Smirnoff. Kurowski, Eduard, thalloacetylacetone,

1910, A., i, 361.

Kurowski, Eduard, and L. Nissenmann, salts of pertitanic acid with organic bases, 1911, A., i, 183.

propylamine peroxide, 1911, A., i, 608. Kurowski, Eduard. See also Sebastian

M. Tanatar.

Kurrein, Herbert, action of ethyl oxalic chloride on ethyl sodiomalonate, 1905, A., i, 413.

Kursanoff, Nicolai, some derivatives of phenylcyclohexane, 1907, A., i, 599. the hydrocarbon, C₁₃H₁₈, 1907, A., i,

Kurtenacker, Albin, elementary analysis, 1911, A., ii, 823; 1912, A., ii, 1001.

Kurtenacker, Albin, and H. Habermann, ethyl acetate, 1911, A., i, 600.

Kurtenacker, Albin. See also Josef Habermann.

Kurz, Karl, radium, thorium, and actinium in the atmosphere and their significance in atmospheric electricity, 1910, A., ii, 476.

Kurzer, Alfred. See Walter Herz. Kurzmann, M. See Hermann von Tap-

peiner.

Kurzweil, Paul. See Josef Herzig. Kusel, Hermann, isocarbostyril deriva-

tives containing a meta-substituted benzene nucleus, 1904, A., i, 619. Kusnetzoff, Alexander N. See Nicolai

S. Kurnakoff, and Henri Moissan.

Kusnetzoff, M. I., decomposition of gaseous hydrocarbons by heating with finely-divided aluminium, 1907, 'A., i, 669.

a new desiccator for the drying of gases, 1907, A., ii, 160.

Kusnetzoff, M. I. See also Alexander Pawlowitsch Lidoff, and Wassili W. Scharwin.

Kusnetzoff, Petr, burette reading, 1907, A., ii, 809.

tetra-acetamide compound of calcium chloride, 1909, A., i, 461.

hydrates of the halogen salts of calcium, 1909, A., ii, 574,

Kusnetzoff, Petr, labile forms of tetrahydrated manganese bromide and chloride, 1909, A., ii, 580.

Kusnetzoff, S. D., Trans-Baikal minerals, 1911, A., ii, 1104; 1912, A., ii,

456.

Kusnezoff, K. A. See Wassili W. Scharwin.

Kusserow, R., new theory of alcoholic fermentation, 1910, A., ii, 231.

Kusumoto, Chasaburō, excretion of ethereal sulphates after giving salicin to normal and diabetic dogs, 1908, A., ii, 613.

the influence of tolylene-2:4-diamine on the secretion of cholesterol in

the bile, 1908, A., ii, 970. the maltase of the blood-serum and

liver, 1909, A., ii, 69. the influence of tolylenediamine on * the cholesterol content of the

fæces, 1909, A., ii, 79.

the cholesterol content of dogs' fæces with ordinary nutrition and after administration of cholesterol, 1909, A., ii, 79.

the content of dogs' fæces in cholesterol and coprosterol, 1909, A., ii,

Kuśy von Dúbrav, Leo (Ritter). See Rudolf Wegscheider.

Kutsch, William Adelbert. See Ernst Hermann Riesenfeld.

Kutscher, Friedrich, proteins. II., 1903, A., i, 666.

preparation of cytosine, 1903, A., i, 668.

[oxidation of nucleic acids], 1905, A., i, 621; 1906, A., i, 55.

meat extracts, 1906, A., ii, 562.

decomposition by oblitine by means of bacteria. I., 1906, A., ii, 697.

novaine, 1907, A., i, 18, 114.

[carnosine and ignotine], 1907, A., i,

carnosine, 1907, A., i, 634.

methylguanidine in urine, 1907, A., ii, 114.

recognition of toxic bases in urine, IV., 1907, A., ii, 568.

Liebig's extract of meat, 1907, A., ii, 708.

extractives of fish muscle, 1910, A., ii,

synthetic homocholine, 1910, A., i, 611.

the physiological action of an ergot base, and of 4-\(\beta\)-aminoethylglyoxaline, 1911, A., ii, 59.

basic substances in extract of mushroom, 1911, A., ii, 528.

Kutscher, Friedrich, and Alfred Lohmann, end-products of the autodigestion of yeast and pancreas, 1903, A., ii, 670, 737.

end-products of pancreatic autodigestion, 1904, A., ii, 425; 1905,

A., ii. 466.

papain-digestion, 1906, A., i, 127. the detection of toxic bases in urine,

1906, A., ii, 471, 786, 875.

physiological action of some bases obtained from ox-muscle, 1906, A., ii. 877.

occurrence of pyridine methochloride in urine and its relation to tobacco smoking and coffee drinking, 1907, A., ii, 284.

Kutscher, Friedrich, and Jiro Otori, apparatus for the determination of high melting points, 1904, A., ii,

detection of guanidine amongst the products of the autodigestion of the pancreas, 1904, A., ii, 828.

Kutscher, Friedrich, and Martin Schenck, oxidation of proteins with calcium permanganate; oxidation of gelatin, 1904, A., i, 955; 1905, A., i, 251.

oxidation of thymonucleic acid with calcium permanganate, 1905, A., i,

oxaluria, 1905, A., ii, 104.

Kutscher, Friedrich, and John Seemann, oxidation of thymonucleic acid with calcium permanganate, 1904, A., i, 127.

Kutscher, Friedrich, and Hermann Steudel, meat extracts. I., 1903, A., ii, 499.

estimation of nitrogen by Kjeldahl's method, 1903, A., ii, 687.

an apparatus for extracting liquids with ether, 1904, A., ii, 80.

Kutscher, Friedrich, and Goswin Ziekgraf, formation of guanidine by oxidation of gelatin with permanganates, 1903, A., i, 666.

Kutscher, Friedrich. See also Achelis, Dankwart Ackermann, and R. Engeland.

Kutscheroff, Leon. See Alexei E. Faworsky.

Kutscheroff, Michael, the vanillin reaction for the detection of ketones, 1905, A., ii, 771.

hydration of hydrocarbons of the acetylene series by means of cadmium, zinc, and magnesium salts, 1909, A., i, 625.

nature of the electrical synthesis of colloids, 1912, A., ii, 1148.

Kutscheroff, Michael. See also Volkmar Kohlschütter.

Kuttenkeuler, Heinrich. See Josef König.

Kuttner, Leopold, and Georg Pulvermacher, the occurrence and diagnostic significance of a peptolytic enzyme in the stomach contents, 1911, A., ii, 513.

Kuzirian, Simon Boghos. See Frank Austin Gooch.

Kuzma, Bohumil. See Jiri Baborovský, and Bohuslav Brauner.

Kuzmin, W., action of magnesium on a mixture of phenyl p-tolyl ketone and allyl bromide, 1910, A., i, 109.

Kuzmina-Aron, (Mme.) Z. A. See George L. Stadnikoff.

Kuznitzsky, Eric. See Hermann Waldemar Fischer.

Kyas, Otto. See Johann Vanha.

Kyes, Preston, lecithin and snake poison, 1904, A., ii. 431.

the lecithids of snake poison, 1907, A., ii, 569.

lecithid formation, 1908, A., ii, 215.

Kyes, Preston, and Hans Sachs, cobra

poison, 1903, A., ii, 444. **Kylin**, Harald, phycocrythrin and phycocyanin from Geramium rub-

rum (Huds), 1910, A., i, 866. the green and the yellow colouring matters of the Florideæ, 1911, A., ii,

the red and blue pigments of the algee, 1912, A., i, 289.

Kym, Otto, benziminazoles and dyes derived from them, 1904, A., i, 453.

condensations with carbamide; carbamide as a source of ammonia, 1907, A., i, 560.

Kym, Otto, and S. Kowarski, benziminazoles and benzoxazoles and azodyes derived therefrom, 1911, A., i,

Kyriakides, L. P. See William Albert Noyes.

L.

Laan, Foeko Hendrik van der, bromination of toluene, 1906, A., i, 490.

Laan, Foeko Hendrik van der, and H. Tydens, estimation of benzoic acid in foods, 1910, A., ii, 759.

Laan, Foeko Hendrik van der. See also Arnold Frederik Holleman.

Laar, [Peter] Conrad, formal types of structural isomerides, 1908, A., i, 749.

Laar, Johannes Jacobus van, the potential difference which occurs at the surface of contact of two different non-miscible liquids in which a dissolved electrolyte has distributed itself, 1903, A., ii, 258.

the course of the melting point lines of solid alloys or amalgams, 1903,

A., ii, 266, 588.

conception of independent components, 1903, A., ii, 536; 1904, A., ii, 314.

possible forms of the melting point curve for binary mixtures of isomorphous substances, 1903, A., ii,

631; 1904, A., ii, 109.

vapour tension of liquid mixtures (for example, of bromine and iodine) in cases where a partially dissociated compound is formed, 1904, A., ii, 311.

latent heat of mixing for associating solvents, 1904, A., ii, 804.

verification of a recent equation of van der Waals, 1905, A., ii, 148.

some phenomena which can occur in the case of partial miscibility of two liquids, one of them being anomalous, especially water, 1905, A., ii, 234.

concentrated solutions, 1905, A., ii, 234.

abstract and concrete conceptions (osmotic pressure and thermodynamic potential),1905, A., ii, 374.

exact expression for the so-called molecular change of critical tempera-

ture, 1905, A., ii, 434.

different forms and transformations of the boundary curves in the case of partial miscibility of two liquids, 1905, A., ii, 507.

exact expression for the course of the spinodal curves and of their plait points for all temperatures, in the case of mixtures of normal substances, 1905, A., ii, 507.

stances, 1905, A., ii, 507. shape of the plait-point curve for mixtures of normal substances, 1905,

A., ii, 507.

molecular rise of the lower critical temperature of a binary mixture of normal components, 1905, A., ii,675.

thermodynamic potential and its application to problems of chemical equilibrium, 1905, A., ii, 683.

equation of an ideal cutectic curve in a ternary system, and the use of this equation in calculating the transition temperature of two isomerides in presence of solution, 1906, A., ii, 270. Laar, Johannes Jacobus van, anomalous character of solubility curves and the relation of this to the formation of hydrates in solution, 1906, A., ii. 275.

course of melting-point curves for compounds which are partially dissociated in the liquid phase, the proportion of the products of dissociation being arbitrary, 1906, A., ii, 331.

course of melting-point curves for solid solutions (or isomorphous mixtures) in a special case, 1906, A., ii, 422.

osmotic pressure of solutions of nonelectrolytes in connexion with the deviations from the laws of ideal gases, 1906, A., ii, 526.

the shape of the spinodal and plaitpoint curves for binary mixtures of normal substances. IV., 1907, A.,

ii, 16.

endothermic and exothermic dissociation processes, 1907, A., ii, 156.

is it permissible to draw conclusions as to the molecular condition of a solvent from an abnormal boiling point elevation observed for a dilute solution ? 1907, A., ii, 228.

degree of dissociation of saturated solutions of an electrolyte in various solvents and of solutions in partition equilibrium, 1907, A., ii, 328.

solubility of electrolytes, 1907, A., ii,

aluminium in the potential series, 1908, A., ii, 248, 558.

vapour pressure of dry and of ordinary sal ammoniac, 1908, A., ii, 353,

melting-point and freezing-point curves of binary systems when the solid phase is a mixture (amorphous solid solution or mixed crystals) of the two components, 1908, A., ii, 808.

velocity of reaction, 1908, A., ii, 824,

osmotic pressure, 1908, A., ii, 1018.

melting-point or freezing-point curves of binary systems when the solid phase is a mixture of the two components and a compound is formed, 1909, A., ii, 376.

theoretical considerations on electrolytic dissociation of dissolved electrolytes, 1909, A., ii, 965.

vapour pressures of binary mixtures,

1910, A., ii, 583.

"simple" and complex "systems" of thermo-dynamical chemistry, 1911, A., ii, 256.

Laar. Johannes Jacobus van, form of the fusion curve (solid-liquid equilibrium curve) and its critical end-points, 1912, A., ii, 1040.

Labat, J. A., a mode of production of iodoform, 1909, A., i, 689.

reaction of hordenine and urotropine, 1909, A., ii, 527.

new reactions of hydrastine, hydrastinine, and narcotine, 1909, A., ii, 710. new reactions of opianic acid and their

applications to the detection of hydrastine and narcotine, 1909, A., ii, 710.

a reaction of the methylenic ether group in the aromatic series, 1909, A., ii, 771.

presence of bromine in human organs, 1911, A., ii, 533.

extraction of bromine and iodine from aqueous solutions by means of chloroform or carbon disulphide, 1911, A., ii, 653.

fluorescein as an indicator of bromine.

1912, A., ii, 384.

Labate, L. See Giorgio Errera. Labatut, J. See Maurice Vézes.

Labaune, Louis. See Justin Dupont, and Roure-Bertrand Fils.

Labbé, Donatien, sterilisation of air by means of ozone, 1906, A., ii, 479.

Labbé, Henri, nature and determination of the alkalinity of the blood, 1903, A., ii, 663.

distribution of nitrogen in the intestinal excreta, 1910, A., ii, 1090.

Labbé, Henri, and Léon Lortat-Jacob. action of iodine on lymphoid tissues, 1903, A., ii, 498.

Labbé, Henri, and E. Morchoisne, protein in nutriment for human beings, 1904, A., ii, 498.

formation and elimination of urea in man, 1904, A., ii, 575.

elimination of urea in healthy subjects, 1905, A., ii, 102.

Labbé, Henri, and L. Violle, ingestion of mineral acids by the dog, 1911.

A., ii, 220.

ingestion of acids by a dog after partial extirpation of the pancreas, 1912, A., ii, 69.

elimination of amino-nitrogen from the departreatised dog, 1912, A., ii, 277.

Labbé, Henri, and G. Vitry, unestimated substances in diabetic urine, 1909, A., ii, 821.

undialysable urinary substances, 1912,

A., ii, 582.

undialysable substance in diabetic urine, 1912, A., ii, 665.

Labbé, Henri. See also Léon Bernard. and E. Donard.

Labendzinski, Stanislaus. See Richard Abegg.

Labergerie, cultivation of Solanum commersonii at Verrières (Vienne, France), 1905, A., ii, 756.

Labhardt, Hans P. See Fritz Fichter. Karl Reinking, Hans Rupe, and Fritz Ullmann.

Labisi, C. See Francesco Angelico.

Laborde, Albert, condensation of radium emanation, 1909, A., ii, 634.

Laborde, Albert. See also Pierre Curie.

and William Duane.

Laborde, J. [B. Vincent], estimation of ammonia in wine, and its rôle in the differentiation of "mistelles" from sweet wines, 1903, A., ii, 689.

the ferment present in "harsh" or "turned" wine, 1904, A., ii, 278.

estimation of glycerol in wines, 1905, A., ii, 768.

origin of the colouring matter of red grapes and of other plant organs, 1908, A., ii, 774.

transformations of the chromogenic matter of grapes during maturation,

1908, A., ii, 1064.

physiological mechanism of the coloration of red grapes and of autumn leaves, 1909, A., ii, 85.

André de. Laborderie. See Paul

Freundler.

Labrouste. See Anatole Leduc.

Laby, T. H., total ionisation of various gases by the a-rays of uranium, 1907, A., ii, 423.

Landolt's experiments on change of weight in chemical transformation,

1908, A., ii, 170.

supersaturation and nuclear condensation of certain organic vapours,

1908, A., ii, 797. separation of iron from nickel and cobalt by lead oxide, 1908, A., ii, 988.

recalculation of the vapour pressure of mercury, 1908, A., ii, 1039.

pitchblende probably occurring in New South Wales, 1910, A., ii, 46.

tables of constants of ionisation and radioactivity, 1910, A., ii, 814.

Laby, T. H., and P. W. Burbidge, nature of γ-rays, 1912, A., ii, 221.

Laby, T. H., and George A. Carse, relation between the velocity and the volume of the ions of certain organic acids and bases, 1906, A., ii, 420.

Laby, T. H., and George William Clarkson Kaye, gaseous ionisation and pressure, 1909, A., ii, 111.

Laby, T. H. See also George A. Carse.

and Douglas Mawson.

Lachman, Arthur, azoxybenzene, 1903. A., i, 294.

a probable cause of the different colours of iodine solutions, 1903, A., ii,

Lachmann, Siegbert. See Carl Neuberg. Lachs, Hilary, simultaneous reactions in the decomposition of ethyl diazoacetate, 1910, A., ii, 702.

Lachs, Hilary, and Hans Friedenthal, the colorimetric estimation of iron,

1911, A., ii, 542.

Lachs, Hilary, and Leonor Michaelis, adsorption of neutral salts, 1911, A., ii. 190, 1069.

Lachwitz, August. See Heinrich Beckurts, and August Michaelis.

Lacombe, Henri, fractionation of cerium earths, 1904, A., ii, 485.

Lacombe, Henri. See also Georges Urbain.

Lacombe, L. See J. Galimard.

Lacour, Felix. See William Küster. Lacroix, [Antôine François] Alfred, a new mineral [grandidierite], 1904, A., ii, 52.

basic magnesium carbonates from the volcanic eruption at Santorin in 1866, 1905, A., ii, 464.

occurrence of Redonda phosphate in Martinique, 1905, A., ii, 536.

crystals of sylvite in blocks ejected during the recent eruption of Vesuvius, 1906, A., ii, 455.

products of the recent eruption of Vesuvius, 1906, A., ii, 555.

sodium sulphate in secondary fumaroles of Mt. Pelée, 1906, A., ii, 769.

lead and arsenic minerals as fumarole products in the recent eruption of Vesuvius, 1907, A., ii, 33.

a new mineral from the high temperature fumaroles of the recent eruption of Vesuvius, 1907, A., ii, 628.

sodium fluoride in nepheline-svenite from Los Islands, 1908, A., ii, 200.

a new mineral from the French Congo, 1908, A., ii, 508.

a new mineral occurring with tourmaline in Madagascar, 1908, A., ii,

fumaroles of Etna; boric acid in the fumaroles of Vesuvius, 1908, A., ii,

lavas of the recent eruption of Etna, 1908, A., ii, 766.

Lacroix, [Antoine François] Alfred, minerals of the fumaroles of Vesuvius, 1909, A., ii, 57.

minerals of the pegmatite-veins with lithia-tourmaline in Madagascar,

1909, A., ii, 58.

the pumice of the volcano of Mont Dore, 1909, A., ii, 63.

mode of formation of the Puv de Dôme, 1909, A., ii, 65.

lavas of the last eruption of Vulcano, Lipari Islands, 1909, A., ii, 156.

meteorite of St. Christophe-la-Chartreuse (Vendée), 1909, A., ii, 248.

danburite from Madagascar, 1909, A., ii, 812.

radioactive minerals from Madagascar. 1909, A., ii, 813; 1911, A., ii, 296.

rhodizite in the pegmatites of Madagascar, 1910, A., ii, 46.

rhönite from Puy de Barneire at Saint-Sandoux, 1910, A., ii, 49.

minerals from the pegmatites of Madagascar, 1910, A., ii, 307.

a variety of minervite from Réunion,

1910, A., ii, 308.

mineral with optical scroll structure contained in holocrystalline phosphorites from Quercy, 1910, A., ii,

mineralogical constitution of French phosphorites, 1910, A., ii, 720. rivotite, 1910, A., ii, 782.

a new mineral from the iron mines near Segré (Maine-et-Loire), 1910, A., ii, 783.

two uraniferous columbo-titanates from Madagascar, 1911, A., ii, 295. veined lodes of peridotites in New

Caledonia, 1911, A., ii, 406. lavas of the active volcano at Réunion,

1912, A., ii, 267.

radioactive uraniferous columbotantalotitanites from pegmatites of Madagascar; their frequent association with bismuth minerals, 1912, A., ii, 567.

constitution of the volcano of the island of Réunion, 1912, A., ii,

1061.

some minerals from Madagascar, several of which can be used as gems, 1912, A., ii, 1182.

Lacroix, Alfred, and Etienne Rengade, optical properties of rose beryl from Madagascar, 1911, A., ii, 736.

Lacroix, Alfred, and August de Schulten, a new mineral from the ancient lead slags at Laurion, Greece, 1907, A., ii,

Lacroix, Alfred. See also Adolphe Car-

Lacroix, Hun Kiarbéyendian, quinine formates, 1905, A., i, 716; 1907, A., i. 78.

Lacy, Burritt Samuel, the luminosity of the bunsen flame, 1908, A., ii, 1033.

Lacy, Burritt Samuel. See also Fritz Haber, and Theodore William Richards.

Ladd, Edwin Fremont, and Harry Preston Bassett, bleaching of flour, 1909, A., i,

Lade, Fritz, the conditions of formation of ethereal sulphates in the animal body, 1912, A., ii, 778.

Ladenburg, Albert, by-product in the preparation of stilbazole, 1903, A., i,

transformation of tropidine into tro-

pine, 1903, A., i, 431. estimation of ozone, 1903, A., ii,

asymmetric nitrogen, 1904, A., i, 92.

preparation of pure isostilbazoline, 1904, A., i, 1048.

atomic weight of iodine, 1905, A., ii, 310.

isoconiine and the synthesis of coniine, 1906, A., i, 692.

chemistry of silicon, 1907, A., i, 668; 1908, A., i, 492.

isoconiine, 1907, A., i, 956.

partial racemism, 1909, A., i, 252. racemic liquid compounds, 1910, A., i,

application of the phase rule to stereoisomeric compounds and the recognition of racemic compounds, 1911, A., ii, 265, 707.

Ladenburg, Albert, and Otto Bobertag, partial racemism, 1903, A., i, 575.

Ladenburg, Albert, and Leo Fischi, partial racemism. VI., 1907, A., i, 586.

Ladenburg, Albert, and Willy Herrmann, partial racemism. VII., 1908, A., i, 364.

Ladenburg, Albert, and Walter Herz, benzylmalimides, 1904, A., i, 992; 1905, A., i, 272.

Ladenburg, Albert, and Emanuel Kroener, derivatives of a-stilbazole, 1903, A., i, 275.

Ladenburg, Albert, and Wladislaus Sobecki, a new instance of nitrogen isomerism in the piperidine series, 1909, A., i, 831.

existence of liquid racemic compounds,

1910, A., i, 769.

Ladenburg, Erich, and Erich Lehmann, absorption spectrum of ozone, 1906, A., ii, 509.

Ladenburg, Erich. See also Heinrich Rubens.

Ladenburg, Rudolf, temperature of the incandescent carbon particles of luminous flames, 1907, A., ii, 146.

emission and absorption of luminous hydrogen, 1910, A., ii, 811.

absorption in luminous hydrogen, 1911, A., ii, 83.

Ladisch, Carl. See Alfred Einhorn. Ladner, Gustav. See Julius Schmidt. Laemmel, Rudolf, atomic heat of solid elements, 1905, A., ii, 300.

specific heats of the solid elements,

1907, A., ii, 530.

observations of the natural system of the elements, 1912, A., ii, 1048.

Laer, Henri van, non-inverting yeasts, 1905, A., ii, 547.

diastatic catalysis of hydrogen peroxide applied to malt analysis, 1906, A., ii, 591.

coagulation produced by borates; agglutination of yeast. II., 1907,

A., ii, 120.

malt catalase and the mineral catalysts,

1909, A., i, 688.

velocity of saccharification of starch. 1910, A., ii, 839; 1911, A., ii, 28, 478; 1912, A., ii, 148.

the condition of malt diastase after it has acted, 1912, A., i, 672.

paralysis and stimulation of zymase and catalase, 1912, A., i, 1043. the limit of diastatic hydrolysis of

starch, 1912, A., ii, 35.

influence of temperature on malt

diastase, 1912, A., ii, 244. Läwen, Arthur, local action of cocaine and allied substances on motor nerves, 1907, A., ii, 286.

Lafore, J. See Maurice Lombard.

La Forge, Frederick Burr. See Hermann Leuchs, and Phæbus A. Levene.

La Franca, Sebastiano, relation between proteins and electrolytes. IV. Ionconcentration and ion-toxicity in systems of proteins, metallic salts, and water, 1906, A., ii, 789.

gaseous metabolism in uræmic dogs,

1908, A., ii, 303.

purine metabolism in diseases of the liver, 1911, A., ii, 1013.

Lagatu, Henri, physico-chemical analysis of soils, 1905, A., ii, 557.

classification and nomenclature of arable soils according to their mineral constitution, 1905, A., ii, 758.

Daniel, thermochemical Lagerlöf, studies, 1904, A., ii, 382, 605; 1905, A. ii, 76, 677.

Lagers, G. H. G., estimation of phosphoric acid by the Pemberton and Pemberton-sulphuric acid methods, 1907, A., ii, 907.

Pemberton's method for the estimation of phosphoric acid, 1908, A., ii,

896.

Lagodzinski, Kasimir, 1:2-anthraquinol and its conversion into alizarin. 1904, A., i, 158.

action of a mixture of glacial acetic acid and hydriodic acid on quinones.

1905, A., i, 601.

2:3-dihydroxyanthracene, 1906, A., i,

1:2-anthraquinone, 1906, A., i, 98. compounds of aniline with 1:2-anthraquinone and a new hydroxyanthraquinone, 1906, A., i, 293.

1:4-anthraquinone, 1906, A., i, 439. Łahociński, Z. See Ludwik Bruner.

Laible, I. See Erich Harnack.

Laidlaw, Patrick Playfair, blood pigments, 1904, A., i, 1067. active principle of a Benin spear poison,

1910, A., i, 54.

[physiological] action of tetrahydropapaveroline, 1910, A., ii, 797.

[physiological] action of some isoquinoline derivatives, 1911, A., ii,

physiological action of B-aminoethylindole, 1911, A., ii, 1120.

Laidlaw, Patrick Playfair, and John Henry Ryffel, metabolism in a case of coma under rectal feeding, 1908, A., ii, 311.

Patrick Playfair. See also Laidlaw, Henry Hallett Dale, and Arthur Jumes Ewins.

Lainé, E. See Achille Müntz.

Laird, J. N., the reaction velocity of reducing sugars with Fehling's solution, and its application to the study of urinary chemistry, 1912, A., ii, 244.

Laire & Co., de, chemically pure a- and β-ionones, 1904, A., i, 260.

Laist, Frederick. See Solomon Farley Acree.

Lajoux, Henri, basic mercuric salicylate, 1903, A., i, 485.

chemical analysis and cryoscopy of milk, 1905, A., ii, 559.

Lake, Hilda. See Eric Drabble.

Lakus, K., galvanic estimation of copper in preserves, 1911, A., ii, 771.

Lalin, Leonid. See Otto Diels.

Lalou, S., variations in quantity and composition of the pancreatic juice during secretions provoked by secretin, 1910, A., ii, 1082.

Lalou, S. See also Victor Henri.

Laloue, Gustave, essential oils. I. Orange flower oil. II. Schinus molle oil, 1911, A., i, 138.

essential oils. III. Basil oil, 1912,

A., i, 574.

essential oils. IV. Essence of Mespilodaphne pretiosa, 1912, A., i, 636.

Laloue, Gustave. See also Eugène Charabot.

Lamb, Arthur Becket, action of acetyl chloride on selenic acid, 1903, A., i, 732.

potential of iron calculated from equilibrium measurements, 1910, A., ii,

925.

Lamb, Arthur Becket, and John W.
Marden, an equilibrium in the cobaltammines, 1912, A., ii, 31.

quantitative estimation of perchlorates,

1912, A., ii, 681.

Lamb, Arthur Becket. See also Gregory
Paul Baxter, Arthur Michael, and
Martin Andre Rosanoff.

Lamb, Francis William John Alexander, fat absorption, 1910, A., ii, 520.

the inhibition by cholesterol of the irritating action of oleic acid, 1911, A., ii, 52.

a case of Bence-Jones proteinuria,

1912, A., ii, 857.

Lamb, Samuel. See Arthur H. Hiorns.
Lambert, Alexander, and Charles George
Lewis Wolf, metabolism of nitrogen
and sulphur in pneumonia, 1907, A.,
ii, 711.

Lambert, Bertram, the wet oxidation of metals. Part II. The rusting of iron (continued), 1912, T., 2056; P., 197.

Lambert, Bertram, and James Campbell
Thomson, the wet oxidation of metals.
Part I. The rusting of iron, 1910,
T., 2426; P., 290; discussion, P.,
291.

Lambert, Georges, the fermentation of

cocoa, 1912, A., ii, 972.

Lambert, M., emission of Blondlot's rays [n-rays] in the course of the action of soluble ferments, 1904, A., ii, 271.

action of chemical and osmotic phenomena on phosphorescence, 1904,

A., ii, 305.

Lambert, P., absorption spectrum of manganous salts, 1905, A., ii, 638.

Lambling, Eugène [Frédéric]. See G. Donzé.

Lambotte, Emil. See Theodor Curtius.
Lambrecht, Rudolf, action of hydrogen aulphide on rosaniline and phenylated rosanilines, 1907, A., i, 257.

Lambrecht, Rudolf, and Hugo Weil, colourless salts of triphenylcarbinol and diphenylcarbinol, 1904, A., i, 877; 1905, A., i, 128.

rapid method of distinguishing between rosaniline and pararosaniline, 1904,

A., ii, 794.

a colourless hydrochloride of rosaniline, 1905, A., i, 97.

malachite-green and crystal-violet,

1905, A., i, 243.

Lambrecht, Walther, action of phthalic anhydride on m-cresol, 1909, A., i, 949. Lambrecht, Walther. See also Emil

Fromm.

Lambris, Gustav, absorption of carbon by metals, especially nickel, in the electrolysis of aqueous solutions, 1910, A., ii, 131.

Lami, Pio, volumetric estimation of dextrose, 1907, A., ii, 201.

control and estimation of atomic complexes in drugs, 1908, A., ii, 240.

the polyiodide molecule, 1908, A., ii, 762.

retrogression of the active substance in medicinal plants by the action of

enzymes, 1912, A., ii, 195.

Lamm, G., the action of veratrine on striated muscle. I. and II., 1911, A., ii, 813; 1912, A., ii, 374.

Lampé, Arno Ed. See Emil Abderhalden.

Lampe, Br., 1:5- and 1:8-anthradiol [rufol and chrysazol], 1909, A., i, 379.

Lampe, Victor. See S. Czaplicki,
Stanislaus von Kostanecki, and J.
Miłobedzka.

Lampel, H., deaminoglobulin, 1907, A.,

1, 001

Lampel, H., and Zdenko Hanns Skraup, hydrolysis of serum-globulin by alkalis, 1909, A., i, 587.

Lampen, Alexander, electrical resistance furnace for the measurement of high temperatures with the optical pyrometer, 1906, A., ii, 598.

electrolytic separation of tin and arsenic, 1907, A., ii, 584.

Lampen, Alexander. See also Samuel

Auchmuty Tucker.

Lamplough, Francis Edward Everard,
the determination of the rate of

the determination of the rate of chemical change by measurement of gases evolved, 1906, P., 280; discussion, P., 280; 1908, P., 29; 1909, P., 23; discussion, P., 24; A., ii, 30.

the determination of the rate of decomposition of benzenediazonium

chloride, 1909, P., 166.

Lamplough, Francis Edward Everard, the depression of the freezing points of sodium and calcium chlorides, 1911, A., ii, 581.

Lamplough, Francis Edward Everard. See also Charles Thomas Heycock.

Lamprecht, Hermann, the band spectrum of lead, 1911, A., ii, 831.

Lancien, André, molybdo-uranic compounds, 1907, A., ii, 697; 1908, A., ii, 699.

[physiological action of] electrically prepared colloidal rhodium, 1912, A., ii, 73.

some new double uranium nitrates, 1912, A., ii, 455.

Lancien, André, and Louis Thomas, biological radioactivity, 1910, A., ii, 374.

Lancon, J. See Edouard Urbain.

Landau, Anastazy, alkalinity of blood,

1905, A., ii, 330.

alkalescence and acidosis of the blood. Part II. On the influence of alkalis on the alkalescence of normal blood, and of blood in cases of endogenous acidosis, 1908, A., ii, 304.

Landau, Anastazy, and Micczyslaw Halpern, cerebro-spinal fluid, 1908,

A., ii, 406.

Landau, A. Lionel, the photophosphorescence of inorganic solid solutions, 1912, P., 2; discussion, P., 2.

Landau, Bernhard, influence of the solvent on the rotatory power of optically active substances, 1911, A., ii, 450.

Landau, Bernhard. See also Emil Abderhalden, and Hermann Grossmann.

Landau, Marc, distribution of iodine between certain organic solvents, 1910, A., ii, 593.

action of ultra-violet light on lactic acid, 1911, A., i, 515.

application of ultra-violet light in chemical analysis, 1912, A., ii, 986.

Landauer, Edmond, researches in the phenylacridine group, 1904, A., i, 927.
 Landauer, Paul, and Hugo Weil, methyl-

ene-blue, 1910, A., i, 202.

Landauer, Paul. See also Hugo Weil. Landecker, Max. See Ludwig Weiss.

Landenberger, Albert. See Conrad Willgerodt.

Lander, George Druce, synthesis of iminoethers; N-ethyl-, -methyl-, and -benzyl-benzimino-ethers, 1903, T., 320; P., 15.

the molecular rearrangement of N-substituted innino-ethers, 1903, T., 406; P., 45; discussion, P., 46.

Lander, George Druce, the nature and probable mechanism of the replacement of metallic by organic radicles in tautomeric compounds, 1903, T., 414; P., 47.

imino-ethers and allied compounds corresponding with the substituted oxamic esters, 1904, T., 984; P.,

131

mixed semi-ortho-oxalic compounds,

1907, T., 967; P., 148.

Lander, George Druce, and Frederick Trevor Jewson, imino-ethers corresponding with ortho-substituted benzenoid amides, 1903, T., 766; P., 160.

Lander, George Druce, and Harry Edwin Laws, amidechloroiodides, 1904, T.,

1695; P., 217.

Lander, George Druce, and Alfred Edward Walden, detection of traces of hydrogen cyanide, 1911, A., ii, 668.

Lander, George Druce, and Harold Witham Winter, detection of poisonous metals, 1909, A., ii, 95.

Landers, Hermann. See Johannes

Thiele.

Landesen, Georg. See Arnold Jacobsen. Landin, John, radium in Sweden, 1906, A., ii, 63.

Landini, Gabriele, influence of formaldehyde on the rotatory power of dextrose in relation to the theory of mutarotation, 1907, A., ii, 208.

Lando, Max. See George Bell Frankforter.

Lando, Towie Gutmann. See Paul Pfeiffer.

Landolf, Frederic, milk-serum, 1907, A., ii, 567; 1908, A., ii, 714.

the occurrence of different urinary sugars and their origin from different organs, 1909, A., ii, 915.

Landolt, Hans [Heinrich], addendum to the Sixth Report of the Committee [of the German Chemical Society] for fixing atomic weights, 1905, A., ii, 308.

supposed alteration in the total weight of substances taking part in a chemical reaction, 1906, A., ii, 528; 1908, A., ii, 366.

the development of inorganic chemistry in the last forty years, 1908, A., ii, 31.

permeability of glass to vapours, 1909, A., ii, 1005.

obituary notice of, 1911, T., 1653. Landolt, Hans, and Wilhelm Ostwald, Fifth Report of the Atomic Weight Commission, 1904, A., ii, 20. Landolt, Hans, Wilhelm Ostwald, and Karl Scubert, Fourth Report of the Committee [of the German Chemical Society] on atomic weights, 1903, A., ii, 68.

Landolt, Hans, Wilhelm Ostwald, and Otto Wallach, Sixth Report of the Committee [of the German Chemical Society] for fixing atomic weights, 1905, A., ii, 155.

Landrieu, Philippe, heat of formation of the oximes, 1905, A., ii, 301.

the oximes, 1905, A., ii, 301.
equilibrium between acetone and
hydroxylamine hydrochloride, 1905,
A., ii, 445.

thermochemistry of phenylhydrazones,

1905, A., ii, 628.

thermochemistry of phenylosazones and phenylhydrazones of the adiketones and reducing sugars, 1906, A., ii, 270.

Landrieu, Philippe. See also Marcellin

Berthelot.

Landsberg, Geory, ammonia in the urine, 1903, A., ii, 442. alcohol in animal organs, 1904, A., ii,

alcohol in animal organs, 1904, A., ii, 499.

Landsberger, Willy, estimation of glycerol by the extraction method, 1905, A., ii, 558.

Landshoff & Meyer. See Chemische Fabrik Grünau, Landshoff, & Meyer.

Landsiedl, Anton, reflux condenser with outer and inner cooling arrangement, 1904, A., ii, 554.

estimation of nitrogen according to Dumas' method, 1904, A., ii, 587. determination of melting point, 1905, A., ii, 626.

Landsiedl, Anton. See also Max Bam-

Landsteiner, Karl, theory of colloids, 1905, A., ii, 447.

Robertson's theory of adsorption, 1909, A., ii, 27.

Landtwing, August. See Augustin Bistrzycki.

Lane, Frederick H. See Irving W. Fay. Lane, Joseph Henry. See Lewis Eynon, Arthur Robert Ling, and Raphael Meldola.

Lane, Nathaniel J., a self-filling burette, 1907, A., ii, 390.

Lane-Claypon, (Miss) Janet Elizabeth, haemolytic factors in milk, 1908, A., ii, 970.

Lane-Claypon, (Miss) Janet Elizabeth, and Samuel Barnett Schryver, autolysis of tissues, 1904, A., ii, 574.

Lane-Claypon, (Miss) Janet Elizabeth. See also Arthur Harden. Lanfry, Maurice, a new thiophen compound, $C_{10}H_6S_2$, and some of its derivatives, 1911, A., i, 151.

dinaphthathiophen, 1911, A., i, 555. oxythiophens, 1911, A., i, 740.

oxy-2-methylthiophens, 1911, A., i, 1009.

s-dioxythionaphthen, 1912, A., i, 293. action of hydrogen peroxide on bromothiophens, 1912, A., i, 487.

action of hydrogen peroxide on acetothienone and a-thiophenic acid, 1912, A., i, 717.

action of hydrogen peroxide on trithienyl, 1912, A., i, 1012.

Lang, Arnold. See Eugène Grandmougin.

Lang, Georg, the influence of manganese on the properties of mild steel, 1911, A., ii, 206.

Lang, Georgij F., digestion and absorption in the stomach, 1907, A., ii, 107.

Lang, Hugo, condensation of phenylacetone with phenanthraquinone, 1905, A., i, 292.

o-benzoylbenzoie acid, 1905, A., i, 895. Lang, Hans K. See Karl Bernhard

Lehmann. Lang, Julius, chemical lecture experi-

ments, 1905, A., ii, 810.

Lang, R. See Zdenko Hanns Skraup.

Lang, Rudolf. See Julius Schmidlin.

Lang, S., removal of the amino-group (desamidierung) in the animal body, 1904, A., ii, 427.

Lang, Viktor von, and Ludwig Haitinger, nitrates of yttrium earths and ceric nitrate, 1907, A., ii, 264.

Lang, Walther, preparation of aldehydes and ketones from alcohols, 1906, A., i, 627.

preparation of aldehydes and quinones, 1908, A., i, 350.

Lang, William Robert, the formation of the di- and hexa-methylammoniocadmium chlorides, 1903, T., 724; P., 125.

note on some metallic compounds of substituted ammonias, 1911, P., 140.

Lang, William Robert, and Thomas Boles Allen, an improved form of apparatus for the rapid estimation of sulphates and salts of barium, 1907, T., 1370; P., 187.

Lang, William Robert, and Charles Macdonald Carson, the action of liquefied ammonia on chromic chloride, 1903 P., 147.

compounds of chromic chloride with substituted ammonias, 1904, A., i 800. Lang, William Robert, and Charles Macdonald Carson, the interaction of hydrogen sulphide and sulphur dioxide, 1905, P., 158.

William Robert, and E. H. Jolliffe, the action of methylamine on chromic chloride, 1903, P., 147.

William Robert, and William Perot Kaufmann, action of silver nitrate on disodium orthophosphate in dilute solution, 1906, A., ii, 162.

Lang, William Robert, and Hoyes Lloyd, lecture experiment to illustrate dust explosions; the surface areas of certain finely-divided combustible solids, 1911, P., 161.

William Robert, John Francis Mackey, and Ross Aiken Gortner, some esters of arsenious acid, 1908, T.,

1364; P., 150.

Lang, William Robert, and John Obins Woodhouse, the volumetric estimation of silver, 1908, T., 1037; P.,

some esters of arsenious acid. Part II. Resorcinyl arsenite, 1909, P., 199.

Lang, William Robert. See also Rodger J. Manning.

Langbeck, Kurt. See Friedrich Hoff-

Langbein, Hermann, determination of the heat of combustion by means of combined oxygen, and Parr's method, 1904, A., ii, 86.

Lange, Alfons Erich, determination of alkalinity by electrochemical means,

1908, A., ii, 534.

the conversion of sulphur dioxide into sulphuric acid in presence of positive and negative catalysts, 1912, A., ii, 550.

Lange, Alfons Erich. See also Emil Knoevenagel.

Lange, F. See Leo Borchardt.

Lange, Fritz, the essential oil from Rhizoma imperatoriae, 1912, A., i, 371.

Lange, Hans, the composition of heliumcontaining minerals, 1911, A., ii, 499.

Lange, Kurt. See Richard Josef Meyer. Lange, K. R. See Alfred Werner.

Lange, Martin, the condensation of salicylic acid with epichlorohydrin or the dichlorohydrins, 1907, A., i, 930.

replacement of the sulphonic by the cyano- and carboxyl groups in azocompounds, 1908, A., i, 300.

preparation of 2-hydroxydihydro- and 1-alkyl-2-ketodihydro-quinoxalines,

1908, A., i, 839.

Lange, Martin, new synthesis of pyrazine derivatives by the action of aromatic nitroso-o-hydroxy-compounds on acetaldehyde in the presence of ammonia or primary aliphatic amines, 1909, A., i, 261. preparation of pyrazine derivatives,

1911, A., i, 505.

Lange, Max. See Alfred Wohl. Lange, Werner. See Walther Borsche, and Otto Wallach.

Lange, Wilhelm, electrolysis of copper sulphate as a basis for acidimetry, 1903, A., ii, 106.

Lange, Wilhelm. See also Johannes Brode.

Langelier, Wilfrid F. See Charles James.

Langenberg, A. See Paul Pfeiffer. Langendorff, Oskar, action of laked

blood, 1903, A., ii, 736. Langendorff, Oskar, and Werner Hueck,

action of calcium on the heart, 1903, A., ii, 498.

Langensiepen, Ernst. See Emil Knoevenagel.

Langer. See Rachmiel Segalle.

Langer, G., condensations of 2-methyl-5-ethylpyridine and of 2:4-lutidine with aldehydes, 1906, A., i, 38.

Langer, Hans, excretion of alkaloid into the stomach into which salts have been introduced, 1912, A., ii, 1080. secretion and tolerance of heroine, 1912, A., ii, 1080.

Langevin, P., ionisations of gases, 1903, A., ii, 263.

law of the recombination of the ions, 1903, A., ii, 587.

the ions of the atmosphere, 1905, A., ii, 141.

comparison of the gaseous and dissolved molecules, 1912, A., ii, 334.

Langevin, P., and M. Moulin, registration of the ions in the atmosphere, 1905, A., ii, 141.

Langezaal, (Mlle.) J. See Jacob Bõese-

Langguth, Stephan, reduction of aromatic amino-acids to the corresponding alcohols, 1905, A., i, 593.

Langguth-Steuerwald, L. G., the "encrusting" pigment of the sugar-cane, 1912, A., ii, 481.

Langhans, Alfred. See Hans Pringsheim.

Langheld, Kurt, behaviour of cholic acid towards ozone, 1908, A., i, constituents of ox bile. I., 1908, A.,

ii, 211.

Langheld. Kurt. degradation of aamino-acids to aliphatic aldehydes by means of sodium hypochlorite, 1909, A., i, 138.

behaviour of a-amino-acids towards sodium hypochlorite, 1909, A., i, 557.

ethyl metaphosphate and its use in organic chemistry, 1910, A., i, 536.

esters and amides of the phosphoric acids. II. Attempts to prepare substances allied to the lecithius, 1911, A., i, 705.

preparation of alkyl esters of metaphosphoric acid, 1912, A., i, 407.

esters and amides of phosphoric acid. III. Dihydroxyacetone and lævulose-phosphoric acids, 1912, A., i, 415.

Langheld, Kurt. See also Carl Dietrich Harries.

Langkopf, Otto, storage of alum in zinc vessels, 1910, A., ii, 507.

the detection of salicylic acid, 1912, A., ii, 501.

See also Gustav Langkopf, Otto. Heller.

Langlais, Paul. See A. H. Richard. Langlet, Abraham, absorption spectra of the rare earths, 1906, A., ii, 713.

holmium, 1907, A., ii, 955.

Langley, John Newport, reaction of cells and nerve-endings to certain poisons, 1906, A., ii, 111.

contraction of muscle and receptive substances, 1908, A., ii, 120, 769, 874.

action of nicotine and curare on the receptive substance of the frog's rectus abdominis muscle; antagonism by curare of the nicotine stimulation of nerve cells, 1910, A., ii, 797.

action of salts on the neural and nonneural regions of muscles, 1911, A.,

ii, 628.

Langley, John Newport, and Rudolf Magnus, movements of the surviving intestine, 1905, A., ii, 733.

Langley, Ralph Walker, estimation of

small amounts of barium in rocks, 1908, A., ii, 985.

estimation of zinc as pyrophosphate, 1909, A., ii, 1053.

Langley, Ralph Walker. See also Harry Ward Foote, and Treat Baldwin Johnson.

Langlois, G. See Pierre Genvresse. Langmaid, John Frank. See Charles Loring Jackson.

Langmuir, Arthur C., estimation of rosin in shellac, 1905, A., ii, 214,

Langmuir, Irving, dissociation of watervapour and carbon dioxide at high temperatures, 1906, A., ii, 848.

velocity of reactions in gases moving through heated vessels, and the effect of convection and diffusion, 1908, A., ii, 1020.

thermal conduction and convection in gases at extremely high temperatures, 1912, A., ii, 231.

dissociation of hydrogen into atoms,

1912, A., ii, 826. chemically active modification hydrogen, 1912, A., ii, 1162.

Languess, Julia, electrolytic determinations and separations with the use of a rotating anode, 1907, A., ii, 585.

Languess, Julia, and Edgar Fahs Smith, rapid electrolytic precipitation of antimony, 1906, A., îi, 253.

Langstein, Egon, structure of pyrene, 1910, A., i, 726.

Langstein, Leo, carbohydrates from the globulins of blood-serum, 1903, A., i. 374.

ovomucoid, 1903, A., i, 451.

hydrolysis of zein by hydrochloric acid, 1903, A., i, 588.

carbohydrates from serum globulins, 1903, A., i, 734; 1904, A., i, 790; 1905, A., i, 555.

albumoses in the blood, 1903, A., ii,

end-products of peptic digestion, 1903, A., ii, 670.

the carbohydrate group in proteins, 1904, A., i, 790; 1905, A., i, 496. action of dilute sulphuric acid on

proteins, 1907, A., i, 989. Langstein, Leo, and Martin Mayer, proteins of blood-plasma in experi-

mental infections, 1904, A., ii, 184. Langstein, Leo, and Carl Neuberg, the urine of calves during the first few days of life, 1907, A., ii, 568.

Langstein, Leo, and Franz Steinitz, lactase and sugar exerction in infants with gastric diseases, 1906, A., ii, 187.

Langstein, Leo. See also Emil Abderhalden. Gustav von Bergmann, Wilhelm Falta, and Hans Rietschel.

See Albert Ernest Langton, Harold.

Dunstan.

Langworthy, Charles Ford, and R. D. Milner, the respiration calorimeter and its uses for the study of problems of vegetable physiology, 1912, A., ii, 378. Lanin, Theodor. See Carl

Bischoff. Lanis, E. See Marussia Bakunin.

663

Lankshear, Frederick Russell, the socalled manganese trioxide; prelimin-

ary note, 1912, P., 198.

Lankshear, Frederick Russell, and Arthur Lapworth, the absorption spectra of the isomeric hydrazones and semicarbazones of camphorquinone, 1911, T., 1785; P., 224.

Lankshear, Frederick Russell, and William Henry Perkin, jun., epi-camphor; a new isomeride of camphor; preliminary note, 1911, P., 166.

Eduard. See Alexander Lantelme,

Naumann.

Lanzenberg, A. See Gabriel Bertrand, and Auguste Fernbach.

Lanzer, Eugen, oxidation of proteins by Jolles' method, 1903, A., ii, 584.

Lanzoni, F. See Giuseppe A. Barbieri. Lapidus, Herman, diastase and commercial lecithin preparations, 1911, A., i, 248.

Laporte, F., and P. de la Gorce, electrochemical equivalent of silver, 1910, A., ii, 178.

Laprade, Ferdinand. See Jules Aloy. Lapworth, Arthur, reactions involving the addition of hydrogen cyanide to carbon compounds, 1903, T., 995;

P., 189. optically active esters of 8-ketonic and B-aldehydic acids. Part III. Ozo-derivatives of menthyl acetoacetate, 1903, T., 1114; P., 149.

the influence of nitro-groups on the reactivity of halogen derivatives of benzene, 1903, P., 23.

the action of halogens on compounds containing the carbonyl group, 1903,

P., 188; 1904, T., 30.

reactions involving the addition of hydrogen cyanide to carbon com-pounds. Part II. Cyanohydrins regarded as complex acids, 1904. T., 1206; P., 177.

reactions involving the addition of hydrogen cyanide to carbon compounds. Part III. Action of potassium cyanide on mesityl oxide, 1904, T., 1214; P., 177.

note on the addition of hydrogen cyanide to unsaturated compounds,

1904, P., 245.

reactions involving the addition of hydrogen cyanide to carbon com-Part V. Cyanodihydropounds. carvone, 1906, T., 945; P., 164.

derivatives of cyanodihydrocarvone and cyanocarvomenthone, 1906, T., 1819;

P., 285,

Lapworth, Arthur, oxime formation and decomposition in presence of mineral acids, 1907, T., 1133; P., 168.

an examination of the conception of hydrogen ions in catalysis salt formation, and electrolytic conduction, 1908, T., 2187; P., 275.

saponification of ethyl formate by water in presence of acids as catalytic

agents, 1908, P., 100. ester hydrolysis and theories of esteri-

fication, 1908, P., 152.

note on the variation in the catalytic activity of mineral oxide with changes in their concentration, 1909. P., 19.

cholesterol in animal tissues, 1911, A.,

ii, 305.

Lapworth, Arthur, and William Walker Scott Nicholls, the action of hypobromites on amides, 1903, P., 22.

Lapworth, Arthur, and James Riddick Partington, the influence of water on the availability of hydrogen chloride in alcoholic solution, 1909, P., 307; 1910, T., 19.

electromotive forces in alcohol. Part I. Concentration cells with electrodes reversible to chlorine ions, 1911, T.,

1417; P., 194.

Lapworth, Arthur, and Victor Steele, a new stereoisomeride of cyanodihydrocarvone, 1911, T., 1877; P., 240. some properties of phenyl isopropyl

ketone, 1911, T., 1882; P., 239.

Lapworth, Arthur, and Elkan Wechsler, the interaction of cyanodihydrocarvone, amyl nitrite, and sodium ethoxide. Part I., 1907, T., 977; P., 137.

the interaction of cyanodihydrocarvone, amyl nitrite, and sodium ethoxide. Part II. The constitution of the products, 1907, T., 1919; P., 252.

experiments on substituted allenecarboxylic acids. Part I., 1909, P.,

307; 1910, T., 38.

See also Ernest Lapworth, Arthur. Barrett, Douglas Anderson Bowack, Reginald William Lane Clarke, John Ickering Crabtree, John Ferns, Edward Fitzgerald, Archie Cecil Osborn Hann, Alfred. Taylor Hardman, Robert William Harvey, William Jacob Jones, and Frederick Russell Lankshear.

Laquer, Walther, can the radium emanations taken up by drinking be detected

in the urine ? 1910, A., ii, 58.

Laqueur, Ernst, action of the rennet ferment on milk and casein, 1905, A., ii, 848.

Laqueur, Ernst, casein as an acid and its distinction from casein altered by rennet (paraeasein); action of rennet, 1906, A., i, 56.

the fat-splitting ferment in the "little stomach," 1906, A., ii, 559.

action of quinine on ferments, 1906, A., ii, 870.

the action of gases on autolysis, with special reference to their action on metabolism, 1909, A., ii, 500.

the action of arsenic on autolysis,

1909, A., ii, 500.

autolysis and metabolism. V. The influence of gases, especially oxygen and carbon dioxide, on autolysis, 1912, A., ii, 662.

Laqueur, Ernst, and Kurt Brünecke, autolysis and metabolism. IV. The influence of sodium benzoate on autolysis, 1912, A., ii, 662.

the influence of gases, specially oxygen, on tryptic and peptic digestion,

1912, A., ii, 1188.

Laqueur, Ernst, Kurt Brünecke, and E. Crampe, antolysis and metabolism. III. The influence of sodium salicylate on autolysis, 1912, A., ii, 661.

Laqueur, Ernst, and Jakob Ettinger, autolysis and metabolism. II. The influence of arsenic on autolysis, 1912,

A., ii, 661.

Laqueur, Ernst, and Otto Sackur, acid properties and molecular weight of casein and its decomposition on drying, 1903, A., i, 300.

Laqueur, Ernst, and Fritz Verzar, the specific action of carbon dioxide on the respiratory centre, 1912, A., ii,

Larcheveque, Marc. See von Noble.

Larguier des Bancels, J., influence of electrolytes on the mutual precipitation of colloids of opposite electrical sign, 1905, A., ii, 513.

pancreatic juice rendered active under the combined influence of colloids and electrolytes, 1905, A., ii, 643.

influence of non-electrolytes on the mutual precipitation of colloids of opposite electrical sign, 1906, A., ii,

physical modifications of gelatin in the presence of electrolytes and nonelectrolytes, 1908, A., i, 233.

the influence of alkaline ferro- and ferri-cyanides on blood-coagulation, 1908, A., ii, 958.

electric charge of textile substances immersed in water or in electrolytic solutions, 1909, A., ii, 720.

Larguier des Bancels, J., solubility of coloured resinates submitted to the action of light, 1912, A., ii, 882.

Larguier des Bancels, J. See also Henri Bierry, and Victor Henri.

Laria-Botte, A. See Guido Pellizzari. Larkin, Herbert K. See Martin Andre Rosanoff.

La Roche & Co. See Hoffmann, La Roche & Co.

La Rosa, Michele, thermal effects of the musical are; [probable crystallisation of carbon], 1909, A., ii, 311.

thermal effects of the musical arc; probable fusion of carbon, 1909, A.,

the melting of carbon by means of the Joule effect, 1912, A., ii, 44.

Larsen, B., composition of metallic calcium, 1906, A., ii, 25.

Larsen, B. See also Franz Russ.

Larsen, Esper S., relation between the refractive index and the density of some crystallised silicates and their glasses, 1909, A., ii, 841.

Larsen, Esper S. See also Eugene

Thomas Allen.

Larsen, Esper S., jun., and Waldemar Theodore Schaller, hinsdalite, a new mineral, 1911, A., ii, 1102.

Larsen, Halfdan. See Heinrich Goldschmidt.

Lasareff, P., influence of gas pressure on the bleaching of dyes in the visible spectrum, 1912, A., ii, 219.

bleaching of methylene-blue in the visible spectrum, 1912, A., ii, 219,

Laschtschenko, P. N., specific heats of barytes, witherite, fused lime, quartz, and chalcedony at high temperatures, 1908, A., ii, 758; 1911, A., ii, 253.

transformation of aragonite into calcite, 1911, A., ii, 886.

Laschtschenko, P. N. See also Nicolai A. Pushin.

Lasègue, G., chlorous acid, 1912, A., ii, 842.

estimation of chlorous acid, 1912, A., ii, 988.

Laseker, Richard, analysis of sodium peroxide, 1906, A., ii, 804.

Laska, Anna, the physiological behaviour of radium emanations, 1910, A., ii,

Laske, Victor. See Paul Friedländer. La Société S. Jay & Co., preparation of alcohol from acetylene, 1904, A., i,

Lasocki, Eduard. See Fritz Ephraim.

La Spada, G. See Giorgio Errera.

Lassar-Cohn, tap for use with alkaline

liquids, 1905, A., ii, 631.

Lassar-Cohn, and Josef Löwenstein, rule in benzoylation of aromatic hydroxyacids and their esters, 1908, A., i,

Lassar-Cohn, and Fritz Schultze, action of potassium hypochlorite, bromite, and hypoiodite on dipotassium salicylate, 1905, A., i, 893.

Lasserre, A., action of acetaldehyde and acetone on mercuric acetate, 1905,

A., i, 740.

estimation of isobutyric and valeric acids by Duclaux's method, 1907, A., ii, 203.

analysis of mixtures of some volatile

fatty acids, 1907, A., ii, 991. estimation of butyl and amyl alcohols in alcoholic liquids, 1910, A., ii, 1005.

Lassieur, A. See Albin Haller, and Camille Matignon.

Last, E. See Walther Dilthey.

László, Ernst, the hyperbolæ of furnace gas constituents, 1911, A., ii, 929.

Laszló, Ernst. See also Michael A. Rakusin.

Lászlóffy, Aladár von. See Karl J. Somló.

Latham, Peter Wallwork, synthesis of tyrosine, 1906, A., i, 85.

complete hydrolytic decomposition of egg-albumin at 180°, 1908, A., i, 709.

the synthesis of living albumin, 1908, A., i, 709.

formation of lactic acid and carbon dioxide in muscle, 1908, A., ii, 609.

Lathrop, Elbert C., guanine from a heated soil, 1912, A., ii, 982.

Lathrop, Elbert C. See also Oswald Schreiner, and Edmund C. Shorey.

La Torre, Antonio. See Fritz Ullmann. Lattermann, Arthur. See Emil Erlenmeyer, jun.

Lattes, Ch., polonium rays, 1908, A., ii,

Lattes, Lcone, production of sugar in the perfused liver of diabetic animals, 1909, A., ii, 908. the fat of dog's blood under normal

and various experimental conditions (digestion, hunger, and phosphorus, phloridzin and chloroform poisoning), 1911, A., ii, 994.

Lattes, Leone. See also Gustav Embden. Lattey, Robert Tabor, mutual solubilities of diethylamine and water, 1905, A., i, 747.

Lattey, Robert Tabor, the vapour pressures of triethylamine, of 2:4:6-trimethylpyridine, and of their mixtures with water, 1907, T., 1959; P., 243.

liquid triethylamine, 1907, T., 1971;

P., 243.

Lattey, Robert Tabor, and Henry Thomas Tizard, velocities of ions in dried gases, 1912, A., ii, 516.

Lattre, Jean de, methyl thiolmethyl ether and the corresponding thio-

ethers, 1912, A., i, 745.

Latzko, Wilhelm. See Fritz Fichter. Lau, Erich, composition of the air in

soils, 1908, A., ii, 888.

Laube, Eduard, benzocœroxonium compounds, 1906, A., i, 598. new anthraquinone derivatives, 1907,

A., i, 941. Laube, Eduard, and C. König, dianthraquinonylphenylenediamine. IV., 1909,

A., i, 54. Laube, Eduard, and J. Libkind, attempts to prepare thiazine dyes of the anthra-

quinone series, 1910, A., i, 493. Laube, Eduard. See also Herman Decker.

Lauber, E. See Richard Lorenz. Lauck, Ernst. See August Klages.

Lauder, Alexander. See James Johnston Dobbie.

Laue, Otto. See Alexander Eibner. Lauer, Ludwig, and Gustav Tammann,

torsional elasticity of liquids, 1908, A., ii, 667.

Laufer, René, the utilisation of carbohydrate in cases of diabetic arthritis, 1906, A., ii, 566.

Launay, Louis de, reduction of oligist iron to magnetite by hydrocarbons, 1903, A., ii, 379.

distribution of elements in the earth in relation to their atomic weights, 1904, A., ii, 327.

Launoy, L., action of dimethylaminotert.-amyl benzoate hydrochloride on cilia, 1904, A., ii, 631.

toxicity of dimethylamino-tert.-amyl benzoate hydrochloride, 1905, A., ii,

toxicity of some inorganic and organic arsenic compounds and tolerance to these poisons, 1911, A., ii, 60.

Launoy, L., and F. Billon, toxicity of dimethylamino-tert.-amyl benzoate hydrochloride (stovaine), 1904, A., ii, 501.

Launoy, L., and C. Levaditi, mercurial therapeutics of experimental syphilis in the rabbit and of Brazilian spirollosis, 1911, A., ii, 912.

Laur, Francis, presence of gold and silver in the trias of Meurthe-et-Moselle, 1906, A., ii, 556.

Laurent, Emile, formation of glycogen in fungi grown in solutions of sugar,

1903, A., ii, 746.

influence of mineral food in the production of sexes in directious plants, 1904, A., ii, 69.

Laurent, Emile, and Emile Marchal, synthesis of proteins by plants, 1903,

A., ii, 506.

Laurent, Jules, the quantity of sucrose in the seeds of some of the Logani-

aceæ, 1907, A., ii, 386.

- Laurie, Arthur Pillans, electromotive force of iodine concentration cells in water and alcohol, 1908, A., ii,
 - electromotive force of iodine concentration cells, one electrode of which is saturated with iodine, 1909, A., ii,
 - the temperature-coefficient of concentration cells, in which the same salt is dissolved in two different solvents, 1911, A., ii, 576.

Lauritzen, Marius. See H. Björn-

Andersen.

Lauterwald, Franz, comparison of methods for detecting heated milk, 1903, A., ii, 516.

variations in the non-fatty solids of milk resulting from interrupted milking, 1905, A., ii, 773.

Lauth, Charles, fast azo-dyes derived from 1-aminoanthraquinone, 1904, A., i, 123.

oxidation of o-nitrotoluene, 1904, A.,

i, 233.

triphenylmethane dyes stable towards

alkalis, 1904, A., i, 607.

Lautsch, Hermann, and Gustav Tammann, alloys of iron and molybdenum, 1907, A., ii, 959.

Lautsch, Hermann. See also Otto Wal-

Laux, Julius. See Robert Stollé.

Lavaczeck, Paul. See Julius Tafel.

Laval, L. See F. Wüst.

Lavalle, Francisco P., estimation of sugar with Fehling's solution, 1905, A., ii, 558.

estimation of dextrose with Fehling's solution containing large excess of alkali, 1907, A., ii, 136.

detection of indican in urine, 1907, A.,

detection of boric acid in foods by means of turmeric paper, 1908, A., ii, 896,

Lavaux, James, action of methylene chloride and aluminium chloride on toluene, 1905, A., i, 43.

separation of the three dimethylanthracenes obtained in the action of methylene chloride and aluminium chloride on toluene, 1905, A., i, 125.

action of acetylene tetrabromide and aluminium chloride on toluene, 1905, A., i, 640.

constitution of as-di-p-tolylethane, 2:7:9:10-tetramethylanthracene, dilivdride, and 2:7-dimethylanthracene, 1905, A., i, 698.

constitutional formulæ of some dimethylanthracenes, 1907, A., i, 25.

various cases of the simultaneous production of 1:6- and 2:7- dimethylanthracenes, 1908, A., i, 150.

simultaneous production of 1:6- and 2:7- dimethylanthracenes in the of methylene dichloride, action chloroform, or acetylene tetrabromide on toluene in the presence of aluminium chloride, 1908, A., i, 256.

action of dichloromethane on di-ptolylmethane, 1911, A., i, 533.

Lavaux, James, and Maurice Lombard, secondary action of aluminium chloride on aromatic chloro-compounds, 1910, A., i, 548.

m-p-ditolyl ketone, 1910, A., i,

747.

Laveran, Charles Louis Alphonse, treatment of trypanosomiasis by arsenious acid and "trypanroth," 1905, A., ii, 272, 408.

Laveran, Charles Louis Alphonse, and D. Roudsky, action of an oxazine (3:5:9-triaminophenoxazonium chloride) on trypanosomes, 1911, A., ii, 911.

action of an oxazine (3:5:9-triaminophenoxazonium chloride) and of acridine on trypanosomes, 1912, A., ii, 75.

Laves, Ernst, examination and evaluation of horse-chestnuts, 1904, A., ii,

74.

Lavesson, Hilding, estimation of reducing substances in normal urine, 1907, A., ii, 586.

Lavialle, Pierre, occasional occurrence of urobilin in gastric juice, 1910, A., ii, 729.

Lavilla Llorens, Felipe, reactions of cyclic amines, 1911, A., ii, 78. sensitive reagent for acetylene, 1912,

A., ii, 606.

Lavison, Jean de Rufz de, the elective rôle of the root in the absorption of salts, 1910, A., ii, 1100.

Law, Douglas John, acetylation, 1908.

A., i, 321.

Law, Douglas John. See also Henry Richardson Procter, Henry Julius Salomon Sand, and Joseph Turney Wood.

Law, Edward F., non-metallic impurities in steel, 1907, A., ii, 692.

Law, Herbert Drake, electrolytic oxidation of aliphatic aldehydes, 1905, T., 198; P., 7; discussion, P., 8. electrolytic oxidation, 1906, T., 1437;

P., 197.

electrolytic reduction. Parts I, and IV. Aromatic aldehydes, 1906, T., 1512; P., 237; 1911, T., 1113; P., 138.

electrolytic reduction. Part II. Use of electrodes, 1906, T., 1520; P.,

electrolytic reduction. Part III., 1907, T., 748; P., 73; discussion, P., 74.

electrolytic reduction. Part V. Benzylidene bases, 1911, P., 310; 1912,

T., 154.

electrolytic reduction. Part VI. Unsaturated aldehydes and ketones, 1912, T., 1016; P., 98.

electrolytic reduction. Part VII. The catalytic action of copper, 1912,

T., 1544; P., 162.

Herbert Drake, and Frederick Mollwo Perkin, electrolytic oxidation of the hydrocarbons of the benzene series. I. Hydrocarbons containing the methyl group, 1905, A., i, 40.

electrolytic oxidation of hydrocarbons of the benzene series. Part II. Ethylbenzene, cumene, and cymene,

1905, A., i, 761.

electrolytic analysis of antimony, 1905, A., ii, 767.

preparation of chromyl dichloride, 1907, T., 191; P., 11.

oxidation of hydrocarbons of the benzene series, 1907, T., 258; P.,

action of metallic calcium on ketones,

1907, P., 308.

oxidation of hydrocarbons of the benzene series. Part II. Substances containing a negative radicle, 1908, T., 1633; P., 195.

Law, Herbert Drake. See also Alfred

Chaston Chapman.

Lawaczeck, Paul. See Julius Tafel.

LaWall, Charles Herbert, is formaldehyde produced by boiling solutions of sucrose? 1909, A., ii, 835.

LaWall, Charles Herbert, and Henry A. Bradshaw, estimation of benzoic acid in ketchup, 1908, A., ii, 438.

Lawrie, James W., constitution of the acetylidene compounds, 1907, A., i, 3.

Lawroff, David, peptic and tryptic digestion of proteins, 1904, A., ii, 186; 1905, Å., ii, 178. coaguloses, 1907, A., i, 995; 1908,

A., i, 844; 1909, A., i, 624.

the action of rennet on concentrated solutions of the products of peptie digestion, 1907, A., ii, 280.

Lawroff, Maria, and Sergei Salaskin. the precipitate produced by adding rennin to solutions of albumose, 1903,

A., i, 136.

Laws, Ernyst Graham, and Nevil Vincent Sidgwick, isomeric acetaldehydephenylhydrazones, 1911. T. 2085; P., 263.

Laws, Harry Edwin. See George Druce

Lander.

Laws, Samuel Charles, magnetic susceptibility of alloys of bismuth and tin. 1904, A., ii, 537.

Lawson, Andrew Cowper, plumasite, an oligoclase-corundum-rock from California, 1903, A., ii, 658.

orbicular gabbro from California,

1905, A., ii, 178.

Laxa, Otakar, action of lactic acid on casein and paracasein, 1906, A., i, 123.

influence of lactose and lactic acid on the decomposition of caseinogen by micro-organisms, 1907, A., ii, 497. estimation of catalase, 1911, A., ii, 675.

Layrand, E., ketones obtained by means of n-valeric acid, 1906, A., i, 432.

Lazareff, Petr P., decoloration pigments in the visible spectrum, 1908, A., ii, 4.

Lazarus, Paul. See Johannes Kerb. Lazarus-Barlow, Walter Sydney, presence

of radium in some carcinomatous tumours, 1912, A., ii, 665.

Lazennec, I., new derivatives of catechol; preparation of phenylethylenecatechol, 1909, A., i, 469. new derivatives of catechol, 1909, A.,

i, 488.

Lazennec, I. See also Charles Moureu. Lazinsky, K., and W. Swadkowsky, preparation of some mixed simple ethers of tertiary alcohols, 1903, A., i, 394,

Lazzart, A., direct manuring of cereals with different forms of calcium, 1906, A., ii, 892.

Lazzarini, Guido. See Camillo Manuelli,

and Gaetano Minunni.

Leach, Albert Ernest, composition of turmeric, 1905, A., ii, 127.

Leach, Albert Ernest, and Hermann C. Lythgoe, estimation of ethyl and methyl alcohols in mixtures by the immersion refractometer, 1905, A., ii,

Leach, Frederick Peacock, limonene nitrosocvanides and their derivatives,

1905, T., 413; P., 117. some new derivatives of pinene, 1906,

P., 137. pinene nitrolamine, 1906, P., 304; 1907, T., 1.

a 4-semicarbazide from pinene, 1906, P., 304; 1907, T., 10.

Leach, Frederick Peacock. See also (Sir)

William Augustus Tilden.

Leach, (Miss) Mary F., chemistry of the Bacillus coli communis, 1906, A., ii, 568; 1908, A., ii, 56. Lean, George. See William Carrick

Anderson.

Leather, John Petty. See Raymond Ross. Leather, John Walter, estimation of small quantities of iron, 1905, A., ii, 422.

amount of combined nitrogen in rain

and dew, 1906, A., ii, 302.

composition of Indian rain and dew, 1906, A., ii, 487. records of drainage in India, 1912, A.,

ii, 596. Leathes, John Beresford, amount of fat

in musele, 1904, A., ii, 356. diurnal variations in uric acid excre-

tion, 1907, A., ii, 114.

excretion of nitrogen, creatinine, and

uric acid in fever, 1907, A., ii, 376. higher fatty acids in the liver after removal, 1908, A., ii, 1054.

Leathes, John Beresford, and L. Meyer-Wedell, desaturation of fatty acids in the liver, 1909, A., ii, 416.

Leathes, John Beresford. See also Edward Provan Catheart, and Oscar

Hildesheim.

Leavenworth, Charles Samuel. See Lafayette Benedict Mendel, Thomas Burr Osborne, and Horace Lemuel Wells.

Leavitt, Sherman, and Joseph Arthur Le Clerc, loss of phosphoric acid in the incineration of cereals, 1908, A., ii. 428.

estimation of phosphorus in ash analysis, 1908, A., ii, 531.

Leavitt, Sherman. See also Edward Harrison Keiser.

Lebach, Gustav. See Martin Freund.

Lebach, Hans. See Emil Knoevenagel. Lebailly, A. See Fernand Malengreau. Lebas, C., presence of aucubin in differ-

ent varieties of Aucuba japonica, 1910,

A., ii, 63.

Lebas, C. See also Henri Hérissey.

Le Bas, Gervaise, a relation between the volumes of the atoms of certain compounds at the melting points and their valencies: interpretation by means of the Barlow-Pope theory, 1906, P., 322; 1907, T., 112.

the relation between valency and heats of combustion; preliminary note,

1907, P., 134.

the unit-stere theory; demonstration of a natural relation between the volumes of the atoms in compounds under corresponding conditions and that of combined hydrogen, 1907, A., ii, 754; 1908, A., ii, 667.

new theory of molecular volumes,

1910, A., ii, 1039.

the influence of the alternating factor in certain series on the molecular volumes at the melting point, 1911, P., 196.

Lebeau, Paul [Marie Alfred], new cobalt silicide, 1903, A., ii, 22.

silicides of cobalt, 1903, A., ii, 80.

two silicides of manganese, 1903, A., ii, 215.

equilibrium which exists between copper, silicon, and manganese, and the manganese silicide, MnSi2, 1903, A., ii, 298.

decomposition of lithium carbonate by

heat, 1903, A., ii, 477.

commercial manganese silicides, 1903, A., ii, 652.

volatility and dissociation of alkali carbonates, 1904, A., ii, 121; 1906, A., ii, 161.

preparation of metallic silicides; manganese silicides, 1904, A., ii,

343.

decomposition of mixtures of an alkali carbonate and an alkaline earth carbonate under the action of heat in- a vacuum, 1904, A., ii, 561; 1906, A., ii, 85.

production of isomorphous mixtures of lime and lithia, 1904, A., ii,

employment of metal-ammonium compounds in organic chemistry; preparation of fatty hydrocarbons, 1905, A., i, 401.

Lebeau, Paul [Marie Alfred], physical properties of propane, 1905, A., i,

employment of metal-ammonium compounds in organic chemistry; formation of primary amines, 1905, A., i, 512.

commercial cuprosilicon, 1906, A., ii, 29.

bromine fluoride, BrF2, 1906, A., ii,

cuprosilicon, and a new method of preparing silicon soluble in hydrofluoric acid, 1906, A., ii, 168.

action of fluorine on chlorine; a new method of forming hypochlorous acid, 1906, A., ii, 739. the existence of bromine chloride,

1906, A., ii, 843.

a new silicide of manganese described

by Gin, 1907, A., ii, 175. copper silicide, 1907, A., ii, 264.

reduction of manganese by charcoal, 1907, A., ii, 460.

observations on a property of Moissan's platinum' amalgam, 1907, A., ii, 479.

action of fluorine on selenium; selenium tetrafluoride, 1907, A., ii, 540. action of fluorine on selenium in glass

vessels, 1907, A., ii, 613. analysis of selenium hexafluoride, 1907,

A., ii, 679.

some physical properties of butane and isobutane, 1908, A., i, 749.

silicon hydrides, 1909, A., ii, 138. uranyl nitrate and the nature of its

ethereal solution, 1911, A., i, 257. the formula of uranium carbide, 1911,

A., ii, 403. the hydrates of uranyl nitrate, 1911,

A., ii, 403.

definite bismuthides, 1911, A., ii, 405. the decomposition by heat of uranyl nitrate, 1912, A., ii, 650.

uranic anhydride and its hydrates, 1912, A., ii, 770.

a new determination of the atomic weight of uranium, 1912, A., ii, 848. Lebeau, Paul, and Robert Bossuet, mag-

nesium silicide, 1908, A., ii, 184. the system: silicon-magnesium, 1909 A., ii, 403.

Lebeau, Paul, and P. Damoiseau, the nature of sulphammonium, 1907, A., ii, 680.

Lebeau, Paul, and J. Figueras, chromium silicides, 1903, A., ii, 486.

Lebeau, Paul, and Pierre Jolibois, definite compounds of silicon and palladium, 1908, A., ii, 602.

Lebeau, Paul, and A. Novicky, a new silicide of platinum, 1907, A., ii, 784. Lebeau, Paul. See also Henri Moissan. Lebedeff, A. See Paul Askenasy.

Lebedeff, Alexander von, the influence of the alternating current on the rate of hydrolysis of starch by diastase and mineral acids, 1908, A., i, 321.

occurrence of formaldehyde in cellfree fermentation, 1908, A., i. 747.

action of alternating currents of high frequency on the decomposition of hydrogen peroxide by colloidal platinum, 1908, A., ii, 166.

attempts to explain cell-free fermentation by means of experiments with the ultra-filter, 1909, A., i, 863.

hexose phosphoric acid ester, 1910. A., i, 716; 1911, A., i, 837.

extraction of zymase, 1911, A., i, 248, 828; A., ii, 519.

is zymase a diastase ? 1911, A., i, 828. the mechanism of alcoholic fermentation, 1911, A., ii, 816, 1122.

the mode of action of phosphatese, 1912, A., i, 61.

Lebedeff, A. F., assimilation of carbon in bacteria which oxidise hydrogen, 1908. A., ii, 56; 1910, A., ii, 229.

humous carbonate soils and their conversion into grey sand soils, 1908, A., ii, 220.

the formation of nitric oxide by Bacillus hartlebi during denitrification, 1911, A., ii, 917.

Lebedeff, A. F. See also A. J. Nabokich.

Lebedeff, Peter, pressure of light on gases, 1910, A., ii, 472.

fusion experiments with some metasilicates, 1911, A., ii, 604.

experiments with binary systems of silicates, 1912, A., ii, 919.

lead sulphide electrode and the passivity of lead, 1912, A., ii, 1129.

Lebedeff, Sergius V., formation of molasses, 1908, A., i, 606.

polymerisation of diethylene hydrocarbons of the type C:C·C:C, 1911, A., i, 26.

polymerisation of diethylene hydrocarbons. II. Polymerisation and isomerisation of as-dimethylallene, 1911, A., i, 774.

polymerisation of diethylene hydrocarbons; polymerisation of as-dimethylallene. IV., 1912, A., i, 173.

Lebedeff, Sergius V., and (Mlle.) N. A. Skavronskaja, polymerisation of diethylene hydrocarbons. III. Divinyl, 1911, A., i, 959.

Le Bel, Joseph Achille, constitution of ammonium, 1904, A., i, 718.

dimorphism of rubidium dichromate,

1912, A., ii, 49.

Leberle, Hans. See Karl Daniel.

Lebert, (Mlle.) Madeleine. See Pierre Thomas.

Le Blane, Max [Julius Louis], electrolysis with alternating currents; passivity of metals, 1905, A., ii, 137.

electrolysis with alternating current,

1906, A., ii, 5.

can an element form both positive and negative ions? 1906, A., ii, 67.

hybrid elements, 1906, A., ii, 742. volumetric estimation of dilute solutions of alkali hydroxides containing carbonate by Winkler's method, 1907, A., ii, 505.

the unimolecular course of the decomposition of ammonia by the silent discharge, 1908, A., ii, 819.

conductivity of solid mixtures of salts,

1912, A., ii, 727.

Le Blanc, Max, and L. Bergmann, action of metals on fused sodium hydroxide, 1910, A., ii, 123.

Le Blanc, Max, and Johannes Brode, electrolysis of fused sodium hydroxide, 1903, A., ii, 18, 144.

electrolysis of fused sodium and potassium hydroxides, 1903, A., ii,

75.

Le Blanc, Max, and Horace Greeley Byers, anodic behaviour of tungsten, 1909, A., ii, 1020.

Le Blanc, Max, and Carlo Cantoni, the Castner mercury process of obtaining chlorine and alkali, 1905, A., ii, 696.

Le Blanc, Max, and John Hughes Davies, does the law of the action of mass hold for the silent electrical discharge? 1908, A., ii, 653.

Le Blanc, Max, and M. Eschmann, formation and decomposition of calcium

cyanamide, 1911, A., i, 185. Le Blanc, Max, and Fritz Kerschbaum, conduction of electricity through solid silver chloride, 1910, A., ii, 382, 925.

conduction of electricity through glass,

1910, A., ii, 481.

Le Blane, Max, and Karl Novotný, causticising of sodium and potassium carbonates with lime, 1907, A., ii, 22.

Le Blanc, Max, and Emanuel Plaschke, preparation of formaldehyde from methyl alcohol by the contact process, 1911, A., i, 176.

Le Blanc, Max, and David Reichinstein, hybrid elements, 1909, A., ii, 476.

Le Blanc, Max, and Karl Schick, electrolysis with alternating current, 1904, A., ii, 229.

Le Blank, Max, and Wilfred Schmandt, crystallisation and dissolution in aqueous solutions, 1910, A., ii, 276.

Le Blanc, Max, and O. Weyl, action of some elements on fused potassium hydroxide. II., 1912, A., ii, 1053.

Le Blanc, Max. See also W. Nüranen.
Le Bon, Gustave, dissociation of matter under the influence of light and heat, 1906, A., ii, 825.

Lebrun, J. See Lucien Louis de

Koninck.

Lecanu. See Allain Lecanu.

Lecon, Marco Thomas, estimation of

lithium in waters, 1910, A., ii, 453. toxicological detection of mercury and mercurial compounds, 1910, A., ii, 456.

toxicological detection of alcohol, 1910, A., ii, 461.

Le Chatelier, André, theory of the tempering of steel, 1903, A., ii, 374.

Le Chatelier, *Henri*, effect of nitrogen on steel, 1905, A., ii, 639.

austenite, 1908, A., ii, 490.

precipitated silica, 1908, A., ii, 1033. law of constant dissociation pressures, 1909, A., ii, 721.

alterability of aluminium, 1911, A., ii, 398.

metallographic notes, 1911, A., ii, 894.

the law of mass action, 1912, A., ii, 631, 1151.

determination of atomic weights by Hinrichs' method, 1912, A., ii, 840.

Le Chatelier, Henri, and S. Wologdine, density of graphite, 1908, A., ii, 177.

ordinary carbon, 1909, A., ii, 662. iron phosphides, 1909, A., ii, 1017.

Le Chatelier, Henri. See also Octave Boudouard.

Lecher, Ernst, measurement of the variation of specific heat with temperature, 1908, A., ii, 83.

Lecher, Hans. See Karl Andreas Hofmann, and Heinrich Wieland.

Lechner, Gedeon, effect of the frequency and form of the current on the formation of ozone, 1911, A., ii, 797.

estimation of ozone by an alkaline solution of potassium iodide, 1911, A., ii, 822.

Le Clerc, Joseph Arthur, amount of increase of the dry matter, sugar, and nitrogenous constituents of mangels at different periods of growth, 1904, A., ii. 77.

Le Clerc, Joseph Arthur, and Frank C.
Cook, metabolism experiments with
organic and inorganic phosphorus,

1906, A., ii, 870.

Le Clerc, Joseph Arthur, and Wilbur L. Dubois, estimation of sulphur and phosphoric acid in foods, fæces, and urine, 1904, A., ii, 774.

Le Clerc, Joseph Arthur. See also Sher-

man Leavitt.

Leclerc du Sablon, Mathieu, variation of the carbohydrate reserves in the stems and roots of woody plants, 1903, A., ii, 170.

carbohydrate reserves of evergreen

trees, 1905, A., ii, 605.

transpiration in oil-producing plants; influence of light, 1912, A., ii, 193.

Leclère, André, simplification of the analysis of silicates by the use of formic acid, 1903, A., ii, 612.

method of separating aluminium and iron by means of formic acid, 1904,

A., ii, 212.

detection of white phosphorus in presence of hypophosphites and arsenic, 1912, A., ii, 202.

Lectere, André. See also Pierre Termier. Leccoq, Emile, new test for molybdenum, 1904, A., ii, 369.

a colloidal solution of pure elemental

arsenic, 1910, A., ii, 406. toxicity of elemental arsenic, 1910,

A., ii, 434.

the carbonyl ferrocyanides; their extraction, analysis, and applications, 1911, A., i, 269.

estimation of cyanogen compounds in coke oven gases, 1911, A., ii, 161.

Le Comte, Octave, preparation of iodoform by means of acetylene, 1903, A., i, 61.

the salt and water of Kef-el-Melah in the Djebel Amour, 1903, A., ii, 159.

complete decomposition of urea and ammoniacal salts by means of nascent sodium hypobromite in an alkaline medium, 1903, A., ii, 518. grapes from the region of Schariare,

Persia, 1906, A., ii, 625.

Lecoq de Boisbaudran. See Boisbaudran. Le Count, Edwin R. See Emil Abderhalden.

Ledden-Hulsebosch, C. J. van, apparatus for storing of, and titrating with, alkali hydroxides, 1907, A., ii, 390. Leder, F., the absolute distribution of intensity in the continuous background of the spectra of the alkali metals; the radiation of the Hefner lamp and of osmium, 1908, A., ii, 5.

Lederer, Charles, organic compounds of quadrivalent tellurium, 1910, A., i,

731

aromatic tellurinium compounds with the same hydrocarbon residue, 1911, A., i, 857.

Lederer, Karl, aromatic telluride dihaloids and their basic fission products,

1912, A., i, 852.

Lederer, Karl. See also Martin Fround.
Lederer, Richard, and Karl Stolte, the composition of the heart of man and dog, 1911, A., ii, 906.

Lederer, Richard. See also Rud.

Ehrmann, and Carl Schwarz.

Ledien, Franz. See Oskar Drude.
Ledingham, John Charles Grant, relation of antitoxin to the globulin of blood-serum: the leucocyte reaction during immunisation with diphtheria-toxin, 1907, A., ii, 190.

Ledoux, R., the electrical properties of copper tin alloys, 1912, A., ii, 727.

Ledru, Marcel. See Paul Freundler.

Leduc, [Sylvestre] Anatole, electrolysis of mixtures of salts, 1903, A., ii, 6. atmospheric hydrogen, 1903, A., ii, 68, 202.

combined hydrogen contained in reduced copper, 1903, A., ii, 480. precision attained in the determination

of the atomic weights of hydrogen and nitrogen, 1905, A., ii, 310.

diamagnetism of bismuth, 1905, A., ii, 371.

latent heat of fusion of ice, 1906, A., ii, 70.

density of ice, 1906, A., ii, 155. atomic weights of nitrogen, oxygen, and carbon, 1908, A., ii, 271.

atomic weight of silver, 1909, A., ii, 140.

compressibility of gases between 0 and 3 atmospheres at all temperatures, 1909, A., ii, 298.

molecular volumes, densities, and atomic weights, 1909, A., ii, 381.

calculation of molecular weights by means of vapour densities: toluene, 1909, A., ii, 382.

coefficients of expansion of gases, 1909,

A., ii, 542.

internal pressure of a gas, 1909, A., ii, 550.

new form of characteristic equation of gases, 1909, A., ii, 644.

Leduc. [Sylvestre] Anatole, internal pressure in gases; equations of state and the law of molecular attraction, 1911, A., ii, 792.

densities of some gases and vapours.

1912, A., ii, 831.

Leduc, Anatole, and Labrouste, electrolysis of very dilute solutions of silver nitrate and oxide; silver an alkali metal, 1907, A., ii, 684.

Lee, Frederic Schiller, action of ethyl alcohol on protoplasm, 1903, A., ii,

cause of the treppe (staircase phenomenon), 1907, A., ii, 187, 373.

action of normal fatigue substances on muscle, 1907, A., ii, 898.

Lee, Frederic Schiller, and M. Levine, the action of ethyl alcohol and water on muscle, 1912, A., ii, 854.

Lee, Gabriel Warton. See Léon W. Collet. Lee, H., and A. Beyer, the importance of direct or alternating current in heating air or fused substances electrically, 1907, A., ii, 927.

Lee, William Emerson, action of tobacco

smoke, 1909, A., ii, 81.

Leeden, Rudolf van der, action of acetic acid on clays (kaolin and allophane), 1910, A., ii, 621.

aluminium silicate minerals in soils,

1911, A., ii, 299.

relations of some aluminous silicate weathering products, 1911, A., ii,

Leeden, Rudolf van der. See also Otto

Leefhelm, Ludwig. See Max Busch. Leemann, Gottlieb. See Friedrick Kehr-

Leemann, Hans, estimation of nitrogen

by Dumas' method, 1908, A., ii, 629. Leemann, Hans, and Eugène Grandmougin, 2:4:2':4':6'-pentanitroazobenzene, 1908, A., i, 478.

s-hexanitroazobenzene, 1908, 478.

Leemann, Hans. See also Eugène

Grandmougin. Leenhardt, Ch., velocity of crystallisation of supersaturated solutions, 1905, A., ii, 630.

Leenhardt, Ch., and A. Boutaric, cryoscopy in the fused pentahydrate of sodium thiosulphate, 1912, A., ii, 234.

Leenhardt, Ch. See also A. Boutaric. Leent, Frederik Hendrik van, the reactions concerned in the estimation of the iodine value, 1905, A., ii, 124.

Leers, Otto, photomethæmoglobin, 1908, A., i, 843.

Leersum, Evert Cornelius van, glycuronic acid in icteric urine, 1903, A., ii, 444.

the orcinol test for glycuronic acid, 1904, A., ii, 688.

amino-acids in the urine during preg-

nancy, 1908, A., ii, 715. Leersum, P. van, microchemical analysis of cinchona barks, 1905, A., ii, 620.

are the cinchona alkaloids a protection for the plant? 1909, A., ii,

alkaloidal content of cinchona leaves, 1910, A., ii, 992.

Lees, Frederic Herbert, interactions of ketones and aldehydes with acid chlorides: the formation of benzoxyolefines and 1-benzoxycamphene, 1903, T., 145.

some derivatives of umbellulone, 1904,

T., 639; P., 88.

researches on morphine. Part III., 1907, T., 1408; P., 200.

Lees, Frederic Herbert, and Frank Shedden, the electrolytic reduction of pheno- and naphtha-morpholones, 1903, T., 750; P., 132; discussion, P., 133.

Lees, Frederic Herbert, and Frank Tutin, the conversion of morphine and codeine into optical isomerides; preliminary communication, 1906, P., 253.

Frederic Herbert. Lees, See also

Frederick Belding Power.

Lees, Norman, and Jocelyn Field Thorpe, some derivatives of 2-phenyl-1:3naphthylenediamine. Part I., 1907, T., 1282; P., 189.

Leete, Harold, and Edward de Barry Barnett, note on the action of hydrogen dioxide on thiobenzanilide, 1911, P., 120.

Leeuw, H. L. de, the system: acetaldehyde-ethyl alcohol, 1911, A., ii,

Leeuw, H. L. de. See also Andreas Smits.

Leeuw, M. C. de, some secondary aromatic amines related to diisopropylamine, 1912, A., i, 24.

Leeuwen, J. Docters van, extraction apparatus, 1906, A., ii, 797.

Lefébure, Pierre. See Georges Darzens. bvre, Charles, taxicatin, a new glucoside from Taxus baccata, 1907, Lefebvre, A., i, 864.

application of biochemical methods for the detection of sugars and glucosides in plants of the tribe Taxeæ, 1908, A., ii, 57.

673

Lefebvre, Charles. See also Henri

Hérissey.

Lefèvre, Jules, development of green plants in light, in absence of carbon dioxide, in an artificial soil containing amides, 1905, A., ii, 648.

development of green plants grown without carbon dioxide in artificial soil containing amides, 1906, A., ii,

116.

increase in the dry weight of green plants grown in light, without carbon dioxide in artificial soil containing amides, 1906, A., ii, 116.

amide nutrition of green plants in absence of carbon dioxide, 1906,

A., ii, 245.

exchanges of gas in a green plant grown in light without carbon dioxide in artificial soil containing an amide, 1906, A., ii, 791.

the nutritive effect of amides on the germinating seed, the detached embryo, and the green plant, 1909,

A., ii, 83.

influence of certain nutrient media on the development of embryos of *Pinus pinea*, 1909, A., ii, 693.

Lefèvre, Karl Ulrich, and Bernhard Tollens, estimation and colour reactions of glycuronic acid, 1908, A., ii, 74.

Leffmann, Henry, detection of asaprol [naphthol-β-sulphonate]; estimation of methyl alcohol in presence of formaldehyde, 1905, A., ii, 864. test for sucrose in milk-sugar, 1906,

A., ii, 586.

Lefmann, Gotthold, poisonous substances in blood, 1908, A., ii, 522.

creatinine metabolism, 1908, A., ii, 1050.

Léger, Eugène, aloins of Natal aloes, 1903, A., i, 356.

constitution of the aloins, 1903, A., i, 356.

assay of cantharides, 1903, A., ii, 517. assay of opium, 1903, A., ii, 583.

the sugar of the aloins, 1904, A., i, 907.

the André [thalleoquinine] reaction for quinine, 1904, A., ii, 458.

evaluation of quinine by André's reaction, 1904, A., ii, 458.

estimation of quinine in the presence of other cinchona alkaloids, 1904, A., ii, 458.

methylnataloe-emodin and nataloe-emodin, 1905, A., i, 532.

hordenine: a new alkaloid obtained from malt germs, 1906, A., i, 204.

Léger, Eugène, constitution of hordenine, 1906, A., i, 761; 1907, A., i, 151, 336.

derivatives of hordenine, 1907, A., i, 234.

Jafferabad and Uganda aloes, 1907, A., i, 545.

barbaloin; its existence in most aloes; composition and formula, 1907, A., i, 631.

transformation of barbaloin into an isomeride, \$\mathcal{B}\$-barbaloin; existence of the latter in several aloes, 1908, \$\Lambda\$., i, 40.

2:4:6-trichlorophenol and its transformation into chlorinated benzoquinones, 1908, A., i, 335.

aloesol, a complex phenol prepared from certain aloes, 1908, A., i, 980. synthesis of hordenine, 1910, A., i, 336. aloinose, the sugar from aloin, 1910,

A., i, 463.

identity of crystallised aloinose with d-arabinose, 1910, A., i, 543.

action of nitric acid on aloins; production of tetranitroaloe-emodin and of 2:4:6-trinitro-3-hydroxybenzoic acid, 1911, A., i, 140.

constitution of nitro-compounds obtained by the action of nitric acid on aloins, 1911, A., i, 734.

constitution of chrysophanic acid, 1912, A., i, 197.

constitution of the aloins of the Natal aloes, 1912, A., i, 708. chrysophanic acid and chrysarobin,

1912, A., ii, 819.

Legler, Ludwig, estimation of lactic acids in musts and saccharine liquids, 1908, A., ii, 438.

Le Goff, J., [acetone in diabetes], 1903, A., ii, 675.

glycosuria and sucrosuria in a healthy man, following the ingestion of 100 grams of sucrose, 1911, A., ii, 752.

Légrady, Elisabeth, so-called Moser rays, 1908, A., ii, 142.

Legrand, Julien. See J. Delaite, and Eugène Pellas.

Lehalleur, J. Pepin, analysis of special steels, 1909, A., ii, 704.

Le Heux, J. W., some unsaturated internal ethers, 1912, A., i, 598.

Lehfeldt, Robert Alfred, electrochemical equivalents of oxygen and hydrogen, 1908, A., ii, 559.

Lehmann, A. See Reinhold von Walther. Lehmann, Curt, new method of fat estimation, 1903, A., ii, 702.

action of asparagine in animal metabolism, 1907, A., ii, 109, 491. Lehmann, Curt, and Franz Rosenfeld, action of asparagine on nitrogenous metabolism, 1906, A., ii, 560.

Lehmann, Erich, separation of colouring matters by diffusion, 1907, A., ii,

234.

relation of absorption and sensitiveness in photographic preparations, 1908, A., ii, 789.

Lehmann, Erich. See also Robert Ladenburg, and August Michaelis.

Lehmann, Franz, straw as food, 1903, A., ii, 96.

poultry feeding, 1904, A., ii, 510.

the most simple method for the estimation of dextrose in urine, 1910, A., ii, 660.

Lehmann, Franz, and Bodo Creydt, drying sugar-beet leaves, 1903, A., ii,

507.

Lehmann, Franz, and A. Müller, estimation of cinnamein in balsam of Peru, 1912, A., ii, 212.

1912, A., ii, 212.

Lehmann, Franz. See also Erwin Rupp.

Lehmann, Hans, ultra-red emission spectra, 1912, A., ii, 873.

Lehmann, Huns. See also Hermann

von Tappeiner. Lehmann, Hermann.

Meyer. Lehmann, Julius Eduard. See Fred

See Ernst von

Armstrong Young.

Lehmann, Karl Bernhard, corrosion of tinned containers of preserved food by acids and by the contents, 1908, A., ii, 389.

hygienic studies on nickel, 1909, A.,

ii, 333.

Lehmann, Karl Bernhard, Val. Behr, Leonhard Quadflieg, Margarete Franz, Georg Herrmann, Adolf Heinrich Knoblauch, Karl Gundermann, and Würth, the influence of the chlorinated hydrocarbons of the fatty series on the organism, 1911, A., ii, 634.

Lehmann, Karl Bernhard, Joseph Biederbeck, Ludwig Bitter, Alban Heimannsberg, Krepelka, Jakob Kuhles, Hans K. Lang, Saburo Noda, Franz Schmidt, T. Tani, Harry Warburg, and Adolf Weger, chemical and toxicological studies on tobacco, tobacco-smoke, and smoking, 1909, A., ii, 334.

Lehmann, Karl Bernbard, and Arthur

Lehmann, Karl Bernhard, and Arthur Burck, absorption of hydrogen chloride by animals, 1910, A., ii, 982.

Lehmann, Karl Bernhard, and Karl Gundermann, the significance of hydrocyanic acid in the production of toxic effects by tobacco smoke, 1912, A., ii, 859.

Lehmann, Karl Bernhard, Karl Gundermann, Ottmar Stöhr, and Rudolf Kleiner, quantitative investigations on the absorption of benzene from the air by men and animals, 1910, A., ii, 875.

Lehmann, Karl Bernhard, and Hasegawa, absorption of chloroform, carbon tetrachloride, and tetrachloroethane in animals and man, 1910, A., ii, 982.

Lehmann, Karl Bernhard, and Adolf Treutlein, the injury to health caused by long-continued ingestion of sodium sulphite in small doses, 1909, A., ii, 383.

Lehmann, Karl Bernhard, Rudolf Weissenberg, Adolf von Wojciechowski, Luig, and Karl Gundermann, the influence of benzene, toluene, xylene, and light and heavy "benzines" on the organism, 1912, A., ii, 189.

Lehmann, Karl Bernhard, Armin Werner, Heinrich Stadtfeld, Sannuel Mandelbaum, Isidor Eisenlauer, and Albert Imhof, hemoglobin in muscles,

1904, A., ii, 60.

Lehmann, Karl Bernhard, Joseph Wiener, Johannes Wilke, and Jiro Yamada, absorption of certain poisonous gases by the respiratory tract, 1908, A., ii, 771.

Lehmann, Martin. See Arthur Hantzsch,

and Otto Wiegand.

Lehmann, Max, manurial experiments with tobacco, 1903, A., ii, 681.
Lehmann, Max, and S. Tobata, manurial

Lehmann, Max, and S. Tobata, manurial experiments with tobacco, 1904, A., ii,

Lehmann, Otto, colour phenomena connected with liquid crystals; [cholesterol compounds], 1906, A., i, 952. structure of "apparently living" crystals, 1906, A., ii, 430.

continuity of the states of aggregation; fluid crystals, 1906, A., ii, 431.

substances existing in three liquid modifications, one isotropic and two fluid-crystalline, 1906, A., ii, 836.

extension of the field of existence of fluid crystals by addition of other substances, 1906, A., ii, 837.

liquid crystals, 1908, A., ii, 1023. experiments and models in illustration of liquid crystals, 1909, A., ii, 799.

liquid crystals and Avogadro's hypothesis, 1910, A., ii, 193.

self-purification of liquid crystals, 1910, A., ii, 194.

dimorphism and mixed crystals occurring in liquid-crystalline substances; applications of the phase rule, 1910, A., ii, 772. Lehmann, Otto, molecular structure and optics of large liquid crystals, 1911, A., ii, 679.

magnetic analysis of liquid crystals,

1912, A., ii, 631.

Lehmann, Paul (Erlangen), and Hermann Stadlinger, table for the rapid calculation of the original extractive matter of beer wort, 1905, A., ii, 123.

Lehmann, Paul (Heidelberg). Se

Friedrich Krafft.

Lehmann, Richard. See Ludwig Weiss. Lehnardt, Robert. See Paul Pfeiffer.

Lehner, Alfred, modification of the Landsberger apparatus for molecular weight determination, 1903, A., ii, 411.

Lehner, Alfred. See also Fritz Ullmann.
Lehnkering, Paul, hydrogen phosphide poisoning by ferrosilicon, 1906, A., ii, 664.

Lehr, Hermann. See Carl Thomae.

Leicester, James, action of quinones on o-diamines, o-nitroaniline, m-nitroaniline, and 2-nitro-p-toluidine; preliminary note, 1906, P., 41.

Leidié, Émile [Jules], double nitrites of

iridium, 1903, A., ii, 24.

Leidié, Émile, and L. Quennessen, qualitative and quantitative analysis of iridium osmides, 1903, A., ii, 576.

Leidler, P., estimation of gold by means of sucrose or dextrose, 1908, A., ii,

327.

Leidreiter, Paul, behaviour of manganese in the soil towards some agricultural plants, 1911, A., ii, 923.

Leighton, Virgil L. See Arthur

Michael.

Leimbach, Robert, pyknometers, 1903, A., ii, 132.

essential oil from the seeds of Monodora grandiflora, 1910, A., i, 186.

Leimdörfer, Alfred, the respiratory exchange of diabetic patients on different forms of diet, 1912, A., ii, 583.

Leimdörfer, J., technical soaps as colloidal solutions, 1911, A., ii, 794.

Leiningen, W. (Graf) zu. See, Rudolf Emmerich.

Leiningen-Westerburg, Wilhelm (Graf) zu, estimation of fluorine, 1903, A., ii, 98.

Leipprand, Fritz. See Julius Schmidt. Leiser, Heinrich, electrolytic reduction of tungstic acid, 1907, A., ii, 967.

Leiser, Richard, electrical double refraction of carbon compounds, 1911, A., ii, 563.

Leiser, Richard. See also Paul Askenasy.

Leishman, William Boog, stimulins, 1905, A., ii, 844.

Leishman, William Boog, William Sandilands Harrison, Arthur Briton Smallman, and Forbes Mason Grantt Tulloch, blood changes following antityphoid inoculation, 1905, A., ii, 599.

Leister, J., estimation of nicotine in tobacco extracts, 1911, A., ii, 345.

Leith, Charles Kenneth. See Frank Wigglesworth Clarke.

Leithäuser, Gustav, and Robert Pohl, influence of ozone on the condensation of water vapour, 1908, A., ii, 372.

Leithäuser, Gustav. See also Emil War-

burg.

Leitmeier, Hans, relations between quartz, chalcedony, and opal, 1908, A., ii, 954.

deposits from the mineral water of the Rohitsch springs, Styria, 1910, A., ii, 49.

dimorphism of calcium carbonate, 1910, A., ii, 503.

Lejeune, Albert. See Lucien Louis de Koninck.

Lekos, P. See Theodor Stanislaus Warunis.

Lelarge, a cause of explosion of tubes containing a compressed mixture of air and hydrogen, 1912, A., ii, 1162.

Lelli, Francesco Ferrari, detection of sodium hydrogen carbonate in milk by means of aspirin, 1907, A., ii, 578.

Lemaire, Joseph, action of ethyl mesoxalate on alkyl magnesium haloids and the synthesis of βδ-dimethylpentane-βδ-diol, 1909, A., i, 199.

Lemaire, Paul, differentiation between arbutin and quinol, 1908, A., ii,

040

colour test for alypine and various other local anæsthetics, 1908, A., ii, 784.

reaction of uranium and cadmium salts, 1909, A., ii, 187.

the [French] official method for titrating pyramidone, 1910, A., ii, 909.

Lemaître, H., estimation of sodium perchlorate in saltpetre, 1904, A., ii, 587.

Leman, E. D. See Warren Rufus Smith. Lematte, L., physical analysis of pertones; new form of apparatus for cryoscopic determinations, 1911, A., ii, 447.

estimation of mono- and di-metallic phosphates in the presence of organic substances of an acid character; estimation of total urinary acidity, 1912, A., ii, 703. Lematte, L., and A. Savès, physical constants of peptones, 1909, A., i. 344

Lemberg, Johann [Theodor], microchemical reactions of certain minerals,

1903, A., ii, 27.

Lemberger, Frieda. See Carl Schwarz. Lemcke, N., electrical conductivity and internal friction, 1908, A., ii, 251.

Lemcke, N. See also Leo W. Pissar-

jewsky.

Lemeland, P., the gum of Mangifera indica, 1904, A., ii, 583.

polarimetric estimation of sucrose in presence of reducing sugars, 1910, A., ii, 1006.

Lemme, Georg, estimation of formaldehyde in solution, 1903, A., ii, 768.

Lemmermann, Otto, influence of variations in the amount of soil on the yield and composition of plants, 1904, A., ii, 76.

influence of different amounts of soil on the development of plants, 1905,

A., ii, 413.

probable causes of the differences in the relations between the nutrition of leguminous and gramineous plants, 1906, A., ii, 480.

properties and action of ammonium sulphate containing an excess of sulphuric acid, 1909, A., ii, 260.

Lemmermann, Otto, Keijirō Asō, Hugo Fischer, and Ludwig Fresenius, decomposition of different organic hydrocarbons in soils, especially under the influence of lime, 1912, A., ii, 483.

Lemmermann, Otto, E. Blanck, Heinitz, and Johann von Wlodeck, the retention of ammoniacal nitrogen on limed and unlimed soils, 1912, A., ii,

473.

Lemmermann, Otto, Albert Einecke, and Hugo Fischer, the distinctive action of calcium and magnesium oxides in soils on higher plants and microorgani;ms, 1912, A., ii, 198.

Lemmermann, Otto, Hugo Fischer, and Bedřich Husek, effect of different bases on the changes of ammonia and nitrate nitrogen, 1909, A., ii, 602.

Lemmermann, Otto, Otto Foerster, and Albert Einecke, the results of deficiency of lime in field soils, and its influence on vegetation, 1912, A., ii, 198.

Lemmermann, Otto, and Ludwig Fresenius, increasing the ammonia-fixing power of soils under the influence of calcium carbonate, 1912, A., ii, 1206.

Lemoigne, fermentation of sugar by Bacillis subtilis; production of butylene $\beta\gamma$ -glycol, 1912, A., ii, 1199.

Lemoigne. See also Pierre Mazé. Lemoine, [Clément] Georges, some cata-

lytic reactions effected under the influence of wood charcoal, 1907, A., ii, 248.

decomposition of alcohols under the catalytic influence of charcoal

(braise), 1908, A., i, 595.

rate of decomposition of hydrogen peroxide under the influence of heat.

1912, A., ii, 747.

Lemoine, Georges, and Paul Lemoine, chemical and geological studies of different springs in the North of Madagascar, 1904, A, ii, 671.

Lemoine, Paul. See Jean Chautard, and

Georges Lemoine.

Lemoult, Paul [Aimé Louis], dibromoacetylene, 1903, A., i, 595, 673.

a new organic base containing phosphorus; its constitution, and some of its salts, 1903, A., i, 672. heats of combustion of organic com-

pounds viewed as additive properties; hydrocarbons, 1903, A., ii, 410. phosphorus-nitrogen bases of the type

P(NHR)₃: NR, 1904, A., i, 380. action of phosphorus trichloride on some primary cyclic amines at the boiling point; reduction of phosphorus trichloride with formation of

phosphorns, 1904, A., i, 572. orthophosphoric anilide and its homologues; non-existence of the compound NHPH:P(NPh)2, 1904, A., i,

806.

some derivatives of pentabasic phosphoric acid, P(OH)5, 1904, A., i, 807; 1906, A., i, 80.

a crystalline compound of lead thiosulphate and aceta'e, 2PbS2O3, Pb(C₂H₃O₂)₂, 1904, A., i, 842.

heats of combustion of organic compounds viewed as additive properties; alcohols, phenols, ethers, aldehydes, and ketones, 1904, A., ii, 12.

calculation of the heats of combustion of organic acids, their anhydrides and esters, 1904, A., ii, 12.

a new method for the calculation of heats of combustion and some of its consequences, 1904, A., ii, 12.

general relations between the heat of combustion of organic compounds and their constitutional formula; calculation of the heats of combustion, 1904, A., ii, 310; 1905, A., ii, 441,

Lemoult, Paul [Aimé Louis], calculation of the heats of combustion of organic compounds containing nitrogen, 1904, A., ii, 382.

cyclic amines, 1904, A., ii, 382.

heat of combustion of organic compounds containing sulphur; remarks relating to halogen compounds, 1904, A., ii, 605.

a reagent for phosphorus, arsenic, and antimony hydrides, 1904, A., ii,

728.

heats of combustion of some organic compounds, 1904, A., ii, 805.

reversion of some secondary cyclic

amines, 1905, A., i, 48.

action of phosphorus pentachloride on tertiary cyclic amines; synthesis of dyes and formation of phosphorus, 1905, A., i, 194.

hydrogen phosphites of primary cyclic

amines, 1906, A., i, 493.

azo-colouring matters; heat of combustion and constitutional formula, 1906, A., ii, 832.

heats of combustion and of formation of some amines, 1907, A., ii,

10.

heats of combustion and of formation of nitrogen cyclic compounds, 1907, A., ii, 10.

carbylamines and nitriles, 1907, A., ii,

10.

heat of combustion and formation of gaseous hydrogen phosphide, 1907, A., ii, 760.

action of hydrogen phosphide on mercuric chloride or bromide, PHg₃Cl₃ and P₂Hg₅Br₄, 1908, A., ii, 35.

new series of leuco-bases and of colouring matters derived from diphenylethylene, 1909, A., i, 836; 1911, A., i, 399.

comparisons between nitriles and carbylamines, 1909, A., ii, 644.

simplified method and apparatus for determining the calorific power of combustible gases, 1909, A., ii, 793.

thermochemistry of phosphorus compounds, 1909, A., ii, 865.

estimation of phosphorus in combustible substances by the bomb calorimeter, 1909, A., ii, 936.

derivatives of styrene; rectification of some experimental errors, 1911, A.,

ii, 583.

diphenylethylene leuco-bases and colouring matters; some alkylam-inoethylenic derivatives, 1912, A., i, 583.

Lemoult, Paul [Aimé Louis], hexahydrogenated malachite-green; an example of two different leuco-bases which yield the same dye, 1912, A., i, 583.

leuco-bases and dyes derived from diphenylethylene; preparation of two cyclohexylidene bases, 1912,

A., i, 725.

leuco-bases and colouring matters derived from diphenylethylene; oxidation of the tetramethyleyclohexylidene base by lead peroxide, 1912, A., i, 791.

Lemoult, Paul. See also Ferdinand Curtis.

Lenard, Philipp [Eduard Anton], emission of light from the vapours of alkali metals and their salts, and the centres of this emission, 1905, A., ii, 565.

light emission and its excitation, 1910,

A., ii, 369.

Lenard, Philipp, Heike Kamerlingh Onnes, and Wilhelm Edward Pauli, behaviour of the phosphorescent sulphides of the alkaline earths at various temperatures, and particularly at very low temperatures, 1909, A., ii, 777.

Lenard, Philipp, and Sem Saeland, photo-electric and actino-dielectric action in the phosphorescence of the alkaline earth sulphides, 1909, A., ii,

283.

Lenci, F. See Nazareno Tarugi.

Lendenfeld, Hans von, condensation of terephthalaldehyde with ketones, 1907, A., î, 221.

Lendrich, Karl, and Rudolf Murdfield, an error in the estimation of caffeine by Juckenack and Hilger's method, 1909, A., ii, 193.

Lendrich, Karl, Erich Koch, and L. Schwarz, hydnocarpus fats, 1911, A.,

ii, 1125.

Lendrich, Karl, and E. Nottbohm, estimation of caffeine in coffee, 1909, A., ii, 449.

Lendrich, Karl. See also K. Farnsteiner.

Lenert, August, the dielectric constants of the halogen compounds of lead, 1911, A., ii, 178.

Lenger, Walter. See Alfred Stock.

Lengyel, Roland von, estimation of sulphuric acid in urine by alcoholic strontium chloride, 1904, A., ii, 774

heat production and enzyme action. II. Action of pepsin, 1907, A., i, 102.

Lenhard, Wolfgang, gas filling apparatus for lecture purposes, 1910, A., ii, 493.

derivatives of anthraquinone, 1912,

A., i, 996.

Lenhard, Wolfgang. See also Theodor Curtius.

Lenher, Victor, gold fluoride, 1904, A., ii, 44.

solubility of gold in certain oxidising agents, 1904, A., ii, 490,

homogeneity of tellurium, 1908, A., ii, 483.

atomic weight of tellurium, 1909, A., ii, 230.

non-existence of tellurium oxychloride, 1909, A., ji, 231.

Lenher, Victor, and Raymond Calvier Benner, yttrium earths, 1908, A., ii,

385.

Lenher, Victor, and Charles Warren

Hill, action of various anhydrous
chlorides on tellurium and on tel-

lurium dioxide, 1908, A., ii, 484.

Lenher, Victor, and Alfred W. Homberger, estimation of tellurium, 1908,

A., ii, 426.
Lenher, Victor, and Joseph Howard
Mathews, nitrosylselenic acid, 1906,

A., ii, 349.

Lenher, Victor, and Henry Briggs North, action of thionyl and sulphuryl chlorides on selenium and selenium dioxide, 1907, A., ii, 255.

Lenher, Victor, and Paul David Potter, reaction between fused potassium nitrate and tellurium dioxide, 1909,

A., ii, 231.

Lenher, Victor, and Winifred Titus, double haloids of tellurium with the

alkaloids, 1908, A., i, 774.

Lenher, Victor, and Edward Wolesensky, selenium nitride, 1907, A., ii, 255.

Lenher, Victor. See also Melvin Edison Diemer, Roy Dykes Hall, Edgar Burton Hutchins, jun., and Samuel Weidman.

Lenk, Emil, and Hugo Brach, concentric stratification in filter paper, 1911, A., ii. 702.

Lenk, Emil, and Julius Mondschein, combined influence of alcohol and neutral salts on the sensitiveness of phenolphthalein, 1912, A., ii, 598.

Lenk, Emil. See also Paul Friedländer, Otto von Fürth, and Alois Kreidl.

Lenko, Josef. See Roland Scholl.
Lennep, D. P. Ross van, and J. D. Ruys, estimation of the fat content of milk by the aid of trichloroethylene, 1912, A., ii, 1008.

Lennep, D. P. Ross van. See also Jacob Böeseken.

Lenoble, Emile, formula for the calculation of the calorific value of fuels, 1907, A., ii, 300.

Lenormand, C., estimation of organic matter in waters; especially those containing chlorides and bromides, 1903, A., ii, 697.

estimation of organic matter in water; inconvenience of filtration of samples through paper before analysis, 1904,

A., ii, 215.

determination of the degree of polution of sea-water by the estimation of the organic matters, 1909, A., ii, 943.

Lenton, Walter Henry, assay of opium and its preparations, 1905, A., ii, 491.

Lentz, Fritz. See Rudolph Fittig.

Lentz, G. See Oscar Bally.

Lenz, Arthur von, action of alcoholic potash on methylethylacraldehyde, 1903, A., i, 460.

Lenz, Wilhelm, action of bleaching powder on o-dibromodiazobenzenep-sulphonic acid, 1904, A., i, 457.

apparatus. I. Melting-point tube holder. II. Suction funnel with stretched filter, 1906, A., ii, 432.

the Carrasco-Plancher method of estimating carbon and hydrogen in organic substances, 1908, A., ii, 65.

constituents of derris species, 1911, A., ii, 645.

analysis of camphor, 1911, A., ii, 665.

Lenz, Wilhelm, and E. Richter, detection of perboric acid and some similar compounds, 1911, A., ii, 823.

Lenz, Wilhelm, and Nikolaus Schoorl, microchemical test for sodium, 1911, A., ii, 439.

Lenzner, Alfred. See Hans Stobbe.

Leo, Hans, utilisation of glycerol in the organism and its estimation in the urine, 1903, A., ii, 160.

gastric digestion of proteins, 1905, A., ii, 838.

Leo, Julius Friedrich. See August Michaelis.

Leo, K., new arrangement for the estimation of nitric compounds in sulphuric acid, 1910, A., ii, 71.

León. See Calafat y León.

Leonard, Alfred Godfrey Gordon, the absorption spectrum of triphenylmethane, 1908, P., 93. Leonard, Alfred Godfrey Gordon, the quantitative spectra of molybdenum, tungsten, thorium, and zirconium, 1908, A., ii, 648.

the absorption spectra of 1:4-dihydronaphthalene and 1:2:3:4-tetrahydronaphthalene, 1910, T., 1246;

P., 143.

Leonard, Alfred Godfrey Gordon, See also (Sir) Walter Noel Hartley, and James Holms Pollok.

Leonard, Veader Newton, and Walter Jones, preformed hypoxanthine, 1909, A., ii, 911.

Leonardi, Battista. See Amedeo Colombano.

Leonardi, G. See Guido Bargellini. Leonardi, Giovanni, and M. de Franchis, methyl and ethyl ethers of acetylcarbinol and some of their derivatives, 1903, A., i, 787.

Leoncini, Giovanni, soluble carbohydrate of chestnut flour, 1911, A., ii, 1023.

Leoneini, Giovanni, and Cosimo Pieri, the action of manganese dioxide on nitrogen compounds, especially amides, in reference to the use of the dioxide as a manure, 1912, A., ii, 983.

Leone, G. See Arnaldo Piutti. Leonhard, Alfred. See Max Dittrich. Leonhardt, Richard. See August Mich-

aelis. Leontowitsch, Alexandr W., sodium

hexatungstate, 1905, A., ii, 325.

Leontowitsch, W. See Wladimir N.

Inatieff.

Leopola, Gerard Hildebrand, three-phase equilibrium, showing a pressure minimum, in the case of a dissociating compound of two components. I., II., and III., 1909, A., ii, 218, 472; 1910, A., ii, 190.

Leopold, Gerard Hildebrand. See also Hendrik Willem Bakhwis Roozeboom.

Leopold, Max. See Wilhelm Lossen.
Leopold, Paul, band spectrum of strontium fluoride in the electric arc, 1912, A., ii, 614

Leopold, Richard. See Johannes Thiele. Lepape, Adolphe. See Charles Moureu.

Lepel, Franz von, oxidation of atmospheric nitrogen by electric discharges, 1903, A., ii, 420.

relations between the nature of the arc, its temperature, and the yield of nitric oxide by the burning of atmospheric nitrogen, 1904, A., ii, 251.

oxidation of nitrogen; comparative yields by division of the current, 1904, A., ii, 725.

Lepel, Franz von, oxidation of atmospheric nitrogen by aid of the electric arc, 1905, A., ii, 581.

Lepère, Erich, the process of the decomposition of pastry, 1906, A., ii, 640.

Lepère, Erich. See also Rudolf Fittig. Leperre, Ferdinand, the presence of fluorine in grapes, 1909, A., ii, 338.

Lepeschkin, Nicolaus, sesquiterpene occurring together with cadinene in "Oleum cadinum," 1908, A., i, 278.

isomerisation phenomena during the preparation of cadinene, 1908, A., i, 557.

Lepeschkin, W. W., mathematical expression for the velocity of flow of water through a cell, according to Pfeffer's first and third schemes, 1904, A., ii, 634.

permeability of the plasma membrane for dissolved substances, 1909, A.,

ii, 603.

composition of the plasma membrane,

1911, A., ii, 817.

the action of anæsthetics on the osmotic properties of the plasma membrane, 1911, A., ii, 919.

Lepetit, Roberto, condensation product from hæmatoxylin and formalde-

hyde, 1905, A., i, 148.

preparation of the salts of p-ethoxyphenylaminomethylsulphurous acid, 1909, A., i, 569.

Lepetit, Roberto, and E. Levi, action of sodium sulphite and of sodium hydrogen sulphite on some azo-dyes, 1911, A., i, 930.

Lepin, A. I., isomeric changes of haloids containing a tertiary radicle in the molecule, 1912, A., i, 957.

stereoisomeric βγ-diphenylbutanes (dimethyldibenzyls), 1912, A., i, 958.

Lépinay. See Macé de Lépinay.

Lépine, Jean, the pancreas and glycosuria, 1904, A., ii, 60.

Lépine, Raphael, and Raymond Boulud, glycuronic acid of blood, 1903, A., ii, 493; 1904, A., ii, 422; 1905, A., ii, 730; 1906, A., ii, 238.

formation of sugar in the blood as it passes through the lung, 1903, A.,

ii, 736.

the sugar of the blood, 1904, A., ii, 56; 1906, A., ii, 868; 1907, A., ii, 562; 1908, A., ii, 957; 1909, A., ii, 68.

increase in the glycolytic power of the blood after ligature of Wirsung's duct, 1904, A., ii 183. Lépine, Raphael, and Raymond Boulud. production of sugar in the kidney of the dog under the influence of phloridzin, 1904, A., ii, 753.

influence of local temperature on glycolysis in the capillaries, 1905, A., ii, 46. reduction of oxyhæmoglobin, 1905, A.,

ii, 403.

distribution of saccharine matters in the plasma and in the blood corpuscles, 1905, A., ii, 642.

carbon monoxide in normal blood,

1906, A., ii, 867.

total sugar in the plasma and globules of blood, 1909, A., ii, 903.

the sugar of plasma and bloodcorpuscles, 1911, A., ii, 619.

Lepkowski, W. von, influence of the rate of cooling on the composition of saturated mixed crystals, 1908,

A., ii, 810. critical phenomena in solutions under the kardioid ultra-microscope, 1911,

A., ii, 95.

Le Pla, (Miss) Margaret. See James Frederick Spencer.

Le Play. See Albert Charrin.

Leprince & Siveke. See Herforder Maschinenfett & Oel-Fabrik, Leprince & Siveke.

Leprince, Maurice, compounds of methylarsinic acid with ferric hydroxide, 1903, A., i, 329.

chemistry of mistletoe (Viscum album),

1908, A., ii, 58. the pharmacognosy of Adenium hongkel and Xanthoxylum ochroxylum,

1912, A., ii, 479. Leprince, Maurice. See also Emile Perrot. Bernhard, application Lepsius. electrolysis in inorganic chemical

manufactures, 1909, A., ii, 885. Lepsius, Richard. See Emil Fischer,

and Franz Fischer.

Lerat, René, oxidation of vanillin by the oxydase of mushrooms, 1904, A., i, 360.

Lerch, Friedrich (Edler) von, surface tension and double layer at the common surface of two solvents, 1903, A., ii, 13.

activity induced by thorium, 1904,

A., ii, 8. thorium-X and the induced thorio-

activity, 1905, A., ii, 790. separation of radium-C from radium-

B, 1906, A., ii, 514. radiation of thorium-A, 1907, A., ii,

Le Renard, action of copper salts on the germination of Penicillium, 1906, A., ii, 880.

Leroide, J., alcohols and aromatic hydrocarbons derived from fenchone, 1909, A., i, 596.

See also Roure-Bertrand Leroide, J.

Fils, and Eugène Tassilly.

Le Rossignol, Robert, simple regulator for high pressure gas, 1908, A., ii, 827.

Le Rossignol, Robert, and Conrad Theodore Gimingham, rate of decay of thorium emanation, 1904, A., ii, 531. Le Rossignol, Robert. See also Frederick

George Donnan, Fritz Haber, and Samuel Smiles.

Leroux, A. See K. Friedrich.

Leroux, Henri, tetrahydro- and decahydro-naphthalenes, 1904, A., i,

decahydro-B-naphthol and octahydronaphthalene, 1905, A., i. 278. decahydro-B-naphthyl ketone decahydro-B-naphthylamine, 1905,

A., i, 601.

decahydro-a-naphthol and A-octahydronaphthalene, 1906, A., i, 16.

decahydro-a-naphthyl ketone and decahydro-a-naphthylamine, 1907, A., i, 538.

tetrahydronaphthyl glycols (cis and trans) and their combination, 1909, A., i, 299.

naphthan-β-diols, 1909, A., i, 569. heat of combustion of some hydronaphthalene derivatives, 1910, A., ii, 828.

Leroux, Henri. See also Pierre Breteau. Georges Darzens, and Emile Jung-

Le Roux, P., action of very low temperatures on the phosphorescence of certain sulphides, 1905, A., ii, 131.

Leroy, Edouard. See Octave Dony-Hénault.

Le Roy, G. A., detection of tartaric acid in cider, 1908, A., ii, 237.

Leroy, J. See Ernest Gérard.

Lesage, L. See Robert Fosse.

Lesage, Pierre, limits of germination of seeds submitted to the action of different solutions, 1912, A., ii, 478.

Lesch, Karl, and Anton Michel, oxidation of octaglycol isobutyrate, 1905,

A., i, 403.

Leschke, Erich, the behaviour of phloridzin after extirpation of the kidneys, 1910, A., ii, 530, 1094.

Leschtsch, Marie, effect of oil of turpentine on the changes in the proteins in plants, 1904, A., ii, 282.

Lesem, William Wolfe, and William John Gies, protagon of the brain,

1903, A., ii, 90.

Léser, Georges, two isomeric cyclohexane β-diketones, 1910, A., i, 48.

cyclic hexamethylenic β -diketones, 1912, A., i, 778.

Léser, Georges. See also Philippe Bar-

Les Etablissements Poulenc Frères and Ernest Fourneau, preparation of the esters of the amino-α-hydroxyacids, 1908, A., i, 937.

preparation of alkyl dialkylaminoaaa-trichloro-β-hydroxyethoxyisobutyrate, 1909, A., i, 210.

preparation of acyl derivatives of the esters of the aminohydroxy-acids, 1909, A., i, 229.

preparation of glycerylphosphates, particularly crystallisable sodium glycerylphosphates, 1909, A., i, 451.

[preparations containing colloidal gold], 1909, A., ii, 407.

preparation of glycerol mono-o- and -p-chlorophenyl ethers, 1910, A., i, 373.

preparation of salicylic esters of dihydroxyalkylaliphatic acid esters, 1910, A., i, 386.

preparation of secondary aminoalcohols, 1911, A., i, 291.

preparation of mercury derivatives of alkali alkyldithiocarbamic acetates, 1911, A., i, 841.

Leskiewicz, Stanislaus, examination of the solid constituent of turpentine from Pinus silvestris, of its derivatives, and of French colophony, 1910, A., i, 402.

Leslie, (Miss) May Sybil, molecular weight of the thorium emanation, 1911, A., ii, 843.

thorium and its products of disintegration, 1911, A., ii, 1048.

the period of radio-thorium and the number of a-particles given by thorium and its products, 1912, A., ii, 1023.

a comparison of the coefficients of diffusion of thorium and actinium emanations with a note on their periods of transformation, 1912, A., ii, 1032.

Leslie, (Miss) May Sybil. See also Harry Medforth Dawson.

Lesné, Edmond, and Charles Richet, jun., antitoxic effects of urea and sugars, 1903, A., ii, 503.

Lespieau, Robert, additive products of vinylacetic acid, 1903, A., i, 547. constitution of allyl cyanide, 1903, A., i, 684. Lespieau, Robert, ethyl γ-chloroacetoacetate, 1904, A., i, 286; 1911, A., i, 108.

lactone of hydroxycrotonic acid and the γ-substituted crotonic acids, 1904, A., i, 471.

β-bromobutyric acid, 1905, A., i,

action of hydrogen cyanide on epiethylin (ethyl glycide ether), 1905, A., i, 255.

ethoxycrotonic acid and ethylerythritic acid, 1905, A., i, 319.

tetra-carbon hydroxy-acids obtained by the action of hydrogen cyanide on epichlorohydrin, epibromohydrin, and epiethylin (ethyl glycide ether), 1905, A., i, 406.

synthesis of the lactone of erythric acid, 1905, A., i, 566.

cryoscopic measurements with hydrogen cyanide, 1905, A., ii, 303.

oxidising power of the air on a mixture of potassium iodide and arsenite at various points on Mont Blanc, 1906, A., ii, 741.

syntheses of natural erythritol, 1907, A., i, 173.

methyl ethers of allyl- and propargylcarbinols, 1907, A., i, 580.

syntheses of r-erythric acid and of inactive erythritol, 1908, A., i, 4.

hydrate and iodo-derivatives of propargyl alcohol (propinol), 1908, A., i, 496.

stand for apparatus for cryoscopic measurements, 1908, A., ii, 564.

methylacetenylcarbinol [butinene-γ-ol], 1910, A., i, 149.

hydrogenation of acetylenic compounds, 1910, A., i, 535.

condensation of αβ-dibromopropaldehyde with malonic acid, 1911, A., i, 106.

method for preparing certain true acetylenic alcohols, 1911, A., i, 347.

α-bromoacraldehyde, 1912, A., i, 7.
 α-dimethoxy-Δβ-pentinene and its hydrogenation, 1912, A., i, 331.

acetylenic compounds, 1912, A., i, 934.

Lespieau, Robert, and Georges Chavanne, liquefaction of allene and allylene, 1905, A., i, 401.

Lespieau, Robert, and Henri Pariselle, propargylearbinol, 1908, A., i, 496.

Lespieau, Robert, and Gustave Vavon, dipropargyl, its magnesium derivative, and Δβε-hexadi-inene-αζ-dicarboxylic acid, 1909, A., i, 450. Lespieau, Robert, and Paul Viguier, y-hydroxytetrolic acid, 1908, A., i,

halogen derivatives of y-hydroxycro-

tonic acid, 1909, A., i, 205.

Lesser, Ernst J., metabolic experiments with the end-products of peptic and tryptic digestion, 1904, A., ii, 271.

protein synthesis in the animal body,

1904, A., ii, 498.

catalase, 1906, A., ii, 562; 1907, A., ii. 707.

guaiacum reaction of blood, 1907, A.,

ii. 827.

chemical processes in worms, 1908, A.,

ii, 309; 1909, A., ii, 419.

chemical processes in the earthworm. III. Anoxybiotic decomposition of glycogen, 1910, A., ii, 429.

chemical processes in the earthworm. IV. Gaseous metabolism in the state

of anoxybiosis, 1910, A., ii, 429.

Lesser, Ernst J., and Ernst W. Taschenberg, the ferments of the earth-

worm, 1908, A., ii, 309. Lesser, Ernst J. See also Heinrich von

Hoesslin.

Lesser, Rudolf, preparation of nitroderivatives of aromatic amines from phthalimides, 1903, A., i, 618; 1904, A., i, 418.

preparation of o-carboxylic derivatives of arylthiolacetic acids, 1911, A., i,

[preparation of condensation products from p-benzoquinone or a-naphtha-

quinone], 1911, A., i, 994.

Lesser, Rudolf, and R. Weiss, "selenindigo" ("bis-selenonaphthenindigo") and aromatic selenium compounds. I., 1912, A., i, 642.

Le Sueur, Henry Rondel, the action of heat on a-hydroxycarboxylic acids. Part I. a-Hydroxystearic acid, 1904, T., 827; P., 14, 132; discussion, P., 133.

Δa-oleic acid, 1904, T., 1708; P.,

the action of heat on a-hydroxycarboxylic acids. Part II. a-Hydroxymargarie acid, a-hydroxypalmitic acid, a-hydroxypentadecylic acid, and a-hydroxymyristic acid, 1905, T., 1888; P., 285.

the action of heat on a-hydroxycarboxylic acids. Part III. aa'-Dihydroxysebacic acid and its diacetyl derivative, 1907, T., 1365; P., 196.

dihydroxyadipic acids; preliminary note, 1907, P., 196.

Le Sueur, Henry Rondel, the action of heat on α-hydroxycarboxylic acids. Part IV. Racemic aa'-dihydroxyadipic acid and meso-aa'-dihydroxyadipie acid, 1908, T., 716; P.,

formation of heterocyclic compounds. Part I. 1-Phenylpyrrolidine-2:5dicarboxylic acid from adipic acid,

1909, T., 273; P., 36.

preparation of secondary amines from carboxylic acids. Part I. Preparation of heptadecylaniline, pentadecylaniline and tridecylaniline, 1910, T., 2433; P., 290.

preparation of secondary amines from carboxylic acids. Part II. Preparation of the heptadecyl and pentadecyl derivatives of a- and \(\beta\)-naphthylamine, 1911, T., 827; P., 104.

Le Sueur, Henry Rondel, and Paul Haas, formation of heterocyclic compounds. Part II. Action of bases on the aa'dibromo-derivatives of certain dicarboxylic acids, 1910, T., 173; P., 4.

Le Sueur, Henry Rondel. See also

Arthur William Crossley.

Lesueur, M., occurrence of sucrose in the dry roots of certain plants of the Aristolochiaceae, and of a glucoside decomposed by emulsin in those of Asarum europæum, 1911, A., ii, 525.

Lesure, André, action of ultra-violet rays on (I) certain solutions used in pharmacy; (II) certain fatty substances, glucosides, alkaloids, and phenols, 1910, A., ii, 739.

Letellier, reducing properties of the organo-metallic compounds, 1908, A.,

Leteur, F., action of hydrogen sulphide on methyl ethyl ketone, 1903, A., i, 605.

Letsche, Eugen, the organic constituents of serum, 1907, A., ii, 888.

glycocholic and paraglycocholic acids, 1909, A., i, 587; 1911, A., i, 784.

degradation of cholic acid by oxidation, 1909, A., i, 697.

behaviour of hæmoglobin towards hydrazine and the question of the capacity of the colouring matter of blood for combining with gases, 1910, A., i, 599.

spectro-photometry of blood, 1910,

A., ii, 52. hæmoglobin, 1912, A., i, 324.

action of hydroxylamine on the blood colouring matter; methæmoglobin, 1912, A., i, 923.

Letsche, Eugen. See also Otto Dimroth.

Letulle, M., and (Mlle.) M. Pompilian, metabolic balance of nitrogen and sodium chloride, 1907, A., ii, 114.

Leture, E., rapid detection of uric acid in sediments or calculi, 1907, A., ii, 589.

Leuba, Auguste F., estimation of hydroxylamine by means of ferric alum and potassium permanganate, 1904, A., ii, 639.

action of nitric and acetic acids on alkali chromates, 1904, A, ii, 683. action of oxalic acid on lead ferro-

cyanide, 1905, A., i, 422. analysis of copper ferrocyanide, 1905,

A., ii, 556.

Leubner, A. See Robert Luther.

Leuchs, Friedrich, o-nitroaniline, 1907, A., i, 408.

Leuchs, Friedrich. See also Hermann Leuchs.

Leuchs, G. A. See Alexander Gutbier. Leuchs, Hermann, synthesis of hydroxypyrrolidinecarboxylic acids (hydroxyprolines), 1905, A., i, 545.

oxyprolines), 1905, A., i, 545. glycinecarboxylic acid, 1906, A., i, 236. decomposition of malonic ester chlor-

ide, 1906, A., i, 796.

strychnos alkaloids. I. New method of oxidising brueine and strychnine, 1908, A., i, 563.

improved method of preparation of mono-substituted malonic and acetoacetic esters, 1911, A., i, 602.

Leuchs, Hermann, and Rudolph Anderson, strychnos alkaloids. XI. The brucine-nitric acid reaction. Preparation of a new alkaloid, bisapomethylbrucine, 1911, A., i, 746.

strychnos alkaloids. XII. Derivatives of bisapomethylbrucine, 1911,

A., i, 1018.

Leuchs, Hermann, and Paul Boll, strychnos alkaloids. IX. Derivatives of strychninesulphonic acid I. and oxidation of bromostrychnine, 1910, A., i, 766.

Leuchs, Hermann, and Joseph F. Brewster, strychnos alkaloids. XIV. Derivatives and decomposition products of brucinolone. Decomposition of dihydrobrucinonic acid into isobrucinolone and glycollic acid, 1912, A., i, 210.

Leuchs, Hermann, and Heinrich Felser, hydroxyprolines, 1908, A., i, 510.

Leuchs, Hermann, and Walter Geiger, a new synthesis of serine, 1906, A., i, 806.

anhydrides of a-amino-N-carboxylic acids and of a-amino-acids, 1908, A., i, 541.

Leuchs, Hermann, and Walter Geiger, strychnos alkaloids. VI. Preparation of brucinesulphonic acids and cause of the nitric acid reaction for brucine, 1909, A., i, 828.

strychnos alkaloids. XIII. Isolation of a fourth brucinesulphonic

acid, 1911, A., i, 1018.

Leuchs, Hermann, and Arthur Geserick, synthesis and reactions of ethyl phloro-glucinoldicarboxylate; condensation of esters containing nitrogen and the preparation of sodium cyanate, 1909, A., i, 106.

Leuchs, Hermann, and Erich Gieseler, spirans. II. Detection of the special asymmetry caused by the spiran carbon

atom, 1912, A., i, 714.

Leuchs, Hermann, Michele Giua, and Joseph F. Brewster, experiments in the C₅ series. 1. Preparation of ether lactones and butyleneoxidecarboxylic acid esters. 2. A new case of alteration of configuration (Walden rearrangement) in inactive compounds with several asymmetric carbon atoms, 1912, A., i, 603.

Leuchs, Hermann, and Frederick Burr La Forge, isomerism of carbethoxydiglycylglycine ester and the st. bility of N-carboxylic acids, 1908, A., 1, 723.

Leuchs, Hermann, and Friedrich Leuchs, strychnos alkaloids. VIII. Coloured isomeric salts of cacothelin base, 1910, A., i, 425.

Leuchs, Hermann, and Wilhelm Mannasse, isomeric esters of carbethoxyglycylglycine, 1907, A., i, 770.

Leuchs, Hermann, and Ernesto Möbis, application of 8-chlorovalerolactone in the preparation of acids and lactones, 1909, A., i, 361.

Leuchs, Hermann, and George Pierce, strychnos alkaloids. XV. Decomposition of brucine into a base, termed curbine, 1912, A., i, 898.

Leuchs, Hermann, and Dan Radulescu, the preparation and reactions of bis-ahydrinone-(2:2)-spiran, 1912, A.,i,179.

Leuchs, Hermann, and Paul Reich, strychnos alkaloids. X. Reactions of strychninonic acid and of strychninolone, 1910, A., i, 767.

Leuchs, Hermann, and Wilhelm Schneider, strychnos alkaloids. II. New method for the preparation of sulphonic acid. 1900

phonic acids, 1909, A., i, 120. strychnos alkaloids. IV. Reactions of strychninonic acid and fission of the strychnine molecule, 1909, A., i, 602.

Leuchs, Hermann, and Wilhelm Schneider, strychnos alkaloids. V. Isomeric strychninesulphonic acids, 1909, A., i, 671.

Leuchs, Hermann, and Fritz Simion, by-products of the preparation of ethyl phloroglucinoldicarboxylate, 1911, A.,

Leuchs, Hermann, and Oskar Splettstösser, δ-chloro-y-valerolactone and some related compounds, 1907, A., i,

Leuchs, Hermann, and Umetaro Suzuki, syntheses of polypeptides. VI. Derivatives of phenylalanine, 1904, A., i,

867.

Leuchs, Hermann, and George Theodorescu, formation of a keten-like quinone and other completely substituted derivatives of diphenylamine. change of alkyl in esters by means of alcoholic ammonium hydroxide, 1910, A., i, 395.

Leuchs, Hermann, and Lothar E. Weber, strychnos alkaloids. III. actions of brueinonic acid and fission of the brucine molecule,

1909, A., i, 253.

strychnos alkaloids. VII. Fission of brueinonic acid and of brueinolone, 1909, A., i, 954.

Leuchs, Hermann. See also Emil Fischer. Leuchtenberger, Carl. See Alexander

Tschirch.

Leuchter, M., modified cobalt reaction for the detection of small quantities of hydrogen peroxide, 1911, A., ii, 1026. Leulier, Albert, desiccation of cis-terpin

hydrate, 1911, A., i, 548. Algerian oleander bark, 1911, A., ii,

compounds of chloral hydrate with urotropine and caffeine, 1912, A., i, 644.

bark, latex, and seed of Nerium oleander, 1912, A., ii, 290.

Leulier, Albert. See also Louis André. Leuner, Karl. See Hans Stobbe.

Leupold, Frida. See Alfred Bertheim. Leupold, Hans. See Arthur Michael.

Leuze, Wilhelm. See Carl Paal. Levaditi, C., the mechanism of the action of arsenic derivatives in trypan-

osomiasis, 1909, A., ii, 919. Levaditi, C. See also Rudolf Kraus, and L. Launoy.

Levallois, Ferdinand. See Louis Bouveault, and Camille Chabrié.

Levalt-Ezersky, M. K., heat of solution of potassium nitrate at high temperatures, 1912, A., ii, 737.

Levene, Phæbus A[aron Theodore], decomposition of gelatin, I. Amounts of glycine from gelatoses, 1903, A., i. 301.

glucothionic acid, 1903, A., i, 374. glucophosphoric acid, 1903, A., i, 374. nucleic acid, 1903, A., i, 375, 668.

preparation and analyses of nucleic acids, 1903, A., i, 668, 779; 1904, A., i, 126; 1905, A., i, 105.

glucothionic acid from tendon mucin,

1903, A., i, 779.

uracil from autolysis of the pancreas, 1903, A., ii, 438.

decomposition products of gelatin,

1904, A., i, 357. hydrolysis of spleen nucleic acid by dilute mineral acid, 1904, A., i,

end-products of autodigestion animal glands, 1904, A., ii, 188.

end-products of tryptic digestion of gelatin, 1904, A., ii, 188.

autolysis of testis and spleen, 1904, A., ii, 574.

hydrolysis of fresh and self-digested glands, 1904, A., ii, 828.

hydrolytic cleavage of proto-albumose, 1905, A., i, 252.

preparation and analysis of nucleic acids. VII. On the nucleic acid of the spleen, 1905, A., i. 847.

end-products of pancreatic autolysis, 1905, A., ii, 732.

cleavage products of proteoses, 1906, A., i, 54.

glycine picrate, 1906, A., i, 403.

picrolonates of certain nuclein bases, 1907, A., i, 788.

the diuretic action of thymine, 1907, A., ii, 711.

cleavage products of nucleic acid, 1908, A., i, 931.

preparation of glucothionic acid, 1909, A., i, 276.

conjugated phosphoric acids of plant seeds, 1909, A., i, 290.

yeast nucleic acid, 1909, A., i, 541. prolylglycineanhydride formed by the

tryptic digestion of gelatin, 1911, A., i, 97.

Levene, Phæbus A., and Carl Lucas Alsberg, cleavage products of vitellin, 1906, A., i, 913.

the hydrolysis of proteins by means of dilute sulphuric acid, 1907, A., i,

Levene, Phæbus A., and Wallace Appleton Beatty, the precipitability of amino-acids by phosphotungstic acid, 1906, A., i, 339.

Levene, Phabus A., and Wallace Appleton Beatty, occurrence of prolineglycyl anhydride in the tryptic decomposition products of gelatin, 1906, A., i, 718.

cleavage of gelatin, 1907, A., i, 168. the tryptic digestion of egg-albumin,

1907, A., i, 803.

the analysis of the cleavage products of egg-albumin, 1907, A., i, 803. lysylglycine, 1907, A., i, 804.

Levene, Phæbus A., and Walter Abraham Jacobs, the preparation of isoleucine from the hydrolysis products of proteins, 1908, A., i,

inosic acid, 1908, A., i, 931; 1909, A., i, 164, 540; 1911, A., i, 408. the pentose in nucleic acids. II.,

1909, A., i, 541, 858.

guanylic acid, 1909, A., i, 620; 1912, A., i, 926.

yeast nucleic acid, 1909, A., i, 620, 686; 1911, A., i, 96, 510.

the occurrence of free guanosine in the pancreas, 1910, A., ii, 978.

hexoses from d-ribose, 1911, A., i, 14. the pentose from the pancreas, 1911, A., i, 97.

sphingosine, 1912, A., i, 284, 575. guanine hexoside obtained on hydrolysis of thymus-nucleic acid, 1912, A., i, 926.

structure of thymus-nucleic acid, 1912, A., i, 926.

cerebronic acid, 1912, A., i, 936.

the cerebrosides of the brain, 1912, A., i, 1007.

Levene, Phæbus A., Walter Abraham Jacobs, and Florentin Medigreceanu, the action of tissue extracts containing nucleosidase on a- and B-methyl pentosides, 1912, A., ii, 577.

Levene, Phæbus A., and Philip Adolph Kober, elimination of nitrogen after the administration of glycine, asparagine, and glycyl-glycine anhydride,

1909, A., ii, 166.

Levene, Phæbus A., and L. Kristeller, creatinine output in man, 1909, A., ii, 419.

Levene, Phæbus A., and Frederick Burr La Forge, triticonucleic acid, 1911, A., i, 96.

yeast nucleic acids. V. Structure of pyrimidine nucleosides, 1912, A., i, 325.

Levene, Phæbus A., and John Alfred Mandel, the carbohydrate group of the nucleo-protein of the spleer. I., 1906, A., i, 468.

Levene, Phabus A., and John Alfred Mandel, nucleic acids. XI. and XIII., 1907, A., i, 168; 1908, A., i, 586.

preparation and analysis of nucleic acids. XII. Nucleic acid from the spermatozoa of the shad (alosa), 1907. A., i. 266.

the origin of cytosine, obtained by the hydrolysis of nucleic acids of animal origin, 1908, A., i, 376.

the nucleo-protein of the liver. Guanylic acid, 1908, A., i, 587. constitution of thymonucleic acid,

1908, A., i, 587.

Levene, Phabus A., and Florentin Medigreceanu, nucleases, 1911, A., i.

410, 698. nuclein metabolism in the dog, 1911, A., ii, 303.

action of gastro-intestinal juices on nucleic acids, 1911, A., ii, 744.

Levene. Pheebus A., and Gustav M. Meyer, estimation of urea in utines. 1909, A., ii, 709.

the elimination of total nitrogen, urea, and ammonia following the administration of amino-acids, glycylglycine, and glycylglycine anhydride, 1910, A., ii, 53.

the combined action of muscle plasma and pancreas extract on glucose and maltose, 1911, A., ii, 414.

glycolysis, 1912, A., ii, 368.

the combined action of muscle-plasma and pancreas extract on some monoand di-saccharides, 1912, A., ii, 577.

the action of various tissues and tissuejuices on dextrose, 1912, A., ii, 577. the action of leucocytes on dextrose,

1912, A., ii, 577, 852.

Levene, Phæbus A., and Charles A. Rouiller, estimation of tryptophan in protein cleavage products, 1907, A., ii, 319.

Levene, Phabus A., and Donald D. van Slyke, distillation of esters of aminoacids by means of the Geryk pump, 1908, A., i, 509.

hydrolysis of Witte's peptone, 1908, A., i, 932.

plasteins, 1908, A., i, 932; 1909, A., i, 277.

leucine fraction of proteins, 1909, A., ii, 947.

insoluble lead salts of amino-acids, 1910, A., i, 719.

composition and properties of glycine picrate and the separation of glycine from alanine, 1912, A., i, 681.

picrolonates of the monoamino-acids,

1912, A., i, 681.

Levene, Phæbus A., and Donald D. van Slyke, gasometric estimation of free and conjugated amino-acids in the

urine, 1912, A., ii, 1008.

Levene, Phabus A., Donald D. van Slyke, and F. J. Birchard, partial hydrolysis of proteins. II. Fibrinheteroproteose, 1910, A., i, 794.

the partial hydrolysis of proteins. III. Fibrin protoalbumose, 1911,

A., i, 822.

Levene, Phæbus A., and Lyman Brumbaugh Stookey, digestion of gelatin,

1903, A., ii, 308.

biological relation of proteins and protein-assimilation, 1903, A., ii, 309. nucleo-protein from the pancreas,

1904, A., ii, 498.

the combined action of proteolytic enzymes, 1904, A., ii, 674.

Levene, Phabus A., and George Barelay Wallace, decomposition of gelatin, 1906, A., i, 469.

Levene, Phæbus A. See also Alexis Carrel, George William Heimrod, Walter Abraham Jacobs, Isaac Levin, John Alfred Mandel, and Joshua Edwin Sweet.

Leverkus, Karl Otto. See Georg Schroeter,

and Robert Stollé.

Levi. E. See Roberto Lepetit.

Lévi, Lucien. See Emile Fleurent. Levi, Louis E., and August C. Orthmann, analysis of tannins, 1912, A., ii, 705.

Levi, Mario Giacomo, electrolytic preparation of persulphates, 1903, A., ii, 474.

passivity of nickel, 1905, A., ii, 591. Levi, Mario Giacomo, and Fernando Ageno, electrolytic oxidation in presence of fluorine ions, 1907, A., ii, 69.

Levi, Mario Giacomo, and Vincenzo Bettoni, function of the catalyst in the Deacon process for the manufacture of chlorine, 1905, A., ii, 515.

Levi, Mario Giacomo, and Sergio Castellani, certain electrolytic borates,

1909, A., ii, 143.

technical preparation of borax. I.,

1910, A., ii, 501.

Levi, Mario Giacomo, and O. Garavini, preparation of borax. II., 1911, A., ii, 981.

Levi, Mario Giacomo, and Enrico Migliorini, decomposition of sulphates, 1907, A., ii, 81.

preparation of hydrochloric acid by synthesis from its elements, 1907,

A., ii, 756.

oxidation of the ammonia in ammonium persulphate, 1908, A., ii, 835.

Levi. Mario Giacomo, and Enrico Migliorini, electrochemical reactions induced by sulphur ions, 1909, A., ii, 229.

Levi, Mario Giacomo, Enrico Migliorini. and Guido Ercolini, action of metals on aqueous solutions of the persulphates, 1908, A., ii, 581.

Levi, Mario Giacomo, and Egidio Spelta, phosphomolybdic acid, 1903, A., ii,

 $\hat{7}31.$

Levi, Mario Giacomo, and Mario Voghera, electrolysis in acetone and in pyridine, 1905, A., i, 572.

electrolytic formation of thiosulphates.

1906, A., ii, 81, 348, 436.

function of the catalyst in the Deacon process for the manufacture chlorine, 1906, A., ii, 605.

Levi, Mario Giacomo. See also Giacomo Carrara, and Raffaele Nasini.

Levi. Richard. See Aladar Skita.

Levi-Bianchini, Leone, critical point of dilute saline solutions, 1904, A., ii, 707.

Levier, Alex. See Paul Dutoit.

Levi-Malvano, Mario, hydrates of glucinum sulphate, 1906, A., ii, 165.

derivatives of a complex chloride of gold and phosphorus, 1908, A., i, 774.

hexahydrated glucinum

1910, A., ii, 37.

Levi-Malvano, Mario, and O. Ceccarelli, the ternary system : zinc-lead-tin, 1911, A., ii, 1088.

alloys of zinc, lead, and tin, 1911, A.,

ii. 1089.

Levi-Malvano, Mario, and Antonio Mannino, equilibria among the stereoisomerides of santonin, 1909, A., i, 32.

partial racemism in santonin deriva-

tives, 1909, A., i, 801.

Levi-Malyano, Mario, and Mario Marantonio, constitution of aluminium brasses, 1912, A., ii, 52.

the light alloys of aluminium, zinc, and copper, 1912, A., ii, 769.

Levi-Malvano, Mario, and F. S. Orofino, constitution of phosphor bronzes, 1912, A., ii, 51.

Levi-Malvano, Mario. See also Emilio Carlinfanti.

Levin, Isaac, decapsulation of the kidney,

1904, A., ii, 831.

evin, Isaac, D. D. Manson, and Phæbus A. Levene, the influence of removal of segments of the gastrointestinal tract on the character of protein metabolism, 1910, A., ii, 53.

Levin, Max, gold-thallium alloys, 1905, A., ii, 462.

alloys of gold and nickel, 1905, A., ii,

influence of one substance on the solubility of another, 1906, A., ii, 527.

absorption of α-rays from polonium, 1906, A., ii, 595.

origin of the β-rays emitted by thorium and actinium, 1906, A., ii, 718.

radioactive properties of uranium, 1907, A., ii, 150.

properties of uranium and actinium, 1907, A., ii, 220.

some properties of actinium, 1907, A., ii, 522.

radiation of uranium-X, 1907, A., ii, 836; 1908, A., ii, 919.

radium content of uranium preparations, 1907, A., ii, 922.

the radioactivity of the springs of Bad Dürkheim a.d. Haardt, 1910, A., ii, 478.

reduction of the oxides of iron, 1912, A., ii, 1176.

Levin, Max, and Rudolf Ruer, action of potassium salts on photographic plates, 1908, A., ii, 448.

radioactivity of ordinary matter, 1909, A., ii, 779.

Levin, Max, and Gustav Tammann, manganese-iron alloys, 1905, A., ii, 822.

Levin, Max. See also Rudolf Ruer. Levine, M. See Frederic Schiller

Lee.
Levinthal, Walter, the fate of xanthine and caffeine in the human body, 1912,

A., ii, 470. Levison, Louis A. See Ernst Fuld.

Levites, A., filter for filtering solutions of definite concentration at a temperature either above or below that of the surrounding medium, 1908, A., ii, 576.

Levites, A. See also Leo Pissarjewsky.
Levites, Semen J., gelatinisation. II.,
1903, A., ii, 641.

gelatinisation. III. Internal friction of colloidal solutions, 1904, A., ii, 471.

deaminoalbumins, 1905, A., i, 104. influence of neutral salts on the peptic hydrolysis of albumin, 1906, A., ii,

digestion of fat, 1907, A., ii, 891; 1908, A., ii, 960.

the process of gelatinisation, 1908, A., ii, 161, 264, 476. Levites, Semen J., deaminoproteins, 1909, A., i, 751.

the digestion of fat in the animal body, 1909, A., ii, 904.

organic colloids, 1911, A., i, 247.

adsorption experiments, 1911, A., ii, 858.

Levitsky, A. N. See Wladimir I. Palladin.

Levitsky, N., diethyl phosphite, 1903, A., i, 733.

Levitsky, N. See also A. Sachs.

Lévy, Albert, and Adrien Pécoul, estimation of carbon monoxide in confined atmospheres, 1905, A., ii, 203.

estimation of carbon monoxide in air by means of iodine pentoxide, 1906, A., ii, 197.

Levy, Alfred Goodman, estimation of chloroform vapour in air, 1905, A., ii, 121.

Levy, Arthur Garfield, estimation of tin in copper-tin alloys, 1906, A., ii. 55. estimation of carbon in steel, 1912, A., ii, 995.

Levy, Arthur Garfield. See also Bertram Blount.

Levy, Albert M., French sub-alpine tertiary basalts, 1909, A., ii, 591.

Levy, Bruno, some new derivatives of carbazole, 1912, A., i, 304.

Lévy, L. See Xavier Rocques. Levy, Leo. See Theodor Curtius.

Levy, Leonard Angelo, some new platinocyanides, 1907, A., i, 689.

the fluorescence of platinocyanides, 1908, T., 1446; P., 178. platinocyanides, 1908, A., i, 252.

platinocyanides, 1908, A., i, 252. studies on platinocyanides, 1912, T., 1081; P., 91; discussion, P., 92.

rapid estimation of carbon monoxide, 1912, A., ii, 203.

Levy, Leonard Angelo, and Henry Arnott Sisson, some new platinocyanides, 1905, P., 305; 1906, T., 125.

Levy, Louis Henry. See Harry Ward Foote, George Samuel Jamieson, and Treat Baldwin Johnson.

Levy, Paul, American colophony, 1906, A., i, 870; 1907, A., i., 947; 1910, A., i, 11.

Levy, Richard, estimation of sugar in urine, 1906, A., ii, 499.

Levy, Richard. See also Arthur Rosenheim.

Lévy, René J. See Georges Claude.

Levy, Stanley Isaac. See Siegfried Ruhemann. Levy, Walter. See Arthur Rosenheim. Lévy. W., Nathan, use of carbon disulphide for the direct estimation of [free] sulphur in minerals, 1911, A., ii, 1130.

Lew, (Mme.) L. See Henryk Golblum.
Lewandowsky, Felix, growth of bacteria in salt solutions of high concentration, 1904, A., ii, 276.

Lewcock, William. See John Theodore

Hewitt, and Clarence Smith.

Lewin, D. See Neumann Wender.
Lewin, Louis, action of mesityl oxide, phorone, and acetone on the animal body, 1907, A., ii, 496.

spectrophotographic investigations on the action of hydrocyanic acid on

blood, 1908, A., ii, 1048.

quinine and blood-pigment, 1909, A., ii, 593.

the toxic action of methyl alcohol,

1911, A., ii, 753.
Buphane disticha (Haemanthus toxic-

arius), 1912, A., i, 577. hæmanthine, 1912, A., i, 1014.

spectrophotographic investigation of meconium, 1912, A., ii, 664.

Lewin, Louis, Adolf Miethe, and E. Stenger, photographic determination of the absorption bands of the colouring matters of blood, 1906, A., i, 778.

spectroscopic properties of yolk of egg,

1908, A., ii, 1054.

the behaviour of acetylene to blood,

1909, A., i, 857.

Lewin, Louis, and Otto Poppenberg, carbon monoxide poisoning by explosion gases, 1909, A., ii, 690.

plosion gases, 1909, A., ii, 690. **Lewin**, *Louis*, and *E.* **Stenger**, spectrophotographic investigation of urobilin,

1912, A., ii, 217.

Lewin, Max. See Pavel Iw. Petrenko-Kritschenko.

Lewin, Willy. See Franz Sachs. Lewino, Paul. See Conrad Willgerodt. Lewinski, Johann, amount of proteins in

blood plasma, 1904, A., if, 183. the limits of hippuric acid formation

in man, 1908, A., ii, 518.
the limits of hippuric acid formation
in man and the technique of hippuric

acid estimation, 1909, A., ii, 820. Lewinsohn, Arnold. See Ernst Deussen. Lewinsohn, Kurt, oil of myrrh, 1906,

A., i, 972.

Lewis, Dean D. See Joseph L. Miller.

Lewis, D. H. See Charles Hugh Neilson.

Lewis, Ernest Alfred, method of separating zinc from nickel by hydrogen sulphide in a solution containing gallic acid, 1903, A., ii, 454. Lewis, Ernest Alfred, behaviour of brass on heating in hydrogen at temperatures below the melting point, 1912, P., 290.

Lewis, Edward Watkin, tertiary butyl-

phenol, 1903, T., 329; P., 41.
Lewis, Edward Watkin, and Harry
Waumsley, india-rubber as a protective colloid; formation of colloidal
metallic sulphides in rubber solutions,
1912, A., ii, 631.

Lewis, Frederick C. See Harald Seide-

Lewis, Gilbert Newton, hydration in solution, 1905, A., ii, 509.

autocatalytic decomposition of silver oxide, 1905, A., ii, 578.

potential of the oxygen electrode, 1906, A., ii, 262.

silver oxide and silver suboxide, 1906,

A., ii, 284.

elementary proof of the relation between the vapour pressures and the composition of a binary mixture,

1906, A., ii, 423.

applicability of Raoult's laws to molecular weight determinations in mixed solvents and in simple solvents the vapours of which dissociate, 1906, A., ii, 524.

formation of complexes, hydration and

colour, 1906, A., ii, 657.

equilibrium in the Deacon process, 1906, A., ii, 843.

specific heats of solids at constant volume and the law of Dulong and Petit, 1907, A., ii, 735.

outline of a new system of thermodynamics, 1908, A., ii, 16.

osmotic pressure of concentrated solutions and the laws of the perfect solution, 1908, A., ii, 465.

estimation of the hydration of ions from measurements of electromotive

forces, 1908, A., ii, 805.

the theory of the determination of transference numbers by the method of moving boundaries, 1910, A., ii, 683.

Lewis, Gilbert Newton, and Arthur Edgar, the equilibrium between nitric acid, nitrous acid, and nitric oxide, 1911, A., ii, 264.

Lewis, Gilbert Newton, and Carl L. von Ende, potential of the thallium elec-

trode, 1910, A., ii, 571.

Lewis, Gilbert Newton, and Richard Fay Jackson, galvanic polarisation at a mercury cathode, 1906, A., ii, 648.

Lewis, Gilbert Newton, and Frederick G. Keyes, potential of the potassium electrode, 1912, A., ii, 225.

689 Y Y

Lewis, Gilbert Newton, and Charles A. Kraus, the potential of the sodium electrode, 1910, A., ii, 1027.

Lewis, Gilbert Newton, and Merle Randall, heat content of the various forms of sulphur, 1911, A., ii, 371. a summary of the specific heats of

gases, 1912, A., ii, 897.

Lewis, Gilbert Newton, and Frank F. Rupert, the potential of the chlorine

electrode, 1911, A., ii, 364.

Lewis, Gilbert Newton, and Ledyard W. Sargent, potential of the ferro-ferricyanide electrode, 1909, A., ii, 369. potentials between liquids, 1909, A., ii, 369.

Lewis, Gilbert Newton, and Plumer Wheeler, electrical conductivity of solutions in liquid iodine, 1906, A., ii,

650.

Lewis, Gilbert Newton. See also George

Howard Burrows.

Lewis, Henry F., effect of acetone on the transport numbers of sodium and potassium chlorides in aqueous solution, 1907, A., ii, 925.

Lewis, J. B., apparatus for the quantitative electrolysis of hydrochloric acid,

1908, A., ii, 350.

Lewis, R. H. See Richard Sidney Curtiss.

Lewis, Reginald J. See Cecil Napier Hake.

Lewis, Samuel Judd. See Edgar Wedekind.

Lewis, William Cudmore McCullagh, preparations of sodium glycocholate, 1908, A., i, 326.

experimental examination of Gibbs's theory of surface-concentration, regarded as the basis of adsorption, with an application to the theory of dyeing, 1908, A., ii, 357.

adsorption in relation to Gibbs's theory; the mercury adsorbing surface, 1909, P., 258; discussion,

P., 258.

experimental investigation of Gibbs's theory of surface concentration regarded as the basis of adsorption. II., 1909, A., ii, 383.

electrical charge of colloidal silver,

1909, A., ii, 465.

size and electric charge of the oil particles in oil-water emulsions, 1909, A., ii, 474.

nature of the transition layer between two adjacent phases, 1910, A., ii, 829. surface tension of aqueous solutions

and Laplace's constant, 1910, A.,

ii. 933.

Lewis, William Cudmore McCullagh, autosorption (auto-adsorption), 1910, A., ii, 934.

latent heat of vaporisation of liquids, 1911, A., ii, 855.

photokinetics of sodium hypochlorite solutions, 1912, T., 2371; P., 288.

internal, molecular, or intrinsic pressure; a survey of the various expressions proposed for its determination, 1912, A., ii, 136.

the system iron-carbon, 1912, A., ii,

353.

the liquid state. III. Mechanism of vaporisation, 1912, A., ii, 430.

the liquid state. II. Compressibility of mercury, 1912, A., ii, 432.

Lewis, William Cudmore McCullagh. See also Alexander Roshdestwensky. Lewis, William Henry. See Frederick

Daniel Chattaway.

Lewis, William James, sartorite from the Binnenthal, Switzerland, 1904, A.,

ii, 133.

Lewis, Warren Kendall, a method for the calculation of ionic concentrations from measurements of potential in concentration cells, 1908, A., ii, 657.

modification of Ostwald's bromide voltameter, 1909, A., ii, 858.

Lewis, W. Lee, action of Fehling's solution on maltose, 1909, A., i, 767.
Lewite, A. See Otto Hauser.

Lewkonja, Kurt, alloys of thallium and

lead, 1907, A., ii, 261.

alloys of cobalt with tin, antimony, lead, bismuth, thallium, zinc, chromium, and silicon, 1908, A., ii, 853.

Lewkowitsch, Julius, theory of saponification, 1903, A., i, 225; 1904, A., i, 6, 283; 1907, A., i, 10.

estimation of glycerol in crude glycerols, 1903, A., ii, 456.

some Indian oils, 1904, A., ii, 217. characteristics of some almond and allied oils, 1904, A., ii, 456.

Dika fat, 1906, A., ii, 131. Surin fat, 1906, A., ii, 205.

unsaponifiable matter in chrysalidene oil, 1907, A., i, 521.

conversion of optically inactive triolein into an optically active glyceride and an optically active acid, 1908, A., i, 116.

ochoco fat, 1908, A., ii, 885.

Lewkowitsch, Julius, and Hans Pick, synthetical production of optically active petroleum from glycerides, 1907, A., i, 997.

Hermann. See Rudolf Lewkowitz.

Friedrich Weinland.

Lewoniewski, (Mlle.) S., variations in the amounts of single phosphoric acid compounds in seeds depending on conditions of vegetation, 1911, A., ii. 641.

Lewy, Martin. See Walter Herz.

Ley, Heinrich, internally complex metallic salts [copper glycine], 1905, A.,

mercury nitroform and the constitution of salt solutions, 1905, A., i,

colloidal copper oxide, 1905, A., ii,

internally complex salts, 1909, A., i,

Ley, Heinrich, and Kurt von Engelhardt, change of the colour fluorescence with the solvent, 1908, A., ii, 746.

ultra-violet fluorescence of cyclic compounds, 1908, A., ii, 911.

ultra-violet fluorescence and chemical constitution of cylic compounds, 1910, A., ii, 813.

the colour of iodine solutions, 1911,

A., ii, 951.

Ley, Heinrich, and Otto Erler, formation of salts and complex salts with organic acids containing the hydroxyl group, 1908, A., i, 177.

conductivity of the sodium salts of the isomeric hydroxybenzoic acids; the question of the mobilities of isomeric anions, 1908, A., ii, 21.

Ley, Heinrich, and K. Ficken, internally salts of platinum complex chromium, 1912, A., i, 243.

Ley, Heinrich, and Herbert Gorke, apparatus for the comparative observ-

ation of fluorescence, 1907, A., ii, 920. Ley, *Heinrich*, and *W.* Gräfe, evidence of the nature of chemical ring-compounds on the basis of ultra-violet fluorescence, 1910, A., ii, 563.

Ley, Heinrich, and Arthur Hantzsch. condition of pseudo-acids in aqueous

solution, 1906, A., i, 790.

Heinrich, and Christoph Heimbucher, concentration of mercury ions in the calomel electrode and solubility of calomel, 1904, A., ii, 465.

Ley, Heinrich, and Ernest Holzweissig, hydroxyamidines, 1903, A., i, 282.

Ley, Heinrich, and Peter Krafft, abnormal metallic salts of hydroxyamidines and allied compounds; theory of internally complex metallic salts, 1907, A., i, 301.

Lev. Heinrich, and Fritz Müller, two new classes of metallic salts of iminobases; theory of internally complex metallic salts, 1907, A., i, 730. Ley, Heinrich, Fritz Müller, and Peter

Krafft, striking fluorescence phenomena in picryl compounds, 1908, A.,

i. 570.

Ley, Heinrich, and Konrad Schaefer, dissociation of salts of heavy metals. I. Mercury-nitrogen salts, 1903, A., ii, 279.

silver derivatives of acid amides and imides. II., 1906, A., ii, 327.

Ley, Heinrich, and Max Ulrich, constitution of amino-acids, 1909, A., ii,

Ley, Heinrich, and Fritz Werner, salts of heavy metals with feeble acids and attempts to prepare colloidal metallic oxides, 1906, A., i, 561.

abnormally coloured complex metallic salts of acid imides, 1907, A., i,

Ley, Heinrich, and Georg Wiegner, metastable states in reactions between gaseous and solid substances, 1905, A., i, 749.

Ley, Heinrich, and Hans Winkler. stereoisomerism of internally complex salts, 1909, A., i, 886.

stereoisomerism of internally complex salts; stereoisomeric cobaltic salts of a-amino-acids, 1912, A., i, 243.

Ley, Herm., estimation of tartaric acid, 1904, A., ii, 374.

Leyden, P. See Gustav Heller.

Leyko, Lad., and Léon Marchlewski, hæmopyrrole, 1912, A., i, 56.

Leyko, Z., and Léon Marchlewski. hæmopyrrole. II., 1910, A., i, 144. Leyko, Z. See also Karl Dziewónski,

and Léon Marchlewski.

Leys, Alexandre, calculation of real sugar in chocolate, 1903, A., ii, 188.

reactions of certain ethylenic compounds with mercuric acetate in glacial acetic acid solution; mercury resorcinolmercuriacetate and phloroglucinoltrimercuriacetate, 1905, A., i, 433.

action of aldehydes on mercuric oxide in alkaline solution; distinction between acetaldehyde and formaldehyde, 1905, A., ii, 655.

action of mercuric acetate dissolved in acetic acid on unsaturated fatty

acids, 1907, A., i, 379.

interaction of olein and mercuric acetate in acetic acid, 1907, A., i, 582.

Leys, Alexandre, reactions of iodine and of sulphur with mercurialised fatty substances, 1907, A., i, 822.

detection of foreign fats in lard, 1907,

A., ii, 722.

beeswax and carnauba wax. Method of analysis; estimation of foreign hydrocarbons, 1912, A., ii, 816.

Leysaht, Hans. See Eugen Deiss.
Leyson, Lewis Thomas. See Gerald
Tattersall Moody.

Lezé, R., estimation of fat in skimmed

milk, 1908, A., ii, 75.

Lhoták von Lhota, Camill, changes in the muscles of warm-blooded animals by deprivation of oxygen, 1903, A., ii, 384.

action of digitalis on the vagus, 1908,

A., ii, 521.

L'Hôte, Louis, preparation of sulphurous acid for use as a reagent, 1904, A., ii, 653.

detection of cadmium in silver ornaments, 1904, A., ii, 682.

use of nickel vessels in laboratories, 1905, A., ii, 608.

Liberi, G. See Federico Giolitti.

Libkind, J. See Eduard Laubé. Lichtenbaum, J. See Josef Tambor.

Lichtenbelt, (Mile.). See Jacob Böeseken.

Lichtenfelt, H., chemical composition of fish, 1904, A., ii, 628.

Lichtenstadt, Leo. See Jakob Meisenheimer.

Lichtenstein, Ludwig Anton. See Jacobus Henricus van't Hoff.

Lichtenstern, Richard, condensation of synthetical isovaleraldehyde with formaldehyde, 1905, A., i, 509.

Liehtwitz, Leopold, colloids in urine.

II. Relationship between colloids and solubility of uric acid and urates, 1910, A., ii, 430.

the work of concentration of the kid-

neys, 1911, A., ii, 511.

colloids in the urine. III. Quantity and conditions of solubility of the urinary colloids in healthy and pathological kidneys, 1911, A., ii, 632.

the mechanism of the action of adren-

aline, 1911, A., ii, 754.

chemical equilibrium and end conditions in metabolism, 1912, A., ii, 574.

paralysis of enzymes, 1912, A., ii,

Lichtwitz, Leopold, and Otto Rosenbach, colloids in urine. I., 1909, A., ii, 750. Lichty, David Martin, solubility in water of chloride, bromide, and iodide of lead, 1903, A., ii, 480.

chemical kinetics of the decomposition of oxalic acid in concentrated sulphuric acid, 1907, A., ii, 445.

absolute sulphuric acid: its preparation from sulphur trioxide and water; its specific electrical conductivity and that of more dilute acid, 1909, A., ii, 38.

some physical constants of sulphur trioxide: melting and boiling points, density, coefficient of expansion, and molecular weights,

1912, A., ii, 1164.

Lichty, David Martin. See also Georg Bredig.

Lickfett, Herbert. See Otto Ruff. Liddle, Leonard Merritt. See C. E. Eldredge, Thomas Burr Osborne, and

Henry Lord Wheeler.
Lidforss, Bengt, chemotaxis of Equisetum

spermatozoids, 1906, A., ii, 44. Lidholm, Johan Hjalmar, analysis of

ferrosilicon, 1904, A., ii, 90. estimation of sulphur in calcium

carbide, 1904, A., ii, 442.

estimation of phosphorus in calcium carbide, 1904, A., ii, 776.

separation of silver from lead, 1905 A., ii, 204.

preparation of acetylene di- and tetrachlorides, 1908, A., i, 933.

preparation of acetylene di- and tetrachlorides from acetylene and chlor-

ine, 1909, A., i, 198.

Lidoff, Alexander Pawlowitsch, preparation of nitrous oxide, 1903, A., ii, 361.

advantage of hydrogen as unit of comparison in determining the specific gravity of gases, 1904, A., ii, 239.

new gravimetric method of determining the specific gravity of gases,

1904, A., ii, 239.

absorption of nitrogen and other gases, especially those containing nitrogen, by metallic manganese, 1904, A., ii, 250.

volumetric estimation of hydrogen in inorganic and organic substances,

1907, A., ii, 574, 650.

detection of phosphoric acid in stones, ores, and other minerals, 1908, A., ii, 894.

the existence of other gaseous compounds of carbon and nitrogen besides cyanogen, 1911, A., i, 429.

reduction of potassium cyanate with hydrogen, 1911, A., i, 617.

Lidoff, Alexander Pawlowitsch, formation of cyanates from nitrates, 1911, A., i. 618.

oxidation of sodium cyanamide and cyanates with hydrogen peroxide and alkaline bromine solution, 1911, A., i, 618.

oxidation of potassium cvanate by means of hydrogen peroxide, 1912,

A., i, 541.

formation of oxycyanates on heating potassium cyanate with copper oxide or on combustion of potassium cyanate in oxygen, 1912, A., i, 541.

Lidoff, Alexander Pawlowitsch, and M. I. Kusnetzoff, behaviour of gaseous hydrocarbons towards magnesium at a red heat, 1906, A., ii, 201.

Lieb, Hans. See Robert Kremann, and

Richard Weitzenböck.

Lieben, Adolf, action of dilute acids on pinacones, 1905, A., i, 167. congratulatory telegram to, 1906, P.,

Lieben, Adolf. See also Margarete Furcht. Liebenberg, Adolf (Ritter) von, manurial experiments with calcium cyanamide on winter cereals and sugar beet, 1909, A., ii, 698.

Liebenoff, Carl, dissociation of electrolytes, 1903, A., ii, 128; 1905, A., ii,

499.

Lieber, G. Diethelm, indolinones, 1908, A., i, 681.

the sugar in the nodules of Nephrolepsis hirsutula, 1911, A., ii, 921. Liebermann, Carl [Theodor], Michael's

isocinnamic acid, 1903, A., i, 485. dyes derived from protocatechuic aldehyde, 1903, A., i, 860.

xanthophanic and glaucophanic acids,

1906, A., i, 556.

1:4-anthraquinone, 1906, A., î, 594.

a base obtained in the working up of the alkaloids occurring with cocaine, 1907, A., i, 955.

theory of mordant dyes, 1908, A., i, 441.

allo- and iso-cinnamic acids, 1909, A., i, 303.

nomenclature of the lignones, 1909, A., i, 495.

distyrene, 1910, A., i, 469.

dye in the root of azafran, 1911, A., i,

synthesis of orthoquinones, 1911, A., i, 656.

Liebermann, Carl, D. Butescu, Kardos, Profulla Mitter, and W. Rahts, action of oxalyl chloride on aromatic hydrocarbons, 1912, A., i, 464.

Liebermann, Carl, and Negoitza Danaila. oxidation of phenolisatin, 1907, A., i, 976.

Liebermann, Carl, and Alfred Glawe, degradation of dihydroxytetramethylrosaminesulphonic acid, 1904, A., i, 268.

condensation of cotarnine and of hydrastinine with ketones, 1904.

A., i, 765.

Liebermann, Carl, Alfred Glawe, and Simon Lindenbaum, alkyloxvanthranoles, 1904, A., i, 901.

Liebermann, Carl, and G. Häse, the pyrrole-blue group, 1905, A., i, 841.

Liebermann, Carl, and Birger Fjeld Halvorsen, isocinnamic acid, 1903. A., i, 255.

Liebermann, Carl, and E. Herrmuth, derivatives of 3:4:5:3':4':5'-hexahydroxydiphenyl, 1912, A., i, 447.

Liebermann, Carl, and Rudolph Krauss, indigotin-like groups of blue colouring matters from isatin, 1907, A., i, 657. Liebermann, Carl, and Fritz Kropf,

condensations of cotarnine and hydrastinine with ketones, 1904, A., i, 263.

Liebermann, Carl, and Hans Liebermann, alkylated carminic acids, 1909,

A., i, 486.

Liebermann, Carl, and Simon Lindenbaum, condensation of hydroxyquinol with aldehydes, 1904, A., i. 764.

mesophenyl derivatives of anthracene. 1905, A., i, 522.

mesophenylated derivatives of anthracene; a correction, 1906, A., i,

xanthophanic acid, 1907, A., i, 889;

1908, A., i, 548. synthesis of xanthophanic acid: 7hydroxychromone-6-carboxylic acid. V., 1909, A., i, 403.

Liebermann, Carl, Simon Lindenbaum, and Alfred Glawe, condensation of hydroxyquinol with aldehydes, 1904, A., i, 443.

Liebermann, Carl, and Leonhard Mamlock, action of bromine on the anthranols, 1905, A., i, 521.

iodo-hydriodo-compounds of nonnitrogenous derivatives of anthraquinone, 1905, A., i, 531.

Liebermann, Carl, and Bernhard Pleus, anthraquinone-1-sulphonic acid, 1904,

A., i. 326.

Liebermann, Carl, Bernhard Pleus, and Ferdinand Manthner, the thiophen reaction with nitrous-sulphuric acid, 1904, A., i, 684.

Liebermann, Carl, and Kálmán Roka, an old derivative of benzanthrone, 1908, A., i, 427.

Liebermann, Carl, and Hans Truchsäss, glaucophanic acid. III., 1907, A., i, 890.

glaucophanic and xanthophanic acids. VI., 1909, A., i, 405.

allo- and iso-cinnamic acids, 1910, A., i. 36.

transformations of allo-cinnamic and iso-cinnamic acids, 1910, A., i, 175.

Liebermann, Carl, and Hugo Voswinckel, condensation of cochenillic acid with succinic acid, 1904, A., i, 903.

Liebermann, Carl, and Theodor Zerner, phloroglucinolphthalein, 1903, A., i,

Liebermann, Carl, and Milan Zsuffa, anthranolsulphonic acids, 1910, A., i. 376.

introduction of the carboxylic group into polynuclear aromatic hydrocarbons, 1911, A., i, 202.

ethyl polycinnamate, 1911, A., i, 370. derivatives of aceanthrenequinone,

1911, A., i, 387. Liebermann, Hans, the group of acids containing nitrogen and sulphur present in normal human urine, 1907, A., ii, 709.

application of the carbamino-reaction.

V., 1909, A., ii, 103.

Liebermann, Hans. See also Ludwig Gattermann, Carl Liebermann, and Max Siegfried.

Liebermann [von Szentlörincz], Leo, ferment action, 1904, A., ii, 474. estimation of fat, 1905, A., ii, 774.

are toxins ferments? 1906, A., ii, 42. hem-agglutination and hemolysis, 1908, A., ii, 865.

hæmolysis, 1908, A., ii, 959.

detection of proteins by means of formaldehyde, 1908, A., ii, 998.

apparatus for determination of viscosities, especially of serum and other animal fluid, 1911, A., ii, 585.

improvements in Kjeldahl's nitrogen apparatus, 1911, A., ii, 655.

apparatus for the estimation of the melting points of fats, 1911, A., ii, 1039.

Liebermann, Leo, and Paul von Liebermann, is the presence of a catalase necessary for the guaiacum reaction? 1905, A., i, 956.

Liebermann, Leo, Paul von Liebermann. and Béla von Fenyvessy, hæmagglutination and hæmolysis, 1907, A., ii, 973.

Liebermann, Leo, and Franz Wiesner, the oxygen-transport capacity of blood warmed to different temperatures, 1911, A., ii; 993.

Liebermann, Max. See Otto Diels.

Liebermann, Paul von, method for the estimation of phosphoric acid in urine and in alkali phosphate solutions, 1909, A., ii, 617.

Liebermann, Paul von, See also Leo

Liebermann.

Liebermeister, Gustav, the nucleo-protein of blood-serum, 1906, A., ii, 776.

Liebert, F., decomposition of uric acid by bacteria, 1909, A., ii, 691.

a simple laboratory suction-pressure pump, 1911, A., ii, 480.

Liebig, Hans [Freiherr] von, condensation of benzil with resorcinol, 1903, A., i, 828.

esterification of organic acids, 1904,

A., i, 1014.

condensation of benzil with resorcinol. I. Non-fluorescent substances, 1905, A., i, 781.

duplobenzylidenethioacetone and the oxonium theory, 1907, A., i, 940.

2:4(3:5)-dihydroxytritanolactone and m-hydroxytritanolactone, 1907, A., i. 1045.

preparation of benzilic acid, 1908, A., i. 540.

tritanearboxylic acids, 1908, A., i, 540.

combination of benzilic acid with amines, 1908, A., i, 646.

new synthesis of derivatives of anthracene, 1908, A., i, 727. resorcinolbenzein, 1909, A., i, 98.

resorcinolbenzein and fluorescein, 1912, A., i. 376.

Armstrong's benzene formula, 1912, A., i, 686.

chemical action of methyl and ethyl alcohols, 1912, A., i, 824.

Liebig, Hans [Freiherr] von, and Hugo Hurt, condensation of benzil with resorcinol, 1903, A., i, 829.

condensation of benzil with resorcinol. II. Derivatives of m-tetra-2:6-di-hydroxytritanol, 1907, A., i, 45.

Liebig, Hans [Freiherr] von, and Paul Keim, m-hydroxytritanolactone, 1907, A., i, 930.

Liebig, Hans [Freiherr] von, Paul Keim, and Otto Herb, tritan series, 1908, A., i. 445.

Liebig, Heinrich von. See Daniel Vorländer.

Liebig, H. J. von. See Carl Joseph Lintner.

Liebig, Justus (Freiherr) von, centenary of, and presentation of bust of, by Dr.

Messel, 1903, P., 141.

Liebisch, Theodor, the re-formation of the crystalline from the amorphous condition on heating pyrognomic crystals, 1910, A., ii, 489.

silver antimonides, 1910, A., ii, 502. zonal structure and electrical properties of cassiterite, 1911, A., ii, 498.

fluorescence [of the minerals] of the sodalite and willemite group in ultraviolet light, 1912, A., ii, 406.

Liebknecht, Otto, and Erling Nilsen. new method for the determination of freezing points of fused electrolytes,

1904, A., ii, 11.

Liebl, Franz. See Frédéric Reverdin. Liebmann, Alfred. See Richard Lorenz. Liebmann, S. See Wilhem Steinkopf. Liebowitz, S., the hydrolytic action of

glycine on ethyl butyrate, 1912, A., i, 746.

Liebrecht. Arthur, preparation of p-iodoxyp-iodoxyanisole and phenetole, 1906, A., i, 257.

the separation of 6-chloro-m-cresol by the chlorination of pure m-cresol, or of the technical mixture of m- and p-cresols, 1911, A., i, 629.

Liebrecht, Arthur, and Georg Rosenfeld, preparation of a-glucoheptonic acid,

1912, A., i, 537.

Liebreich, Erik, the variation of the refractive index with the temperature in the ultra-red region for rock-salt, sylvine, and fluorite, 1911, A., ii, 165.

Liebreich, Erik, and Fritz Spitzer, influence of painting on the rusting of

iron, 1912, A., ii, 259.

Liebreich, Oskar, preparation of acyl derivatives of aromatic bases and of anhydrous glycerol, 1903, A., i, 473.

Liebschütz, J., and Franz Wenzel, 8-hydroxy-5:7-dimethylfluorone, 1904, A., i, 518.

Liebschutz, Morton, collection of colloidal precipitates, 1910, A., ii, 1113.

Liechtenhan, Carl. See Hans Rupe. Liechti, Paul, and W. Mooser, estima-

tion of phenols in the urine of oxen,

1911, A., ii, 942.

Liechti, Paul, and Ernst Ritter, applicability of Schlesing's method to the estimation of the nitrogen in nitrates in presence of organic substances, 1903, A., ii, 574.

estimation of very small amounts of ammonia in large quantities of air,

1910, A., ii, 70.

Lieck, Albert, action of hydrazine on m-tolylisocoumarin, 1906, A., i, 49. phthalazines, 1906, A., i, 50.

Lieck, Albert. See also Siegmund Gabriel. Liefmann, Emil, and R. Stern, glycæmia

and glycosuria, 1907, A., ii, 116. Liefmann, Emil. See also Gustav Embden. Liefmann, Harry, and Michael Cohn. hæmolysis by lipoids, 1910, A., ii, 726.

Liénard, E., the composition of the reserve carbohydrates of the albumen of some palms, 1903, A., ii, 36.

Lienau, Detlev, and Albert Stutzer, influence of the ash constituents of the lower portions of oat stems on the falling of the stems, 1907, A., ii, 47.

Lienau, Hermann, occurrence of a manganese silicate containing carbonate in the Aure Valley in the Pyrenees, 1903, A., ii, 223.

Lier. Eduard Henri Benjamin van, the interfibrillar substance of the dermis. 1909, A., ii, 748.

Lier, G. Ad. van. See Hartog Jakob Hamburger.

Liesche, Otto. See Ernst Beckmann, and Georg Lockemann. Liesching, Theodor, the influence of sul-

phur on the system iron-carbon, 1910, A., ii, 1070.

Liese, Kurt. See Roland Scholl.

Liesegang, Raphael Ed., an apparent case of chemical action at a distance, 1906, A., ii, 218.

stratified structures, 1906, A., ii, 273. gelatin forms produced by precipitates of salts and crystals, 1907, A., i, 993. formation of crystals under peculiar

conditions, 1907, A., ii, 337. stratifications observed in cases of

diffusion, 1907, A., ii, 533.

gelatose as colloid producer, 1908, A., ii, 476.

colloidal symbiosis, 1909, A., ii, 283. apparent colloidal diffusion; porosity of collodion membranes, 1909, A., ii, 304.

a colour reaction for gelatin, 1910,

A., ii, 84. apparent chemical attractions, 1910, A., ii, 703.

moulding of gels by crystals, 1910, A., ii, 835.

methods of diffusion experiments, 1910, A., ii, 936.

peptisation of silver bromide, 1910. A., ii, 953.

dead spaces, 1910, A., ii, 1052.

detection of phosphates [in tissues] with the molybdate reagent, 1910, A., ii, 1085.

Liesegang, Raphael Ed., incineration of microtome sections, 1910, A., ii, 1085.

theory of certain supersaturation apparently rhythmical reactions, 1911, A., ii, 27.

the colours of colloidal sulphur, 1911, A., ii, 37.

"ripening" of silver haloid emulsions, 1911, A., ii, 39.

reactions in gelatinous media, 1911, A., ii, 306.

colloidal chemistry of histological silver staining, 1911, A., ii, 971.

behaviour of edges and corners in certain diffusion experiments, 1912, A., ii, 141.

the form of certain silicate precipitates, 1912, A., ii, 166.

diffusion phenomena, 1912, A., ii, 541.

deformation of jellies by freezing, 1912, A., ii, 542.

growth of silica acid gels, 1912, A., ii, 756.

Lieske, Rudolf, the physiology of denitrifying sulphur bacteria, 1912, A., ii, 1200.

Liesse, Ch., estimation of minimum quantities of calcium in presence of a large excess of magnesium, 1911, A., ii, 154.

Life, Andrew Creamore. See James Francis Abbott.

Liffa, Aurél, iron-pyrites from Hungary,

1911, A., ii, 46. Lifschitz, Israel, old and new benzene

formulæ, 1911, A., i, 622, 774. Israel. See also Lifschitz, Arthur Hantzsch.

Lifschütz, Isaac, oxidation of cholesterol, oxycholesterol, chollanic acid, 1907, A., i, 315.

oxidation products of cholesterol in the animal organism, 1907, A., ii,

889; 1909, A., ii, 77, 1038. origin and formation of cholesterol, 1908, A., i, 263.

spectroscopic reaction for oleic acid, 1908, A., i, 754.

colour reaction of cholesterol oxidation, 1908, A., ii, 233.

Ligot, O. See M. de Molinari.

Lilienblüm, Abraham. See Pavel Iw. Petrenko-Kritschenko.

Lilienfeld, Julius E., method for determining the temperature and conductivity for heat of the positive column, 1906, A., ii, 653.

Wehnelt cathode in high vacuum,

1908, A., ii, 248.

Lilienfeld, Julius E. See also Emil Warburg.

Lilienfeld, Léon, preparation of indoxyl and its homologues, 1906, A., i, 695; 1908, A., i, 371, 797.

Lilienfeld, Maurice, [electrolytic] preparation of nitro- and amino-compounds, 1904, A., i, 295.

chemotropism of the root, 1905, A., ii, 474.

Lilienthal, manurial value of molasses as compared with ammonium sulphate and 40 per cent. potassium salts, 1905, A., ii, 650.

Liljestrand, G., the action of certain salts on frog's motor nerves, 1910, A., ii, 54.

Lillie, Ralph Stayner, relation of ions to ciliary movement, 1904, A., ii, 273. physiology of cell division. I., 1906, A., ii, 104.

coagulation of the swimming plate and contractility, 1906, A., ii, 185.

antitoxic action of anions, 1906, A., ii, 188.

contractility and coagulation of the colloids of the Ctenophore swimming plate, 1906, A., ii, 466.

relation of ions to contractile processes. I. Action of salt solutions on ciliated epithelium, 1906, A., ii, 869.

artificial parthenogenesis by momentary elevation of temperature, 1907, A., ii, 183.

osmotic pressure of colloids and the action of electrolytes on the osmotic pressure of protein solutions, 1907, A., ii, 607.

influence of electrolytes and of other conditions on the osmotic pressure of colloids, 1907, A., ii, 847.

the rôle of calcium salts in the mechanical inhibition of the Ctenophore swimming plate, 1908, A., ii,

connexion between changes of permeability and stimulation, 1909, A., ii, 419.

relation of ions to contractile processes. IV., 1909, A., ii, 749.

the physiology of cell division. The action of isotonic salt solutions of unfertilised eggs of Asterias and Arbacia, 1910, A., ii, 522.

physiology of cell division. Action of calcium salts in preventing the initiation of cell-division in unfertilised eggs through isotonic solutions of sodium salts, 1911, A., ii, 128.

Lillie, Ralph Stayner, the relation of stimulation and conduction in irritable tissues to changes in the permeability of the limiting membranes, 1911, A., ii, 750.

antagonism between salts and anæsthetics. I. The conditions of the anti-stimulating action of anæsthetics and of their protective or antitoxic action, 1912, A., ii, 280.

antagonism between salts and anæs-II. Decrease by anæsthetics. thetics in the rate of toxic action of pure isotonic salt solutions on unfertilised star-fish and sea-urchin eggs, 1912, A., ii, 468.

Lillig, Richard. See Franz Kunckell. Limbosch, H., critical solution phenomena and saturation curves of the system: water, pyridine, and sodium carbonate, 1909, A., ii, 472.

Limmer, Fritz, crystalline platinum, 1907, A., ii, 882.

estimation of commercial silicon; separation of silica and silicon, 1908, A., ii, 131.

Limmer, Fritz. See also Otto Fischer. Limpach, Otto. See Max Busch. Limprich, R. See Alois Bömer.

Linari, Adolfo, synthesis of a benzoylm-xylenol, 1904, A., i, 64.

Linari, Adolfo. See also Pietro Barto-

Linari, Arrigo. See Guido Cusmano. Linarix, A., periodides of organic bases,

1909, A., i, 769.

Linch, Frank William, the action of sodium hypobromite on carbamide derivatives. Part I., 1912, T., 1755; P., 144.

3-aminocoumarin, 1912, T., 1758; P., 230.

Lincio, Gabrielle, the supposed presence of germanium in euxenite, samarskite, etc., 1904, A., ii, 348.

a ferriferous dolomite from the Simplon tunnel, 1911, A., ii, 1101.

Linck, Gottlob Eduard, heteromorphic (allotropic) modifications of the [elements of the] phosphorusarsenic group, 1908, A., ii, 176.

the phosphorus-arsenic group, 1908, A., ii, 373.

origin of dolomite, 1911, A., ii, 294. Linck, Gottlob Eduard, and P. Möller, red phosphorus, 1908, A., ii, 487.

Linck, S. See Julius Bredt. Lincke, Paul. See Eduard Jordis.

Lincoln, Azariah Thomas, the ternary system: benzene, acetic acid, and water, 1904, A., ii, 473.

Lincoln, Azariah Thomas, new burette holder, 1906, A., ii, 47. Lincoln, Azariah Thomas, and Perry

Barker, estimation of phosphates in natural waters, 1904, A., ii, 680.

Lincoln. Azariah Thomas, and G. C. Bartells, jun., electrolytic corrosion of brasses in synthetic sea-water, 1908. A., ii, 1039.

Lincoln, Azariah Thomas, and David Klein, vapour pressures of aqueous nitrate solutions, 1907, A., ii, 435.

Lincoln, Azariah Thomas, David Klein, and Paul Edward Howe, electrolytic corrosion of brasses, 1907, A., ii, 953.

Lind, Samuel Colville, constitution of ruthenium potassium nitrosochloride in aqueous solution, 1904, A., ii, 45.

some chemical effects of the rays of radium, 1911, A., ii, 841,

ozonisation of oxygen by a-rays, 1912, A., ii, 513.

nature of the chemical action produced by a-particles and the probable rôle played by ions, 1912, A., ii, 1027.

Lind, Samuel Colville, and F. W. Bliss, velocity of hydrolysis of an inorganic salt, potassium ruthenium chloride, 1909, A., ii, 743.

Lind, Samuel Colville, and B. C. Trueblood, alkalimetric method for the estimation of tungsten in steel, 1907, A., ii, 583.

Lind, Samuel Colville. See also Max Bodenstein.

Lindauer, Gustav. See Moritz Kohn. Lindberg, E. See Hans von Euler.

Lindberg, Sven. See Eugen Bamberger. Linde, Otto, lignification, 1906, A., ii,

Linde, Richard von der. See Karl Schaum.

Lindemann, Charles L., dependence of the coefficient of expansion on the temperature, 1912, A., ii, 127.

Lindemann, Charles L., and F. A. Lindemann, the dependence of the penetrating power of Röntgen rays on the pressure and nature of the contained gas, 1912, A., ii, 223.

Lindemann, Charles L. See also F. A.

Lindemann

Lindemann, F. A., specific heats at low temperatures. IV., 1911, A., ii,

calculations of the frequencies of the electrons giving rise to the selective photo-electric effect, 1911, A., ii, 788.

Lindemann, F. A., the forces acting between the atoms of solid substances,

1912, A., ii, 1142.

Lindemann, F. A., and Charles L. Lindemann, tensile strength of materials at low temperatures, 1912, A., ii, 1143.

Lindemann, F. A. See also Charles L. Lindemann, Alfred Magnus, and Walther Nernst.

Lindsmann, Ludwig, Bence-Jones protein, 1905, A., ii, 186.

detection of acetoacetic acid in urine,

1906, A., ii, 813. Lindemann, Walther, autolysis, 1910, A., ii, 1086.

Linden, Charles Florent van der. See Theodor Curtius.

Linden, Maria (Gräfin) von, the pigments of the Lepidoptera. I., 1903, A., ii, 677.

assimilation of carbon dioxide by chrysalides of Lepidoptera, 1906, A., ii, 95.

influence of the amount of carbon dioxide in the respired air on the changes in weight of butterfly pupe, 1908, A., ii, 605.

pupe, 1908, A., ii, 605.

Linden, T. van der, application of the phase rule to stereoisomeric compounds and the recognition of racemic compounds, 1911, A., ii, 477.

benzene hexachlorides and their decomposition into trichlorobenzenes, 1912, A., i, 174.

the addition of chlorine to dichlorobenzenes, 1912, A., i, 248.

Linden, T. van der. See also Arnold Frederik Holleman.

Lindenbaum, Ernst. See Alexander Naumann.

Lindenbaum, Simon. See Carl Liebermann.

Lindenberg, G. See Alfred Werner. Lindenberg, Willy. See Conrad Willgerodt.

Lindener, B. A., luminescence and crystalline form of potassium sodium sulphate, 1909, A., ii, 950.

triboluminescence of minerals, 1910, A., ii, 1019.

Lindener, B. A. See also Wladimir J. Vernadsky.

Lindenhayn, Hans. See Ludwig Wolff. Linder, Ernest, metanil yellow: its use as a selective indicator, 1908, A., ii, 627.

Linder, Ernest, and Harold Picton, solution and pseudo-solution. Part IV., 1905, T., 1906; P., 240.

Linder, Ernest. See also Russell Forbes Carpenter.

Lindesk, Stephan, a relationship between the temperature-coefficient and the specific resistance of certain metals, with special reference to copper, 1911, A., ii, 176.

Lindet, Léon [Gaston Aimé], the carbohydrates of barley and their transformations during the course of germination, 1903, A., ii, 606; 1904, A., ii, 284.

the inversion of sugar, 1904, A., i,

293.

some ancient breads, 1904, A., ii, 75. stimulating and paralysing influences of certain substances in the production of rust, 1905, A., ii, 36.

elective power of vegetable cells for dextrose and lævulose, 1911, A., ii,

422.

estimation of sugar and of calcium in the residues from sugar purification, 1911, A., ii, 664.

condition which phosphorus and calcium affect in milk casein, 1912,

A., i, 1041.

the antiseptic rôle of sea-salt and of sugar, 1912, A., ii, 1200.

Lindet, Léon, and Louis Ammann, progressive ripening of cheeses, 1904, A., ii, 636.

influence of bran on the estimation of gluten and on the suitability of flour for bread-making, 1905, A., ii, 780.

the soluble proteins of milk, 1906, A., ii, 562.

rotatory power of proteins extracted from cereal flours by aqueous alcohol, 1907, A., i, 1095.

Lindet, Léon, and Brasart, use of phenol in the estimation of alkali earths,

1910, A., ii, 548.

Lindet, Léon, and P. Marsais, comparative production of alcohol and carbon dioxide during fermentation, 1905, A., ii, 109.

Lindgren, Justa M. See Edward Bar-

tow.

Lindgren, Waldemar, and William Francis Hillebrand, minerals from Arizona, 1905, A., ii, 96.

Lindhard, J., excitability of the respiratory centre, 1911, A., ii, 617.

Lindhard, J. See also Karl Albert Hasselbalch.

 Lindner, Adriaan, and Robert Behrend, preparation of ethyl chloroaminocrotonate, 1904, A., i, 378.
 Lindner, Bernhard. See Julius Tröger. Lindner. Fritz. See Alexander Gutbier. Lindner, Josef, velocity of the decom-position of malonic acid into carbon dioxide and acetic acid, 1907, A., i, 892.

the pinacolin transformation. I., 1911, A., i, 522.

electrolytic dissociation of sulphurous

acid, 1912, A., ii, 825.

Lindner, Paul, detection of beer yeast in press yeast by means of biological analysis and the introduction of a definite type of yeast in the manufacture of press yeast, 1904, A., ii,

fermentation experiments with different varieties of yeast on different sugars, 1912, A., ii, 475.

the assimilability of different carbohydrates by varieties of yeast, etc.,

1912, A., ii, 476.

Lindner, Paul, and Stefan Cziser, alcohol, a more or less excellent food for different fungi, 1912, A., ii, 589.

Lindner, Paul, and K. Saito, assimilability of different carbohydrates by different yeasts, 1911, A., ii, 758.

Lindsay, Charles Fowler. See Harry Clary Jones.

Lindsay, Dorothy Elizabeth, estimation of urea, allantoin, and amino-acids in urine, 1910, A., ii, 83.

the effect of chloroform on the intermediate protein metabolism of the

dog, 1911, A., ii, 303.

protein metabolism of the fœtus; the distribution of nitrogen in the maternal urine and in the fœtal fluids throughout pregnancy, 1911, A., ii, 1115.

Lindsay, Dorothy Elizabeth. See also Diarmid Noël Paton.

Lindström, Gustaf, llanthanite, 1910, A., ii, 965.

Ling, Arthur Robert, starch conversion in the mash tun, 1904, A., i,

Ling, Arthur Robert, Lewis Eynon, and Joseph Henry Lane, the solution densities of dextrose, lævulose, and maltose, 1911, A., i, 354.

Ling, Arthur Robert, and George Cecil Jones, volumetric estimation of reducing sugars. II. The limits of accuracy of the method under standard conditions, 1908, A., ii, 541.

Arthur Robert, and Theodore Rendle, ready-formed sugars of malt, 1904, A., ii, 507.

volumetric estimation of reducing sugars, 1905, A., ii, 487.

Ling, Arthur Robert, and Theodore Rendle, removal of arsenic from hydrochloric acid for use in the Marsh-Berzelius method, 1906, A., ii, 250.

volumetric estimation of reducing sugar. III. Estimation of sucrose and invert sugar in mixtures, 1908, A., ii, 542.

Ling, Arthur Robert. See also Bernhard Francis Davis.

Lingenbrink. H. See Fritz Ach.

Lingle, David Judson, the importance of sodium chloride in heart activity, 1903, A., ii, 30.

restorers of the cardiac rhythm, 1905,

A., ii, 835.

Lingner, K. A., preparation of dimenthyl dimethylene ether, 1908,

Linhart, George Augustus, hydrolysis of metallic alkyl sulphates, 1912, A., ii,

927.

Linhart, George Augustus. See also William Allen Drushel.

Linke, G. Linus. See August Michaelis. Linke, H., the permanence and sus-ceptibility of the ferric chloridesalicylic acid reaction; approximate estimation by this means of free salicylic acid in aspirin and other acetylated salicylic acids, 1912, A., ii, 501.

Linn, Alvin Frank, separation of lead from maganese by electrolysis, 1903,

A., ii, 242.

Linn, Karl. See Otto Diels.

Linne, Bruno. See Balthasar Pfyl. Linnert, Kurt, does caviare contain purine bases? 1909, A., ii, 684.

Linnert, Kurt. See also Sigmund Frankel.

Linsbauer, Karl. See Viktor Grafe.

Lintner, Carl Joseph, polarimetric estimation of starch in cereals, 1907, A., ii, 823.

polarimetric estimation of starch, 1908, A., ii, 1077.

Lintner, Carl Joseph, and H. J. von Liebig, the reduction of furfuraldehyde by yeasts during alcoholic fermentation, 1911, A., ii, 816.

Lion, Gaston. See George François

Jaubert.

Lipinski, A. V., formation of hydrogen cyanide in the electric high tension arc, 1911, A., ii, 849; 1912, A., ii, 896.

Lipman, Charles Bernard, fixation of nitrogen by yeasts and other fungi, 1911, A., ii, 1019. Lipman, Charles Bernard, toxic effects of "alkali salts" in soils on soil bacteria. I. Ammonification, 1912, A., ii, 76.

toxic effects of "alkali salts" in soils on soil bacteria. II. Nitrification,

1912, A., ii, 473.

Lipman, Charles Bernard, and Leslie T. Sharp, hygroscopic moisture of

soils, 1912, A., ii, 84. toxic effects of "alkali salts" in soils on soil bacteria. III. Nitrogen fixation, 1912, A., ii, 1200.

Lipman, Jacob Goodale, bacteriological methods for estimating the available nitrogen in fertilisers, 1912, A., ii, 89.

Lipman, Jacob Goodale, and Percy E. Brown, losses of ammonia from culture solutions, 1907, A., ii, 982. inoculation experiments with Azotobacter, 1908, A., ii, 615.

experiments on ammonia and nitrate formation in soils, 1910, A., ii,

Lipman, Jacob Goodale, Percy E. Brown, and Irving L. Owen, ammonia and nitrate formation in soils, 1911, A., ii, 649.

availability of nitrogenous materials as measured by ammonification, 1911, A., ii, 924.

Lipman, Jacob Goodale. See also Edward Burnett Voorhees.

Lipp, Andreas, and Eugen Kuhn, ghedda or East Indian wax, 1912, A., ii, 675.

Lipp, Andreas, and J. Richard, action of formaldehyde on a-picoline (2methylpyridine), 1904, A., i, 342.

Lipp, Andreas, and Emil Scheller, hexan-e-one-\$-ol, 1909, A., i, 451. synthesis of ethyl p-orsellate, 1909, A., i, 485.

Lipp, Andreas, and Eduard Widnmann, action of formaldehyde on 1:2-dimethyl- \Delta^2-tetrahydropyridine,

1905, A., i, 610.

action of formaldehyde on 1:2-dimethyl-Δ2-tetrahydropyridine. II. 3-Acetyl-1-methylpiperidine methyl-3-piperyl methyl ketone), 1905, A., i, 662,

Lipp, Andreas, and E. Zirngibl, action of formaldehyde on a-picoline (2methylpyridine), 1906, A., i, 381.

Lipp, Peter, isocamphane, 1911, A., i, 731.

Lippert, Walter, influence of atmospheric moisture on the oxygen absorption of oils. III., 1905, A., i, 258.

Lippich, Fritz, isobutylhydantoje acid and detection of small quantities of leucine, 1906, A., i, 813.

urea in human urine, 1906, A., ii, 564.

the true mean percentage of urea in normal human urine, 1907, A., ii, 638.

carbamido-acids. II. and III., 1908,

A., i, 861.

the formation of uramido-acids in the organism. I., 1910, A., ii, 977. precipitation of protein by zinc sul-

phate, 1911, A., i, 934.

Lippmann, Alexander, electrical double refraction (Kerr effect) in liquids and its relation to chemical composition and constitution, 1911, A., ii, 184.

Lippmann, Eduard, oxidation of unsaturated compounds by means of organic peroxides, 1910, A., i, 149. condensation of chloroacetone with

phenols, 1912, A., i, 851. Lippmann, Eduard, and Rodolfo Fritsch,

the anthracene series; dibenzylanthracene and its derivatives, 1904, A., i, 865.

condensation of aldehydes with ketones, 1905, A., i, 443. anthracene series, 1907, A., i, 309.

Lippmann, Edmund Oskar von, nomenclature of enzymes, 1903, A., i, 304. the occurrence of vanillin, 1905, A., i,

66; 1907, A., ii, 45.

carbostyril as a by-product in a molasses furnace, 1906, A., i, 38. occurrence of quercitol, 1908, A., ii,

acetonedicarboxylic acid from calcium sucrate, 1909, A., i, 11.

discovery of the optical activity of

tannin, 1910, A., i, 55. the history of "potash" and of its name, 1911, A., ii, 38.

occurrence of d-galactose, 1911, A., ii,

the history of the name "gas," 1911, A., ii, 199.

occurrence of chitin, 1912, A., i, 125. the history of alcohol and its name, 1912, A., i, 824.

the history of distillation and of alcohol, 1912, A., ii, 897.

Lippmann, Edmund Oskar von, and Ernst Erdmann, the "de-salting of sea-water" according to Aristotle, 1911, A., ii, 723.

Lippmann, Gabriel, endosmosis between two liquids of the same chemical composition, but at different temperature, 1907, A., ii, 668.

Lippmann, Gabriel, thermo-endosmosis of gases, 1907, A., ii, 668.

Lippmann, Heinrich. See Leo Bor-

chardt.

Lips. Carl Hermann. See Alfred Wohl. Lipschitz, Alfred, and Rudolf von Hasslinger, action of dilute acids on ferrous sulphide, 1905, A., ii, 253.

Lipschitz. Alfred. See also Guido

Goldschmiedt.

Lipschütz, Alexander, the phosphoruscontent of growing dogs, 1910, A., ii. 224.

the phosphorus in fæces, 1910, A., ii, 227.

biological importance of caseinogen phosphorus for the growing organism, 1912, A., ii, 63.

physiology of phosphorus hunger in

growth, 1912, A., ii, 63.

Lipski, Jakob, synthesis of ammonia from its elements, 1909, A., ii, 478.

Lipski, Johannes. See Theodor Posner. Lipstein, Alfred, excretion of aminoacids in gout and leucæmia, 1906, A.,

ii, 109.

Lischke, Wilhelm. See Paul Jacobson. Lissizin, Th., the occurrence of azelaic acid among the oxidation products of keratin, 1909, A., i, 859.

Lissner, A., ultimate analysis of coals containing [hydrated] clays, 1910, A.,

ii, 156.

Lister, Joseph, and Robert Robinson, some derivatives of oxazole, 1912, T., 1297; P., 162.

· Lister, Joseph. See also Arthur

Hantzsch.

Litter, Hans, See Richard Möhlau, and Reinhold von Walther.

Litterer, Gustave, oil derived from leaves and stems of the sweet orange (Citrus aurantium), 1905, A., i, 802.

oil derived from the leaves and stems of the lemon tree (Citrus limonum),

1905, A., i, 802.

Litterscheid, Franz Maria, method of estimating mercury gravimetrically and volumetrically, 1903, A., ii, 615.

some compounds of cuproso-cupric cyanide with pyridine, methylamine, dimethylamine, and trimethyl-

amine, 1904, A., i, 301. preparation of the lower halogen-methyl alkyl ethers, 1904, A., i,

dichlormethyl ether, 1904, A., i, 364. chlorination of chloromethyl ethyl ether, 1904, A., i, 364.

Litterscheid, Franz Maria, action of methylamine and of dimethylamine on furfuraldehyde, 1905, A., i, 76.

volumetric estimation of copper by means of potassium iodide, 1909,

A., ii, 348.

the use of arsenious acid in volumetric analysis. II. The estimation of mercury, 1912, A., ii, 808.

Litterscheid, Franz Maria, and J. Bornemann, application of arsenious acid in volumetric analysis. I., 1910, A., ii, 80.

Litterscheid, Franz Maria, and Thimme, action of hydrogen chloride on aqueous formaldehyde and trioxymethylene, 1904, A., i, 962.

reactions of chloromethyl alkyl ethers,

1904, A., i, 963. Litterscheid, Franz Maria. See also

Ernst Schmidt.

Little, Harry Frank Victor, and Edward Cahen, separation of bismuth from lead and the analysis of bismuth-lead alloys, 1910, A., ii, 755.

Little, Harry Frank Victor, Edward Cahen, and Gilbert Thomas Morgan, the estimation of arsenic in organic compounds, 1909, T., 1477; P., 212.

Little, Harry Frank Victor. See also Edward Cahen.

Little, Otway Henry. See (Sir) Walter

Noel Hartley. Little, William Gordon, the relative importance of inorganic cations, especially those of sodium and calcium in the causation of gout and the production of gouty deposits, 1909, A., ii,

Little, William Gordon, and Charles E. Harris, metabolism in a healthy vegetarian, 1907, A., ii, 486.

Littlebury, William Oswald. See

Robert Howson Pickard.

Littmann, Sigismund, behaviour of selenium in the manufacture of sulphuric acid, 1906, A., ii. 531.

Litvin, I. See Leo Pissarjewsky.

Litzendorff, Jakob, employment of nitron for determining nitrates in soils and plants, 1908, A., ii, 130.

Litzendorff, Jakob. See also Alfred Koch, and Rudolf Schenck.

Liveing, E. H., tellurides at Kalgoorlie,

1903, A., ii, 654. Livens, G. H., influence of density on the position of the emission and absorption lines in a gas spectrum, 1912, A., ii, 874.

Liverani, Raffaele. See Francesco Carlo

Palazzo.

Liversedge, Samuel G., rapid method for the estimation of mercuric salts in aqueous solution, 1908, A., ii, 634.

Liverseege, John Francis, cod-liver oil and other fish oils, 1904, A., ii, 597.

Liversidge, Archibald, Boogaldi, Barratta, Gilgoin, and Eli Elwah meteorites, New South Wales, 1903, A., ii, 658.

the Narraburra meteorite, 1904, A., ii,

Livingston, Carl. See Robert Evstafieff Rose.

Livon, Charles, modifications in the blood-gases under the influence of ethyl chloride, croton-chloral, and chloralose, 1903, A., ii, 161.

blood-gases during anæsthesia produced by amylene, 1903, A., ii,

306.

Lialin, L. M., new method of estimating starch in grains and meal, 1909, A., ii, 625.

enzymes of diastase, 1910, A., i, 907. Ljubavin, Nicolai N., [structure of polymerised vinyl bromide and caoutchouc], 1912, A., i, 789. Ljubavin, Nicolai N., Zorin, and Bunzen,

iron dicarbide, 1912, A., ii, 769.

Ljungdahl, Malte. See Ivar Bang. Llewellyn, William G., effect of heating

yellow phosphorus in ammonia gas, 1908, A., ii, 103.

Llord y Gamboa, Ramón, volcanic materials from the Gulf of Naples, 1907, A., ii, 103.

composition of blende from Picos de Europa, 1911, A., ii, 733.

analysis of aragonite from Molina de

Aragon, 1912, A., ii, 564.

Lloyd, Francis Ernest, the relationship between tanning substance and another colloid in ripening fruits, especially Phanix, Achras, Diospyros, 1911, A., ii, 918.

the tannin-colloid complexes of the persimmon fruit, 1912, A., ii, 380.

Lloyd, Hoyes, the adsorption of some substances by starches, 1911, A., ii, 700.

Lloyd, Hoyes. See also William Robert Lang.

Lloyd, Lorenzo Lyddon. See Stanislaus von Kostanecki.

Lloyd, Percy Vivian. See Clarence

Arthur Seyler.

Lloyd, Stewart J., tribromophenol bromide: its detection, estimation, rate of formation, and reaction with hydriodic acid, 1905, A., i, 277. estimation of phenol, 1905, A., ii, 209.

Lloyd, Stewart J., preliminary note on the constitution of gallotannic acid and of tannins in general, 1908, A., i. 347.

cuprous ammonia haloids, 1908, A., ii, 847.

the estimation of radium, 1910, A., ii.

the \beta-activity of uraninite, 1910, A., ii,

Thomas Henry, bacteriological Lloyd. testing of disinfectants, 1906, A., ii. 592.

Lobeck, Martin. See Carl Bülow, and Max Guthzeit.

Lobello, R., Bettendorf's test for arsenic. 1905, A., ii, 763.

Lobello, R. See also Ezio Comanducci. Lobenstein, Theodor. See Georg Lockemann.

Lobo Gómez, Ruperto, space formulæ and heats of combustion of acyclic hydrocarbons, 1912, A., ii, 736.

Lobry de Bruyn. See Bruyn.

Locher, Fr. See Hermann von Tappeiner.

Lochhead, A. C., and Wilhelm Cramer, phosphorus percentage of various samples of protagon, 1907, A., i, 672.

Lochhead, James, and Wilhelm Cramer. glycogen metabolism of the fœtus, 1907, A., ii, 370.

the glycogenic changes in the placenta and the fœtus of the pregnant rabbit; a contribution to the chemistry of growth, 1908, A., ii, 710.

See also Wilhelm' Lochhead, James. Cramer.

Lochmann, R., detection of arsenic by means of mercuric chloride solution, 1908, A., ii, 532.

Lochte, a reagent for the detection of blood-pigment and the preparation of hæmochromogen crystals, 1910, A., ii, 665.

Locke, Frank Spiller, a perfusion stopcock, 1904, A., ii, 422.

action of dextrose on the isolated mammalian heart, 1904, A., ii, 422. action of potassium and sodium on the

indirect excitability of muscle, 1905, A., ii, 270.

Locke, Frank Spiller, and Otto Rosenheim, action of other [than dextrose] sugars on the isolated mammalian heart, 1904, A., ii, 422.

disappearance of dextrose when perfused through the isolated mammalian heart, 1904, A., ii, 422.

survival of the excised mammalian heart, 1906, A., ii, 103.

- Locke, Frank Spiller, and Otto Rosenheim, consumption of dextrose by mammalian cardiac muscle, 1908, A., ii, 120.
- Locke, James, electroaffinity theory of Abegg and Bodländer, 1903, A., ii,

Locke, James, and Jacob Forssall, action of ammonia on copper sulphate solu-

tions, 1904, A., ii, 258.

Lockemann, Georg, detection of arsenic by means of the Marsh apparatus, 1905, A., ii, 353.

catalytic decomposition of arsenic

hydride, 1905, A., ii, 386.

apparatus for the demonstration of the products of combustion of a candle, 1907, A., ii, 250.

detection of small quantities of arsenic and preparation of arsenic-free chemicals, 1909, A., ii, 267.

the excretion of atoxyl through the urine; reply to the observation of

F. Blumenthal, 1909, A., ii, 421. test for small quantities of cyanide,

1910, A., ii, 807.

the adsorption of arsenic by ferric hydroxide, 1911, A., ii, 485.

chemistry of tuberculin, 1911, A., ii, 916.

detection of small quantities of arsenic in urine, blood, and other organic substances, 1911, A., ii, 1028.

Lockemann, Georg, H. Ende, F. Herold, and Theodor Lobenstein, method of preparation of a benzoylated phenylhydrazines, 1910, A., i, 636.
Lockemann, Georg, and Heinrich Füth,

the detection of lactic acid in the blood, urine, and cerebro-spinal fluid of eclamptic women, 1906, A., ii, 472.

Lockemann, Georg, and Otto Liesche, preparation of acraldehyde by the boric acid method, 1905, A., i, 570. phenylethylidenehydrazine, 1906, A.,

Lockemann, Georg, and Martin Paucke, the excretion and detection of atoxyl in the urine, 1909, A., ii, 167.

the adsorption of arsenic by aluminium and ferric hydroxides, 1911, A., ii, 720.

Lockemann, Georg, and Johannes Thies, the catalase content of maternal and fœtal blood and the action of fœtal serum on animals of the same species, 1910, A., ii, 624.

Lockemann, Georg, Johannes Thies, and Heinrich Wichern, catalase of the

blood, 1909, A., ii, 324.

Lockemann, Georg, and Ernst Weiniger, action of halogens and hydrogen halides on phenylhydrazine, 1908, A., i, 916.

Lockemann, Georg. See also Ernst Beckmann, Heinrich Füth, and Hans Reckleben.

Lockemann, Karl. See Hermann Pauly. Lockett, William Thomas. See Gilbert John Fowler.

Lockhart, L. B. See Charles Basker-

Lockyer, (Sir) Joseph Norman, presence of sulphur in some of the hotter stars, 1908, A., ii, 173.

the sequence of chemical forms in stellar spectra, 1911, A., ii, 81.

Lockyer, (Sir) Joseph Norman, and Frank E. Baxandall, enhanced lines of titanium, iron, and chromium in the Fraunhoferic spectrum, 1905, A., ii, 69.

the group IV. Lines of silicon, 1905,

A., ii, 129.

arc spectrum of scandium and its relation to celestial spectra, 1905, A., ii,

Locquin, René, synthetical isoamyl alcohol and the amyl alcohol of commerce, 1904, A., i, 546.

homologues of butyrylacetic and isovalerylacetic esters, 1904, A., i, 552.

homologues of hexoylacetic and isohexoylacetic esters, 1904, A., i, 552. method of characterising the fatty

acids, 1904, A., i, 644.

of a-mono-substituted preparation acetoacetic esters, 1904, A., i,

pyrazolones derived from a-monosubstituted acetoacetic esters, 1904, A., i, 694.

a-oximino-derivatives of homologues of pyruvic acid and its esters, 1904, A., i, 849.

a-ketonic acids and esters (homopyruvic compounds), 1905, A., i,

oximes and dioximes of a-diketones, 1905, A., i, 19.

a-diketones, 1905, A., i, 20.

preparation of methylethylpyruvic acid and its derivatives, 1906, A., i, 928.

resolution of a-amino-\beta-methylvaleric acid into its optical isomerides; properties of the optically active acids and their derivatives; identification with Ehrlich's isoleucine 1907, A., i, 593.

Locquin, René, derivatives of propylsuccinic acid, 1910, A., i, 10.

2-methyl-laurenone; a new ketone derived from camphor, 1911, A., i, 792.

Locquin, René. See also Philippe Barbier, and Louis Bouveault.

Loczka, József, berthierite from Bräunsdorf, Saxony, 1903, A., ii, 434.

analysis of anapaite, 1903, A., ii, 554. analyses of lorandite and claudetite, 1904, A., ii, 666.

a modified Kipp apparatus, 1904, A., ii. 721.

manganspinel in a furnace slag, 1907, A., ii, 790.

mineral chemistry, 1908, A., ii, 394. analysis of plumosite from Felsöbánya, 1909, A., ii, 153.

estimation of fluorine in fluorite by Jannasch's method, 1910, A., ii,

542. Lodge, (Sir) Oliver Joseph, Becquerel memorial lecture, 1912, T., 2005.

Löb, A., assay of barium peroxide, 1907, A., ii, 131.

Loeb, Adam, protein metabolism of the dog, and the effect of feeding with protein and protein cleavage products on the secretion of bile, with special reference to time relationships, 1911, A., ii, 51. the action of arsenic on the blood-

vessels, 1912, A., ii, 372. Loeb, Adam. See also Julius Baer.

Löb. Albert, electrolytic researches with symmetrical and unsymmetrical currents, 1906, A., ii, 215.

signification of so-called alternating current passivity, 1908, A., ii, 13.

See Hermann Gross-Loeb, Albert. mann.

Loeb, Arthur. See Paul Jacobson.

Loeb, Jacques, relative toxicity of distilled water, sugar solutions, and solutions of single constituents of sea-water for aquatic animals, 1903, A., ii, 676.

artificial parthenogenesis, 1903, A., ii, 737.

the fertilisation of the eggs of echinoderms, 1904, A., ii, 56.

influence of hydroxyl and hydrogen ions on the regeneration and growth of Tubularia, 1904, A., ii, 273.

fertilisation, artificial parthenogenesis, and cytolysis in the sea-urchin, 1904, A., ii, 572.

solutions in which sea-urchins' eggs develop, 1904, A., ii, 624.

antagonism of salts, 1905, A., ii, 400.

Loeb, Jacques, chemical methods by which the eggs of the mollusc Lottia gigantea can be caused to become mature, 1906, A., ii, 94.

rôle of oxygen in artificial parthenogenesis and development, 1906,

A., ii, 371.

the effects of magnesium and calcium on the rhythmical contractions of a jelly-fish (Polyorchis), 1906, A., ii,

the inhibition of the toxic action of hypertonic solutions, on the seaurchin's egg by potassium cyanide and diminution of oxygen, 1906, A., ii, 694.

the chemical nature of fertilisation,

1907, A., ii, 38.

the cause of the electrotonic excitability of nerve, 1907, A., ii, 110.

positive heliotropism produced by acids, especially carbon dioxide, and negative heliotropism produced by ultra-violet light, 1907, A., ii, 113.

cause of the poisonous action of a pure sodium chloride solution and of the removal of the action by potassium and calcium, 1907, A., ii, 119.

osmotic stimulation of unfertilised sea-urchin eggs, 1907, A., ii, 565. the anticytolytic action of the salts

of bivalent metals, 1907, A., ii, 896.

the difference between isosmotic and isotonic solutions in artificial parthenogenesis, 1908, A., ii, 710.

electrolytic dissociation and physiological activity of pepsin trypsin, 1909, A., i, 860.

chemical constitution and physiological activity of acids, 1909, A., ii,

the chemical constitution and physiological action of alcohols and acids. II., 1910, A., ii, 147.

nature of the stimulus leading to development of the animal egg,

1910, A., ii, 320. inhibition of the toxic action of hydroxyl ions on the unfertilised egg of the sea-urchin by withdrawal of oxygen, 1910, A., ii, 788.

inhibition of the toxic action of hydroxyl ions on the eggs of the sea-urchin by means of potassium cyanide, 1910, A., ii, 788.

the inhibition by potassium cyanide of the deleterious action of salt solutions on the fertilised egg, 1910, A., ii, 878.

Loeb, Jacques, influence of the concentration of hydroxyl ions in a sodium chloride solution on the relative anti-toxic action of potassium and calcium, 1910, A., ii, 1095.

the inhibition of the toxic action of certain poisons on the eggs of seaurchins due to depression of oxidation in the eggs, 1910, A., ii, 1096.

antagonistic action of salts, 1911, A., ii, 221.

the mechanism of antagonistic salt action, 1911, A., ii, 1018.

the influence of the anion on the toxicity of sodium and calcium salts, 1912, A., ii, 469.

the toxicity of sugar solutions to Fundulus and the apparent antagonism between salts and sugars, 1912, A., ii, 587.

the inhibition of the toxic action of iodide, nitrate, thiocyanate, and other salts of sodium, 1912, A., ii,

969.

Loeb, Jacques, and Reinhard Beutner, the potential differences at damaged and undamaged surfaces of animal and vegetable organs, 1912, A., ii, 663.

the causes of the current of injury,

1912, A., ii, 1087.

Loeb, Jacques, and William John Gies, poisonous action of ions, and the part played by the valency of cations in this relation, 1903, A., ii, 167.

Loeb, Jacques, and Hardolph Wasteneys, is the stoppage of rhythmic contractions in a solution of pure sodium chloride due to increased rate of oxidation? 1910, A., ii, 1088.

why does sodium cyanide diminish the poisonous action of sodium chloride on sea-urchin's eggs? 1910, A., ii,

1096.

further remarks on the relationship between the magnitude of oxidation and cytolysis of sea-urchin's eggs, 1911, A., ii, 304.

the antagonism in the toxic action of potassium and sodium salts, 1911,

A., ii, 420.

the increase of the toxic action of potassium chloride by low concentrations of sodium chloride, 1911, A., ii, 517.

the antagonistic action of the salts of calcium and other alkaline earths to pot ssium poisoning, 1911, A., ii,

the antagonism of acids by salts, 1911, A., ii, 755.

Loeb, Jacques, and Hardolph Wasteneys, the antagonistic action of sodium to potassium chloride, 1911, A., ii, 756.

are the oxidative processes independent variables in vital processes ? 1911,

A., ii, 1110.

the influence of bases on the development and oxidative processes in the eggs of the sea-urchin (*Arbacia*), 1912, A., ii, 66.

the neutralisation by means of salts of toxicity produced by acids, 1912,

A., ii, 469.

the antagonism to sodium bromide poisoning, 1912, A., ii, 469.

the dependence of the number of heart beats on the partial pressure of oxygen, 1912, A., ii, 571.

Loeb, Leo, blood coagulation in arthro-

pods, 1904, A., ii, 353.

blood coagulation, 1904, A., ii, 496, 747; 1905, A., ii, 330; 1906, A., ii, 372; 1907, A., ii, 279.

action of serum and tissue extracts on blood coagulation, 1907, A., ii, 184.

the influence of alteration in chemical and physical surroundings on the blood-cells of Limulus, and especially on their granules, 1910, A., ii, 420.

Loeb, Leo, and Moyer S. Fleisher, the significance of oxygen for the growth of mammalian ti-sue, 1911, A., ii, 1007.

Loeb, Leo, Moyer S. Fleisher, and D. M. Hoyt, the influence of calcium chloride on the formation of transudates, 1909, A., ii, 252.

Loeb, Morris, crystallisation of sodium iodide from alcohols, 1905, A., ii, 634.Loeb, Morris, and S. R. Morey, analysis of

some Bolivian bronzes, 1910, A., ii, 614. Loeb, Oswald, action of alcohol on the heart of warm-blooded animals, 1905, A., ii, 471.

the distribution of iodine in the animal body after the administration of its compounds, 1907, A., ii, 491.

the pharmacology of iodine, 1912, A.,

ii, 372.

the partition of iodine in syphilitic tissues, 1912, A., ii, 857.

experimental changes in arteries in rabbits produced by aliphatic aldehydes, 1912, A., ii, 857.

Loeb, Oswald, and Louis Michaud, the behaviour of iodine in tuberculous

animals, 1907, A., ii, 285.

Loeb, Oswald, and Ludwig Oldenberg, the relation between chemical constitution and physiological action in the morphine and strychnine groups, 1912, A., ii, 373.

705 z z

Löb, Walther, pyrogenetic preparation of diphenyl by the electric current, 1903, A., i, 20.

influence of the cathode material on the electrolytic reduction of aromatic nitro-compounds, 1903, A., i, 20.

pyrogenetic formation of anthranilic acid from o-nitrotoluene, 1903, A., i 29.

pyrogenetic reactions by means of the electric current; behaviour of benzyl chloride, benzylidene chloride, and benzotrichloride, 1903, A., i, 806.

tervalent carbon, 1903, A., i, 811. electrolytic preparation of azo-dyes, 1904, A., i, 536.

ionic reactions in organic chemistry, 1904, A., ii, 535.

pyrogenic reactions and dissociation, 1904, A., ii, 703.

assimilation of carbon dioxide, 1904, A., ii, 835; 1906, A., ii, 43, 791.

physico-chemical side of organic electrochemistry, 1906, A., ii, 145.

chemical action of the silent discharge, 1906, A., ii, 324.

action of the silent electric discharge on moist methane, 1908, A., ii, 117. the seission of sugars [sucroclasm]. I.

Action of zinc carbonate on formaldehyde solutions, 1908, A., i, 715.

the scission of sugars [sucroclasm]. II.
The action of zinc dust and iron on
formaldehyde solutions; the action
of zinc dust on dextrose, 1908, A.,
i, 764.

formation of hydrogen peroxide by the silent electric discharge, 1908, A., ii, 480.

estimation of catalases and oxydases in blood. I., 1908, A., ii, 999. the scission of sugars. III. Electro-

lysis of dextrose, 1909, A., i, 456. formation of butyric acid from alcohol under the influence of the silent

discharge, 1909, A., i, 759. the scission of sugars. V. The reversal of the sugar synthesis, 1909, A., i, 767.

the formation of nitrogenous compounds from nitrogen and alcohol under the influence of the silent discharge, 1909, A., i, 769.

discharge, 1909, A., i, 769. the seission of sugars. VI. The electrolytic reduction of dextrose, 1909,

A., i, 881. electrochemical reduction of condensation products of aldehydes with amines, 1909, A., i, 910.

the history of chemical fermentation hypotheses, 1911, A., i, 14.

Löb, Walther, photochemical synthesis of carbohydrates from carbon dioxide and hydrogen in absence of chlorophyll, 1911, A., i, 263.

glycolysis. II. The influence of phosphates on oxidative glycolysis, 1911,

A., ii, 504.

the photochemical synthesis of carbohydrates, 1912, A., i, 750.

pyrogenic decomposition of methyl alcohol by means of the electric current, 1912, A., i, 824.

the behaviour of starch under the influence of the silent electric discharge, 1912, A., i, 947.

pancreas diastase, 1912, A., ii, 1188. Löb, Walther, and S. Gutmann, the en-

zymes of the ovaries, 1912, A., ii, 783. Löb, Walther, and Shigeji Higuchi, enzymes of the placenta, 1909, A., ii, 1034.

the ionic concentration in organic liquids. I. The hydrogen and hydroxyl ion concentration in placental and retroplacental serum, 1910, A., ii, 326.

Löb, Wallher, and Roy W. Moore, influence of the cathode material on the electrolytic reduction of nitrobenzene, 1904, A., ii, 310.

Löb, Walther, and Paul Mulzer, estimation of catalases and oxydases in blood. II., 1908, A., ii, 958.

Löb, Walther, and Georg Pulvermacher, the scission of sugars. IV. The electrolysis of glycerol and glycol, 1909, A., i, 352.

electrolysis of dextrose, glycerol, and

glycol, 1910, A., i, 94.

the scission of sugars. VII. The reversal of the sugar synthesis, 1910, A., i, 95.

the scission of sugars; synthesis of sugar from formaldehyde, 1910, A., i, 609.

glycolysis; the oxidative destruction of sugar by the action of organic preparations, 1911, A., ii, 54.

Löb, Walther, and Jos. Schmitt, influence of the cathode material on the reduction of m- and p-nitrotoluenes, 1904, A., i, 986.

Löb, Walther. See also Matthias Joist, and A. Koblenck.

Loebe, Richard, new wire method for the determination of the melting points of metals and the calibration of thermo-elements, 1907, A., ii, 735.

the ternary alloys of lead, tin, and antimony, 1911, A., ii, 204.

Loebe, Richard. See also Erich Müller. Loebell, Heinrich, estimation of the acidity of fats and oils, especially lubricating oils, 1911, A., ii.

estimation of acids in oils and fats.

1912, A., ii, 211.

Loebell, Heinrich. See also Arthur Rosenheim.

Loeben, Wolf Ludwig von, Clarke's new thermochemical constant, 1903, A., ii,

Löbering, Max. See Alexander Eibner. Loebisch, Wilhelm Franz, compounds of nucleic acid and protein, with special reference to those in the mammary gland and their relation to caseinogen tormation, 1906, A., i, 719.

Wilhelm Franz, and Max Loebisch. Fischler, a new colouring matter from

ox-bile, 1903, A., i, 713.

Loebl, Emmo, action of nitrous acid on αθ-octamethylenediamine, 1903, A., i, 735.

Loebl, Emmo. See also Rudolf Scheu-

ble.

Löffler, Karl, derivatives of 2-picolyland 2-picolylmethyl-alkine. 1904, A., i, 265.

derivatives of 2-picolyl- and 2-picolyl-II. Coniceines, methyl-alkines. 1904, A., i, 616.

β-coniceine, 1905, A., i, 917.

constitution of \(\psi\)-conhydrine, 1909, A., i, 180.

constitution and synthesis of e-coniceine (2-methylconidine and iso-2methylconidine), 1909, A., i, 326. $b-\psi$ -conhydrine, 1909, A., i, 327.

new method of preparation of primary and secondary amines from ketones,

1910, A., i, 611.

Löffler, Karl, Waldemar Bobiloff, Curt Freytag, and Marian Lukowsky, new preparation of 1-alkylpyrrolidines, 1910, A., i, 632.

Löffler, Karl, and Max Flügel, 2-7hydroxypropylpiperidine and a new synthesis of piperolidine (6-coniceine), 1909, A., i. 831.

Löffler, Karl, and Curt Freytag, new preparation of 1-alkylpyrrolidines,

1909, A., i, 830.

Löffler, Karl, and Gotthold Friedrich, synthesis of B-coniceine (l-a-allylpiperidine), 1909, A., i, 180.

Löffler, Karl, and Alfred Grosse, 3methylconidine and some pyridine bases, 1907, A., i, 439.

an attempt to synthesise conidine, 1907,

A., i, 440.

Löffler, Karl, and Herbert Grunert, resolution of phenyl-a-picolylalkine [2-8hydroxy-\beta-phenylethylpyridine] its optically active components, 1907, A., i, 441.

Löffler, Karl, and Hans Kaim, synthesis of inactive &-coniceine, 1909, A., i, 179.

Löffler, Karl, and Moriz Kirschner, derivatives of 2-picolyl- and of 2picolylmethyl-alkines. III., 1905, A., i, 938.

Löffler, Karl, and Samy Kober, formation of i-nicotine from methyl-8-3-pyridylbutylamine (dihydrometa-

nicotine), 1909, A., i, 827.

Löffler, Karl, and Phillip Plöcker, 2ethylconidine and some piperidine bases, 1907, A., i, 437.

Löffler, Karl, and Hans Remmler, synthesis of δ-methylconidine and of derivatives of 2-methyl-6-ethylolpiperidine, 1910, A., i, 633.

Löffler, Karl, and Fritz Stietzel, 4picolylalkine [4-8-hydroxyethylpyridine], 4-pipecolylalkine [4-B-hydroxyethylpiperidine], and quinuclidine, 1909, A., i, 181.

Löffler, Karl, and Fritz Thiel, condensation of 2:6-lutidine with formaldehyde and derivatives of 2-methyl-6-methyl-

olpyridine, 1909, A., i, 182. Löffler, Karl, and Reinhold Tschunke, constitution of conhydrine (optically active a-ethylpiperidylalkine), 1909, A., i, 324.

Löffler, Karl. See also Jacques M. Albahary.

Löeffler, Peter. See Heinrich Kiliani. Löeffler, Wilhelm, respiration experiments in man in the fasting condition, and after the administration of various

proteins, 1912, A., ii, 951. Löhlein, Walter, Volhard's titrimetric method for the estimation of pepsin and trypsin, 1905, A., ii, 780.

Löhmann, E. See Hartwig Franzen. Löhnis, Felix, nitrification and denitrifi-

cation in arable soil, 1905, A., ii, 109. decomposition of calcium cyanamide, 1905, A., ii, 412.

nitrogen bacteria, 1905, A., ii, 601. changes in the nitrogen in soils, 1905,

A., ii, 854.

nitrogen decompositions in the soil, 1906, A., ii, 46.

Löhnis, Felix, and Rudolf Moll, decomposition of calcium cyanamide, 1909, A., i, 92.

Löhnis, Felix, and Narayana Kunjan Pillai, nitrogen-fixing bacteria. III., 1908, A., ii, 522.

Löhnis, Felix, and Alexis Sabaschnikoff, decomposition of calcium cyanamide, 1908, A., ii, 220.

Loele, W., colorimetric detection of some oxidising substances of the body.

1911, A., ii, 675.

Loening, Fritz, gaseous metabolism in anaphylactic shock, 1911, A., ii, 993.

Loening, Hermann, and Hans Thierfelder, cerebron. IV., 1910, A., i, 760.

cerebrosides of the brain, 1911, A., i, 898; 1912, A., i, 372.

Lönnqvist, Bernt, excretion of gastric juice, 1907, A., ii, 368.

Loeper, Maurice, actions of adrenaline,

1904, A., ii, 196.

Hermann, glycogen in Loeschcke, organs, 1904, A., ii, 576.

Loesche, Adolf. See Ernst Deussen. Loessner, Fritz. See Adolf Sieverts. Lötsch, Ernst. See Arthur Scheunert.

Loevenhart, Arthur Solomon, milk coagulation, 1903, A., ii, 312.

catalytic decomposition of hydrogen peroxide, 1905, A., ii, 335.

acceleration of certain oxidation reactions by hydrogen cyanide, 1906, A., ii, 153.

action of lipase, 1906, A., i, 328.

ferment actions. I. Coferment of lipase, 1907, A., ii, 281.

ferment actions. IV. Are the animal enzymes concerned in the hydrolysis of various esters identical? 1907, A., ii, 281.

Loevenhart, Arthur Solomon, and W. E. Grove, action of certain substances on the respiratory centre, 1910, A., ii, 724.

Loevenhart, Arthur Solomon, and Joseph Hoeing Kastle, catalytic decomposition of hydrogen peroxide and the mechanism of induced exidations: nature and function of catalase, 1903, A., ii, 415.

Arthur Solomon, and Loevenhart, George Peirce, ferment actions. II. Inhibiting effect of sodium fluoride

on lipase, 1907, A., ii, 281.

Loevenhart, Arthur Solomon, and C. G. Souder, ferment actions. III. Effect of bile on the hydrolysis of esters by pancreatic juice, 1907, A., ii, 281.

Loevenhart, Arthur Solomon. See also Samuel Amberg, W. E. Grove, and Joseph Hoeing Kastle.

Loevy, Hermann. See Franz Sachs.

Loevy, Julius, dry lead and silver assays in ores, 1908, A., ii, 323. estimation of gold and silver in rich copper ores, 1911, A., ii, 338.

Löw, E., gravity and the molecular and atomic energy of gases, 1912, A., ii.

Loew, Karl, condensation of quinaldine and lepidine with aldehydes, 1903, A., i, 577.

Loew, Karl. See also Carl Renz.

Löw, Márton, products of the interaction of mercuriammonium chloride and methyl iodide, 1912, A., i, 751.

Loew, [Carl Benedict] Oscar, distinction of two kinds of catalase, 1903, A.,

i. 544.

action of uranium on plants, 1903, A., ii, 173.

formation of proteins in fungi, 1903, A., ii, 678.

hæmase, 1904, A., i, 358.

lability and activity of enzymes,

1904, A., i, 463.

influence of the relative amounts of calcium and magnesium in the soil on the crop yield, 1904, A., ii, 144.

stimulants of plant growth and their practical employment, 1904, A., ii,

281.

the entrance of metallic elements in

plants, 1904, A., ii, 282. treatment of crops by stimulating compounds, 1904, A., ii, 764.

flowering of bamboo, 1905, A., ii,

poisonous action of sodium fluoride on plants, 1905, A., ii, 606.

lime requirements in plants, 1905, A., ii, 751.

lime requirements of various vegetable organs, 1905, A., ii, 751.

lime manuring, 1905, A., ii, 760. condensation of formaldehyde, 1906, A., i, 401; 1909, A., i, 456.

formation of proteins in the lower fungi, 1907, A., ii, 644.

poisonous action of hydroxylamine and hydrazine, 1907, A., ii, 801. theory of chemical energy in the

living cell, 1908, A., ii, 710. physiological action of dicyanodiamide,

1908, A., ii, 775.

is dicyanodiamide poisonous to crops?
1909, A., ii, 177. is the omission of magnesium in soil

analysis justifiable? 1909, A., ii, theory of catalase action, 1909, A., ii.

685. formation of ozone in a flame, 1909,

A., ii, 993. a reaction for acid soils, 1909, A., ii, 1060.

Loew, [Carl Benedict] Oscar, the theory of enzyme action, 1911, A., i, 409.

the action of strontium salts on algae, 1911. A., ii, 322.

the physiological rôle of calcium salts, 1911, A., ii, 323.

the toxic effect of oxalates and the physiological action of calcium, 1912, A., ii, 281.

assimilation of nitrates in plant cells,

1912, A., ii, 286.

nitrogen assimilation and protein formation in plants, 1912, A., ii,

Loew, Oscar, and Keijiro Aso, different degrees of availability of plant nutrients, 1905, A., ii, 347.

some catalytic actions of platinum black, 1906, A., ii, 862.

changes of availability of nitrogen in soils, 1908, A., ii, 621.

Loew, Oscar, and Thomas Bokorny. active albumin and tannin in plant cells, 1911, A., ii, 324.

Loew, Oscar, and Seiroku Honda, influence of manganese on trees, 1904, A., ii, 766.

Loew, Oscar, and Seitaro Sawa, action of manganese compounds on plants, 1903, A., ii, 322.

catalase, 1911, A., i, 828.

Loew, Oscar. See also Rudolf Emmerich, and Yoshinao Kozai.

Löw, Oskar. See Gustav Schultz.

Löw-Beer, Oscar. See Heinrich Goldschmidt.

Löwe, Friedrich, methods of refractometry, 1906, A., ii, 121.

Loewe Siegfried, the combination of tetanus toxin with other substances, 1911, A., ii, 638, 912.

the physical chemistry of the lipoids. I. The relationship of dyes to lipoids, 1912, A., ii, 741.

the physical chemistry of the lipoids.

II. Relationship of lipoids to other organic substances (narcotics, hypnotics, etc.), 1912, A., ii, 742.

the physical chemistry of the lipoids. III. Diffusion into lipoids, 1912,

A., ii, 742.

the physical chemistry of the lipoids. IV. The properties of lipoid solutions in organic solvents, 1912, A., ii. 742

Loewen, Heinrich, repeating figures in the atomic weight values, 1911, A., ii, 197.

the theory of vulcanisation of caoutchoue, 1912, A., ii, 914, 915.

Loewen, Heinrich. See also Robert Pschorr.

Löwenberg, Emanuel. See Richard Anschütz.

Löwensohn, Martin, condensation of ypicoline with o-nitrobenzaldehyde, 1908, A., i, 51.

Löewenstamm, Willy. See Arthur Rosenheim.

Löwenstein, Erich, hydrates, the vapour pressure of which varies continuously with the composition, 1909, A., ii, 736.

Löwenstein, Ernst, and Ernst Peter Pick, antigen formation in protein-free culture media, 1911, A., ii, 317.

Löwenstein, Josef. See Lassar-Cohn.

Löwenstein, Leo, determinations of vapour density by Nernst's modification of Victor Meyer's method, 1906, A., ii, 271.

new method for the investigation of gaseous equilibria at high tempera-

tures, 1906, A., ii, 272.

Loewenstein, Siegfried, amylene hydrate [tert.-amyl alcohol] as a poison, 1907, A., ii, 119.

Loewenstein, Willi. See Kurt Arndt. Loewenthal, Oscar. See Fritz Ullmann. Loewenthal, Simon, the common instru-

ments for the determination of the radioactivity of springs, 1912, A., ii, 417.

Löwenthal, Simon, and Efraim Edelstein, the influence of radium emanations on autolysis, 1909, A., ii, 74.

Loewenthal, Simon, and Julius Wohlge-muth, diastases. VIII. The influence of radium emanations on the action of the diastatic ferment, 1909, A., ii, 1038.

Loewi, Otto, kidney functions. Phloridzin diuresis, 1904, A., ii, 274. protein synthesis in the animal body, 1904, A., ii, 498.

a new function of the pancreas and its relation to diabetes mellitus, 1908,

A., ii, 712.

Loewi, Otto, and Nathaniel Henry Alcock, physiology of the kidney. IV. Mechanism of salt diuresis, 1905, A., ii, 739.

Loewi, Otto, W. M. Fletcher, and Velyen E. Henderson, physiology of the kidneys. III. Mechanism of caffeine diuresis, 1905, A., ii, 739.

Loewi, Otto, and Hans Meyer, action of synthetical substances allied to adre-

naline, 1905, A., ii, 846. Loewi, Otto, and E. Neubauer, influence of diuretics on phloridzin diabetes, 1908, A., ii, 718.

Loewi, Otto. See also Alfred Fröhlich, Velyen E. Henderson, and D. Jonescu.

Löwinger, Berthold, rapid estimation of sodium hydrogen carbonate in presence of sodium carbonate, 1909, A., ii, 1053.

Loewinson-Lessing, Franz [Julievic], [magnetite, serpentine, and amphibole from the Southern Urals, 1903. A., ii, 28.

possible relation between the viscosity curves and the molecular volumes of silicates, 1906, A., ii, 459.

a hitherto unrecognised crystallochemical relation, 1911, A., ii, 807. fusion experiments with tremolite and diopside, 1912, A., ii, 950.

Loewit, Moriz, formation of sugar in the

liver, 1911, A., ii, 130.

Loewy, Adolf, effect of hydrocyanic acid on protein katabolism. I., 1907, A., ii, 368.

Loewy, Adolf, and Carl Neuberg, diamines, 1905, A., i, 158. cystinuria, 1905, A., ii, 103; 1907,

A., ii, 115.

and Hermann Loewy, Adolf, Schrötter, investigations on the circulation in man, 1905, A., ii, 401.

Loewy, Adolf, Charles George Lewis Wolf, and Emil Osterberg, action of hydrocyanic acid on protein katabolism, 1908, A., ii, 312.

Loewy, Adolf, and Nathan Zuntz, mechanism of oxygen supply to the body, 1904, A., ii, 572.

Loewy, Adolf. See also Wilhelm Caspari, and W. Glikin.

Löwy, Emil, crystalline chitosan sulphate, 1910, A., i, 123.

Löwy, Julius, estimation of total nitrogen

in blood, 1912, A., ii, 807. Löwy, Julius. See also Hugo Pribram.

Löwy, L. See Friedrich Kehrmann. Löwy, M., a test for mushrooms, 1910, A., ii, 168.

the mushroom, an indole-yielding plant, 1910. A., ii, 441.

Logeman, W. H., production of secondary rays by a-rays from polonium, 1906, A., ii, 721.

Loghem, Johannes Jacobus van, absorption of uric acid and sodium urate, 1904, A., ii, 751.

Logie, W. J., action of dysentery bacilli on nitrites and nitrates, 1910, A., ii, 988; 1911, A., ii, 1121.

Logothetis, A. See Daniel Vorländer. Lohmann, Alfred, choline, the substance in the suprarenal bodies lowers blood-pressure, 1907, A., ii, 566.

Lohmann, Alfred, the antagonistic action of adrenaline and choline in the suprarenal glands, 1908, A., ii, 407. neurine, a constituent of the supra-

renal gland, 1909, A., ii, 504.
some constituents of suprarenal,
thyroid, and testis, 1911, A., ii, 630.

simple apparatus for filtering under increased pressure, '1911, A., ii, 1081.

Lohmann, Alfred. See also Friedrich Kutscher.

Lohmann, Carl Ernst Julius, extraction apparatus for large quantities of vege, table powders, 1905, A., ii, 309.

Lohmann. Johann. See Alexander Gutbier.

Lohmann, Wilhelm, Zeeman phenomena, 1908, A., ii, 152.

Zeeman effect for the helium lines, 1908, A., ii, 243.

distinctions between natural, artificial, and synthetic camphors, 1909, A., ii, 525.

Lohmann. Wilhelm. See also Ernst Dorn, and Wilhelm Schneider. .

Lohmeyer, Johannes, band spectra of mercuric chloride, bromide, and iodide, 1907, A., ii, 211.

Lohnstein, Rudolf, occurrence of passive phenomena in magnesium, 1907, A., ii, 868.

electrolytic production silver mirrors, 1909, A., ii, 859.

Lohnstein, Theodor, densimetric estimation of sugar [in urine] 1903, A., ii,

estimation of fat, lactose, and proteins in milk, 1905, A., ii, 773. Tate's law, 1909, A., ii, 25.

Lohr, Friedrich. See Robert Behrend. Lohrisch, Hans, calorimetric investigations of fæces, 1904, A., ii, 428.

digestion of cellulose in dogs, and the methods for estimating cellulose, 1910, A., ii, 1083.

Lohrisch, Hans. See also Oscar Simon. Lohse, Oscar. See Friedrich Willy Hinrichsen.

Lohuizen, T. van, series in the spectra of tin and antimony, 1912, A., ii, 711. Loi, Domenico. See Giovanni Pellini.

Loimaranta, L., measurement of inaccessible potentials by means of intermediary potentials, 1907, A., ii, 151. Loiseau, D., melibiose, 1904, A., i, 225.

Loisel, Gustave, toxicity of semen and genital products, 1906, A., ii, 112.

Lokka, Lauri, See Ossian Aschan. Lomax, Ernest L. See Frederic Charles

Garrett.

Lombard. Maurice. coloured substances produced in Grandval and Lajoux's reaction, 1910, A., ii, 72.

chemical and biological effects of ultraviolet light, 1910, A., ii, 197.

Lombard, Maurice, and J. Lafore, estimation of nitrates by Grandval and Lajoux's method, 1909, A., ii, 436.

See also James Lombard, Maurice. Lavaux.

Lombard, Robert H. See Arthur Amos Noves.

Lombardi, M. See Giuseppe Bonamartini. Lombardi, Ugo, types of diaphragms most used in electrolysis and formulæ proposed for calculating the yield,

1906, A., ii, 596. Lombardo, Casimo, detection of mercury in organs by means of the microscope,

1909, A., ii, 185.

Lombroso, Ugo, rôle of the pancreas in the digestion and absorption of carbohydrates, 1906, A., ii, 292.

internal function of the pancreas in reference to fat-metabolism, 1907, A., ii, 490.

Lommel, Felix, formation of sugar from fat (in phloridzin diabetes), 1910, A., ii. 793.

London, Efim Semen, chemistry of digestion, 1905, A., ii, 730; 1907, A., ii, 563.

chemistry of digestion. III. Protein decomposition in the digestive canal, 1906, A. ii, 464.

chemistry of digestion. VII. Gastro-

lipase, 1907, A., ii, 107.

VIII. Exchemistry of digestion. perimental methods, 1907, A., ii, 367. animal digestion. XIII. Further

methods, 1907, A., ii, 894. digestion. XVII. Digestion and absorption of proteins rich in bases,

1908, A., ii, 870.

chemistry of digestion. XXI. Further investigations of the laws of digestion and absorption in the alimentary tract, 1908, A., ii, 870.

digestion in the animal body. XXVIII. and XXX., 1909, A., ii, 593.

digestion in the animal body. XXXIII. The rôle of the intestinal epithelium in the digestion and absorption of proteins, 1909, A., ii, 817.

chemistry of digestion and absorption in the animal body. XXXIV. Further methods, 1909, A., ii, 1031.

chemistry of digestion and absorption in the animal body. XXXVI. The behaviour of nucleo-protein in the alimentary canal, 1909, A., ii, 1031.

London, Efim Semen, the laws of digestion and absorption. I. Methods, 1910, A., ii, 422.

a reversible phenomenon in the action of intestinal juice on the products of casein digestion, 1911, A., ii, 1000.

protein metabolism from the standpoint of blood and tissue analysis,

1912, A., ii, 1189.

London, Efim Semen, and N. Boljarski, the part played by the liver in creatinine metabolism, 1909, A., ii, 1035.

London, Efim Semen, and W. F. Dagaéff, the laws of digestion and absorption. X. The disappearance of a solution of dextrose from the stomach, 1911, A., ii. 1000.

London, Efim Semen, W. F. Dagaeff, O. E. Gabrilowitsch, M. R. Gillels, O. J. Holmberg, R. S. Krym, L. F. Mazijewski, L. J. Mepissoff, F. J. Riwosch-Sandberg, S. K. Solowéeff, B. D. Stassoff, and H. K. Wiedemann, normal and pathological conditions of digestion in dogs, 1912, A., ii, 1185.

London, Efim Semen, W. F. Dagaeff, B. D. Stassoff, and O. J. Holmberg, digestive and absorptive defects, 1911,

A., ii, 998.

London, Efim Semen, and W. Dmitriew, the chemistry of digestion and absorption in the animal body. XXXIX. Digestion and absorption after intestinal resection, 1910, A., ii, 422.

London, Efim Semen, and N. A. Dobrowolskaja, digestion in the animal body. XXXI., 1909, A., ii,

the laws of digestion and absorption. III. The quantity relationships of the digestive juices, 1910, A., ii, 422. specific adaptation of digestive juices.

III., 1910, A., ii, 971

London, Efim Semen, and O. E. Gabrilowitsch, the laws of digestion and absorption. XI. Absorption of proteins and carbohydrates, 1911, A., ii,

London, Efim Semen, and O. J. Golmberg, the laws of digestion and absorp-VII. The neutralisation laws of digestive juices, 1910, A., ii, 972.

London, Efim Semen, and A. P. Korchow, the laws of digestion and absorption. VIII. The action of various external factors on the secretion of duodenal juices, 1910, A., ii, 972.

the laws of digestion and absorption. IX. Digestion of carbohydrates,

1910, A., ii, 972.

London, Efim Semen, and R. S. Krym, specific adaptation of digestive juices. II. Specificity of duodenal mixed juices, 1910, A., ii, 971.

LON

the specific adaptation of the digestive juices. IV. The relative amount of enzymes in the intestinal chyme on different diets, 1911, A., ii, 1000.

London, Efim Semen, and W. N. Lukin. specific adaptation of digestive juices. I. Specificity of gastric and pancreatic juice, 1910, A., ii, 971.

London, Efim Semen, and J. D. Pewsner, chemistry of digestion. XVIII. The importance of the mouth in gastric digestion, 1908, A., ii, 870.

London, Efim Semen, and W. W. Polowzowa, digestion in animals. Protein and carbohydrate digestion in the alimentary tract, 1907, A., ii, 108.

animal digestion. V. An absorption

dog, 1907, A., ii, 108. animal digestion. XII. Influence of quantity on digestion in the stomach,

1907, A., ii, 894. animal digestion. XV. The behaviour of meat in the stomach, 1907, A., ii, 894.

chemistry of digestion. XVI., 1908, A., ii, 50.

chemistry of digestion. XXIII. Digestion and absorption of carbo-

hydrates, 1908, A., ii, 870. emistry of digestion. XXVI. The chemistry of digestion. behaviour of different proteins in the stomach and upper duodenum of the dog, 1908, A., ii, 960.

chemistry of digestion. XXVII. Relationship of concentration to absorption in the intestine, 1908, A., ii, 1050.

chemistry of digestion and absorption in the animal body. XXXV. Digestion and absorption in the stomach of the dog, 1909, A., ii, 1031. chemistry of digestion and absorption

in the animal body. XXXVIII. The relation between digestion time and absorption, 1909, A., ii, 1031.

London, Efim Semen, and A. G. Rabinowitsch, the laws of digestion and absorption. II. The digestion of finely-divided meat in the stomach, 1910, A., ii, 422.

chemistry of digestion and absorption in the animal body. XL. The degree of cleavage of different proteins in the alimentary canal, 1911, A., ii, 999.

London, Efim Semen, and E. Riwkind, chemistry of digestion. XXV. Composition, digestion, and absorption of tubercle bacilli, 1908, A., ii, 870.

London, Efim Semen, and F. J. Riwosch-Sandberg, chemistry of digestion. XX. Laws of digestion and absorption in the alimentary tract, 1908. A., ii, 870.

digestion in the animal body. XXXII.,

1909, A., ii, 593.

chemistry of digestion and absorption in the animal body. XXXVII. The intestinal digestion of proteins. 1909, A., ii, 1031.

the laws of digestion and absorption. V. The course of gastric digestion on a mixed diet, and the origin of constant numbers, 1910, A., ii, 422.

London, Efim Semen, and Aron Sagelmann, animal digestion. XI. Gastric digestion of mixed diets, 1907, A., ii, 894.

the laws of digestion and absorption. IV. The secretion of gastric juice, 1910, A., ii, 422.

London, Efim Semen, and Alfred Schittenhelm, digestion and absorption of nucleic acid in the alimentary canal, 1911, A., ii, 52.

London, Efim Semen, Alfred Schitten-helm, and Karl Wiener, digestion and absorption of nucleic acid in the gastro-intestinal canal. 1911, A., ii, 745.

digestion and absorption of nucleic acid in the alimentary canal. III., 1912, A., ii, 364.

London, Efim Semen, and Carl Schwarz, the laws of digestion and absorption. VI. The distance law of solution by duodenal juice, 1910, A., ii, 972.

the chemistry of digestion and absorption in the animal body. XL. The study of gastric digestion on a mixed protein diet, 1910, A., ii, 972.

London, Efim Semen, and A. Sivré, digestion in the animal body. XXIX., 1909, A., ii, 593.

London, Efim Semen, and S. K. Soloweeff, the action of intestinal juice on the digestive products of various proteins, 1911, A., ii, 1000.

London, Efim Semen, and Th. Sulima, chemistry of digestion in animals, II. Digestion of proteins in the

alimentary tract, 1905, A., ii, 838. emistry of digestion. XIX. Digeschemistry of digestion. tion and absorption of heat in the intestine, 1908, A., ii, 870.

London, Efim Semen, and M. A. Wersilowa, chemistry of digestion. XXIV. Fat-splitting in the alimentary canal, 1908, A., ii, 870.

London, Efim Semen. See also Emil Abderhalden, and Emil Fischer.

Long, C. P. See Lee Holt Cone.

Long, Frank Stevenson, the velocity of addition of alkyl bromides to cyclic tertiary bases, 1911, T., 2164; P., 283

Long, Gaspard. See Amé Pictet.

Long, John Harper, the electrical conductivity of urine in relation to its chemical composition, 1903, Å., ii, 165; 1904, Å., ii, 274.

relation of the specific gravity of urine to the solids present, 1903, A., ii,

520, 742,

estimation of urea [in urine] with mercuric nitrate, 1903, A., ii, 768. specific rotation of salts of casein,

1905, A., i, 498.

salts of casein, 1906, A., i, 391.

extraction of fat from faces; occurrence of lecithin, 1906, A., ii, 637.
some phenomena observed in the pep-

tic digestion of casei: s, 1907, A., i, 367.

increase in weight in the hydrolysis of casein, 1907, A., i, 570.

combining power of casein with certain acids, 1907, A., i, 991.

the stability of lecithin, 1908, A., i, 385.

Long, John Harper, and Frank Gephart, behaviour of emulsions of lecithin with metallic salts and certain nonelectrolytes, 1908, A., i, 385.

behaviour of lecithin with bile salts and the occurrence of lecithin in

bile, 1908, A., ii, 872.

some analyses of urine composites, 1912, A., ii, 961.

Long, John Harper, and William A. Johnson, phosphorus content of fæces fat, 1906, A., ii, 875.

nature of fæces fat, 1907, A., ii,

Longcope, Warfield Theobald, bacteriolytic serum-complements, 1903, A., ii, 307.

Longinescu, George G., polymerisation of organic liquids, 1903, A., ii, 531.

polymerisation of liquid and solid inorganic compounds, 1904, A., ii, 112.

polymerisation of organic compounds in the solid state, 1904, A., ii, 387.

polymerisation in the liquid and solid states, 1905, A., ii, 79. Longinescu, George G., solubility of substances in water and their physical constants, 1907, A., ii, 15.

polymerisation and dissociation of molecules in the liquid state, 1908,

A., ii, 931.

Longmuir, Percy, the corrosion of metals, 1911, A., ii, 1089.

Lonius, Anton, dependence of the gas diffusion coefficient on the mixture ratio, 1909, A., ii, 646.

Lonsdale, James J., the ionisation produced by the splashing of mercury,

1910, A., ii, 922.

Loomis, Nathaniel Edward, and Solomon Farley Acree, study of the hydrogen electrode of the calomel electrode, and of contact potential, 1912, A., ii, 124.

application of the hydrogen electrode to the measurement of the hydrolysis of aniline hydrochloride, and the ionisation of acetic acid in the presence of neutral salts, 1912, A., ii, 125.

Loomis, Nathaniel Edward. See also Hermon C. Cooper.

Termon C. Cooper.

Loon, Johannes Potter van, benzidine transformations, 1903, A., i, 249; 1904, A., i, 452.

the transformation of hydrazotoluene into tolidine, 1908, A., i, 831.

Loon, Johannes Potter van. See also Arnold Frederik Holleman.

Loose, Anton, reactions of ethyl diazo-

acetate, 1909, A., i, 463.

Loose, Richard. See Erwin Rupp.

Loram, Herbert Yabsley, simple method of decomposing refractory tin ores, 1911, P., 60.

Lorand, Arnold, the blood-glands as pathogenic factors in the production of diabetes and obesity, 1906, A., ii, 296.

Lord, Richard Collins, double cobalt malonates, 1907, A., i, 467.

Lorentz, Guido. See Ludwig Wolff.
Lorentz, Hendrik Antoon, absorption and emission lines of gaseous substances, 1906, A., ii, 209.

results and problems of the theory of electrons, 1906, A., ii, 330.

Lorenz, Erich. See Carl Tubandt.

Lorenz, Hans, specific heat of superheated

steam, 1904, A., ii, 702.

Lorenz, Norbert von, the citrate method for the estimation of phosphoric acid in basic slags, 1903, A., ii, 511.

estimation of phosphoric acid, 1908, A., ii, 777.

Lorenz, Norbert von, estimation of phosphoric acid by direct weighing of ammonium phosphomolybdate, 1911, A., ii, 1028.

Lorenz, Richard, electrolysis of fused sodium hydroxide, 1903, A., ii,

electrolysis of fused lead chloride with reference to its connexion with current density and current yield, 1903, A., ii, 631.

the electrolytic dissociation of fused

salts, 1907, A., ii, 665, 927. metallic fogs, current efficiency and theory of additions in the electrolysis of fused salts, 1907, A., ii, 735.

oxide theory of the oxygen electrode,

1909, A., ii, 15.

electrolysis of molten salts, 1910,

A., ii, 179.

application of the theory of electrolytic ions to fused salts. I., 1910,

A., ii, 259.

theory of electrolytic ions. IV. Coincidence of the diameter of atoms and of ions not related to the solvent, 1910, A., ii, 577. "pyrosols"; colloidal phenomena in

molten solids, 1911, A., ii, 379.

theory of electrolytic ions. V. The dissociation of fused salts, 1912, A., ii, 323.

Lorenz, Richard, and A. Böhi, theory of II. Electrolytic electrolytic ions. dissociation of water, 1909, A., ii,

Lorenz, Richard, and W. Clark, preparation of potassium from fused potassium hydroxide, 1903, A., ii, 425.

Lorenz, Richard, and Giuseppe Fausti, determination of a transference number in the electrolysis of a fused salt, 1904, A., ii, 699.

Lorenz, Richard, and M. G. Fox, change of free energy accompanying the formation of some fused salts of the heavy metals, 1908, A., ii, 656.

thermodynamics of cells with fused electrolytes, 1908, A., ii, 656.

Lorenz, Richard, H. Frei, and Asmus Jabs, densities of some fused salts and their mixtures at various temperatures, 1908, A., ii, 156.

Lorenz, Richard, and Hans Hauser, oxide theory of the hydrogen-oxygen cell, 1906, A., ii, 825.

Lorenz, Richard, Georg von Hevesy, and Ernst Wolff, nature of the metallic "fog" in fused salts, 1911, A., ii, 491.

Lorenz, Richard, and Herbert T. Kalmus, conductivity of some fused salts and the method of determining the same, 1907, A., ii, 430.

determination of the viscosity of some fused salts, 1907, A., ii, 438.

Lorenz, Richard, and M. Katayama, thermodynamics of cells with solid substances, 1908, A., ii, 249. Lorenz, Richard, Felix Kaufler, and

Alfred Liebmann, molecular state of molten salts, 1908, A., ii, 1023.

Lorenz, Richard, and E. Lauber, oxide theory of the oxygen electrode. II., 1909, A., ii, 371, 463.

Lorenz, Richard, and Arnold Mohn, neutral point of the hydrogen elec-

trode, 1907, A., ii, 838.

Lorenz, Richard, and Werner Ruckstuhl, double chlorides of lead and potassium, 1906, A., ii, 853.

migration of the ions in the electrolysis of a fused mixture of two salts, 1907,

A., ii, 152.

Lorenz, Richard, and Percy Edwin Spielmann, oxide theory of the oxygen electrode. IV. and V., 1909, A., ii,

Lorenz, Richard, Percy Edwin Spielmann, and Nicolaus Konstantinoff, oxide theory of oxygen electrodes. VI., 1909, A., ii, 857.

Lorenz, Richard. See also Georg von

Hevesy.

Loria, Stanislas, dispersion of light in gases. I. Dispersion of acetylene and methane, 1909, A., ii, 279.

the dispersion of light in gases. II. Ethylene and ethane, 1909, A., ii,

determination of the dispersion of light in non-luminous saturated sodium vapour at 385°, 1909, A., ii, 949.

Lorie, S. See Alfred Werner.

Loring, Frederick Henry, new method of mathematically harmonising the weights of the elements, together with a review of kindred work, and some observations concerning the inert gases and satellites, 1909, A., ii, 392.

mathematically harmonising the elements, 1909, A., ii, 562.

relations between the inactive gases and the radioactive elements, 1909, A., ii, 715.

atomic weights as mathematical functions, 1910, A., ii, 26.

repeating figures in the atomic weight values, 1910, A., ii, 1053.

Loring, Frederick Henry, atomic weight relations, 1911, A., ii, 197.

is helium fundamentally an element of electropositive make-up? 1912, A., ii. 843.

Lortat-Jacob, Léon. See Marcel Labbé. Lortet, and Louis Hugounenq, natron contained in the urns of Maherpra (Thebes, eighteenth dynasty), 1904, A., ii, 620.

Losanitsch, Milivoj S., nitroacetaldehydediethylacetal, 1909, A., i, 880.

new potash apparatus, 1909, A., ii, 270. Losanitsch, Milivoj S. See also Alfred Wohl.

Losanitsch, Sima M., radioactive cinnabar, 1904, A., ii, 743.

aromatic dithiocarbamates. II., 1907, A., i. 693.

electro-syntheses [with ethylene and acetylene], 1908, A., i, 2.

absorption of oxygen by electro-condensation products, 1908, A., i, 846. electro-syntheses, 1908, A., i, 866;

ii, 32; 1910, A., i, 1, 542; 1911, A., i, 177.

constitution of divalolactone, 1911,

A., i, 804. Losev, Gregor. See Herbert Freundlich. Lossen, Wilhelm [Clemens], chlorination

of benzoic acid, 1904, A., i, 159. preparation of o-chlorophenol, 1905,

A., i, 126.

Hans Ducck, Max Leopold, Erich Mendthal, Max Niehrenheim, Walther Schörk, and Adolf Treibich, halogenated aliphatic acids. II., 1906, A., i, 796.

Lossen, Wilhelm, Carl Dorno, Robert Eichloff, Oscar Gerlach, Eugen Kowski, Fritz Morschöck, and Hugo Smelkus, halogenated aliphatic acids;

1906, A., i, 59.
Lossew, K., alloys of nickel and antimony, 1906, A., ii, 361.

regularity of composition of eutectic alloys, 1911, A., ii, 496.

Lo Surdo, Antonino, supposed change in weight during chemical reactions, 1904, A., ii, 720.

Lothian, John, solubility of magnesium ammonium sulphate, 1910, A., ii, 504.

Lothrop, Alfred Peirce, the effects of bone ash on digestion and metabolism, 1909, A., ii, 594.

Lotka, Alfred J., theory of periodic reactions, 1910, A., ii, 401.

periodic autokatakinesis (autokatakinetic decomposition), 1912, A., ii, 745.

Lott, Francis Edward, decomposition of salicylic acid by mould, 1903, A., ii, 318.

Lott, Robert H., fruit of Viburnum nudum, 1909, A., ii, 427.

Lotterhos, Sichler's sinacid-butyrometer, 1906, A., ji, 131.

Lottermoser, [C. A.] Alfred, colloidal silver, 1904, A., ii, 31.

colloidal silver haloids, 1904, A., ii,

absorption compounds of colloidal silver and inorganic colloids with organic colloids, 1905, A., ii, 318.

colloidal salts. I. Silver salts, 1905,

A., ii, 586.

colloidal salts. II. Formation of hydrosols by the interaction of ions, 1906, A., ii, 429.

colloids, 1906, A., ii, 528.

formation of hydrosols by the interaction of ions, 1907, A., ii, 78.

formation of hydrosols and organosols of metallic sulphides, 1907, A., ii,

process of formation of hydrosol and hydrogel. I., 1907, A., ii, 851.

[action of some electrolytes on colloidal silver solutions; the process of coagulation], 1908, A., ji, 365.

formation of colloidal phosphorus, 1908, A., ii, 1032.

freezing of hydrosols, 1909, A., ii, 27. hydrosol and hydrogel formation, III., 1910, A., ii, 278.

tungstic acid hydrosol, 1910, A., ii,

solid colloidal solutions, 1911, A., ii, 194.

anomalous adsorption, 1911, A., ii,

Lottermoser, Alfred, and Paul Maffia. a new proof of the existence of an adsorption equilibrium in hydrosols, 1911, A., ii, 99.

Lottermoser, Alfred, and Alfred Rothe, process of formation of hydrosol and hydrogel. II. Adsorption of silver nitrate and potassium iodide by amorphous silver iodide, 1908, A., ii, 364. Lotz, Walther. See Hans Rupe.

Louderback, George Davis, and Walter Charles Blasdale, benitoite, a new gem-mineral from California, 1907, A., ii, 705.

benitoite, its paragenesis and mode of occurrence, 1910, A., ii, 310.

Louise, [Alphonse Camille] Émile, method of analysis by miscibility curves; application to edible oils, 1909, A., ii, 722.

Louise, [Alphonse Camille] Émile, new method of analysis by miscibility curves; application to turpentine oils, 1910, A., ii, 357.

analysis by means of miscibility curves; application to the examination of cod liver oils, 1911,

A., ii, 548.

Louise, Emile, and F. Moutier, toxicology of mercury diphenyl, 1905,

A., ii, 601.

Louise, Emile, and Ch. Riquier, calculation of the extent of skimming and diluting in the analysis of milk, 1903, A., ii, 249.

Louise, Emile, and E. Sauvage, new characteristic constants for oils, 1907,

A., ii, 722.

Love, Andrew, leucocytosis of typhus fever, 1905, A., ii, 338.

the changes in blood-forming organs in typhus fever, 1906, A., ii, 187.

Lovelace, Benjamin Franklin. See Harmon Northrop Morse, and John Bishop Tingle.

Lovén, Johan Martin, optically active a-phenylethylamines (a-aminoethylbenzenes), 1905, A., i, 875.

optically active thiolactic acids and thiodilactylic acids, 1908, A., i,

714.

Lovisato, Domenico, chrysocolla and vanadinite in the copper mines of Bena (de) Padru, near Ozieri [Sardinia], 1903, A., ii, 735.

bournonite from Sardinia, 1904, A., ii,

825.

tungsten minerals at Genna Gurèu, between Nurri and Orroli (Cagliari), 1907, A., ii, 482.

rosasite, a new mineral from the mines of Rosas (Sulcis, Sardinia), 1909,

A., ii, 246.

new kind of vanadate in the cupriferous deposit of Bena (de) Padru, near Ozieri (Sassari), 1910, A., ii, 1077.

amphiboles from Mount Plebi, near Terranova Pausania (Sardinia),

1912, A., ii, 358.

Loviton, L., use of ammonium nitrate in analysis of metals, 1909, A., ii, 834.

Low, Albert H., copper assay by the iodide method, 1903, A., ii, 334.

estimation of lead in ores, 1908, A, ii, 536.

Low, Wilson H., detection and estimation of boric acid [in foods], 1906, A., ii, 629.

Low, Wilson H., estimation of antimony and tin in Babbit-metal. type-metal, or other alloys, 1907, A., ii, 304.

precipitation of nickel compounds and preparation of spongy nickel, 1911, A., ii, 1139.

Lowe, Frank Harold. See James Codrington Crocker.

Lowe, William Foulkes, accuracy of the dry assay of galena in an iron crucible, 1905, A., ii, 205.

Lownds, Louis, thermomagnetic and related properties of crystalline bismuth,

1903, A., ii, 264.

Lowry, Thomas Martin, nitrocamphor and its derivatives. V. sesquiCamphorylhydroxylamine, a product of the spontaneous decomposition of VI. Camphoryloxnitrocamphor. VII. B. Bromo-a'ime-anhydride. nitrocamphor. β- and π-Bromo-camphoryloximes, 1903, T., 953; P., 129, 156; discussion, P., 131.

studies of dynamic isomerism. I. The mutarotation of glucose, 1903, T.,

1314; P., 156.

the solubility of dynamic isomerides,

1903, P., 156.

studies of dynamic isomerism. III. Solubility as a means of determining the proportions of dynamic isomerides in solution; equilibrium in solutions of glucose and of galactose, 1904, T., 1551;

the design of gas-regulators for thermostats, 1905, T., 1030; P., 181; discussion, P., 181.

dynamic isomerism, 1905,

application to electrolytes of the hydrate theory of solutions, 1905, A., ii, 686.

studies of dynamic isomerism. Part IV. Stereoisomeric halogen derivatives of camphor, 1906, T., 1033;

new pattern of thermostat designed to supply a rapid stream of water heated to a constant temperature, 1907, A., ii, 928.

measurement of rotatory dispersive power in the visible and ultra-violet regions of the spectrum, 1909, A.,

ii. 200.

method of producing an intense cadmium spectrum, with a proposal for the use of mercury and cadmium as standards in refractometry, 1909, A., ii, 774.

Lowry, Thomas Martin, the oxidation of atmospheric nitrogen in presence of ozone, 1912, T., 1152; 64.

a method of producing a steady thallium flame, 1912, P., 65.

mercury lamps for use in spectroscopy, polarimetry, and 1912, A., ii, 825. saccharimetry,

Lowry, Thomas Martin, and Cecil Henry Desch, studies of dynamic isomerism. Part VIII. The relationship between absorption spectra and isomeric change; absorption spectra of halogen, nitro-, and methyl derivatives of camphor, 1909, T., 807; P., 13.

studies of dynamic isomerism. Part IX. The relationship between absorption spectra and isomeric change; absorption spectra of sulphonic derivatives of camphor,

1909, T., 1340; P., 192.

Lowry, Thomas Martin, Cecil Henry Desch, and Herbert William Southgate, studies of dynamic isomerism. Part X. The relationship between absorption spectra and isomeric change; absorption spectra of camphorcarboxylic acid and its derivatives, 1910, T., 899; P., 68.

Lowry, Thomas Martin, and George Caulton Donington, camphor- 8-thiol,

1903, T., 479; P., 57.

Lowry, Thomas Martin, and Walter Hamis Glover, studies of dynamic isomerism. - Part XIV. Successive isomeric changes in camphorcarboxylamide and camphorcarboxypieridide, 1912, P., 186.

Lowry, Thomas Martin, and William Thomas John, studies of dynamic isomerism. Part XII. The equations for two consecutive unimolecular changes, 1910, T., 2634; P.,

Thomas Martin, and Egbert Lowry, Hockey Magson, studies of dynamic isomerism. Part V. Isomeric sulphonic derivatives of camphor, 1906,

T., 1042; P., 145.

studies of dynamic isomerism. Part VI. The influence of impurities on the mutarotation of nitrocamphor, 1907, P., 193; discussion, P., 194;

1908, T., 107.

162.

studies of dynamic isomerism. Part VII. Note on the action of earbonyl chloride as an agent for arresting isomeric change, 1907, P., 260; 1908, T., 119.

Lowry. Thomas Martin, and William Robertson, studies of dynamic isomerism. II. Solubility as a means of determining the proportions of dynamic isomerides in solution. Equilibrium between the normal and pseudonitro-derivatives of camphor, 1904, T.,

Lowry, Thomas Martin, and Herbert William Southgate, studies of dynamic isomerism. Part XI. The relationship between absorption spectra isomeric change; absorption spectra of the acyl derivatives of camphor, 1910, T., 905; P., 68.

Lowry, Thomas Martin. See also Henry Edward Armstrong, William Robert Bousfield, and Walter Hamis

Loy, Sylvester Kline, and Solomon Farley Acree, reaction of iodoacetonitrile with silver nitrate, 1911, A., i,

Lozano, Edmundo, stereochemistry of the aromatic series, 1912, A.,

Lubarsch, Oscar, glycogen in pathological cases, 1906, A., ii, 471.

Lubenau, C., formation of acid by the diphtheria bacillus, 1908, A., ii, 722.

Lubieniecki, H., the influence of calcium salts in the purine metabolism of mammals, 1912, A., ii, 659.

Lubimenko, V. N. See N. A. Monte-

Lubimenko, W., influence of absorption of sugars on germination, 1906, A., ii. 624.

spectroscopic study of the green pigments of ripe seeds, 1906, A., ii, 624.

direct action of light on the transformation of sugars absorbed by the young plants of Pinus pinea. 1906, A., ii, 882.

Lubimenko, W., and A. Froloff-Bagreief, influence of light on the fermentation of grape juice, 1912, A.,

Lublin, Jarl, dinitriles and amyl nitrite. 1904, A., i, 890; 1907, A., i, 213.

Lublin, Jarl. See also Eugen Bamberger.

Luc, Armand de. See Frédéric Reverdin.

Lucas, A. See Charles Marie.

Lucas, H. J. See William McPherson. Lucas, Keith, temperature-coefficient of rate of conduction in nerve, 1908, A., ii, 711.

Lucas, (Mlle.) Pauline. See Ramart-Lucas.

Lucas, Richard, equilibrium between silver salts, 1904, A., ii, 715.

absorption of oxygen by platinum,

1905, A., ii, 396.

contraction exhibited by certain substances on ignition, 1905, A., ii,

the contact process of manufacturing sulphuric acid, 1905. A.,

Lucas, Richard. See also Guido Bodländer, and Erich Müller.

Lucchèse, Louis, rapid estimation of silicon in ferrosilicon, 1905, A., ii,

analysis of ferrosilicons; use of sodium peroxide in platinum crucibles, 1905,

A., ii, 119.

Luchmann, Ernst. See H. Bollenbach. Lucion, R., net calorific power of fuels (calculated from the results obtained with the Mahler bomb calorimeter and the proximate analysis), 1912, A., ii, 811.

Lucius, Reinhold, preparation of quaternary ammonium bases by means of alkali from additive products of tertiary amines with alkylene dibromides, 1907, A., i, 678.

Luckhardt, Arno B., physiology of lymph. X. The comparative electrical conductivity of lymph and serum, and its bearing on theories of lymph forma-

tion, 1910, A., ii, 226.

Luckhardt, Arno B., and Frank C. Becht, source of immune substances in lymph; the part played by the spleen in the formation of immune substances, 1911, A., ii, 217.

the relation of the spleen to the fixation of antigens and the production of immune substances, 1911, A., ii, 812.

Luckhardt, Arno B. See also Anton Julius Carlson.

Lucking, Hubert Leslie. See Hartwig Franzen.

Luckow, Carl, the production of sparingly soluble compounds of the distillable heavy metals, 1907, A., ii, 869.

Luckow. Carl. See also Gustav

Kroupa.

Luczizky, W. J., isomorphism and polymorphism of the mercury haloids, 1909, A., ii, 483.

See Robert Behrend, Ludewig, Wilhelm. and Eduard Jordis.

Ludlam, Ernest Bowman, action of ultraviolet light on chlorine, 1912, A., ii,

Ludlam, Ernest Bowman. See also Gerhard Preuner.

Ludwig, Albert, dependence of valency on volume in certain tervalent elements, 1909, A., ii, 875.

Ludwig, Alexander, action of organomagnesium compounds on phthalide, 1907. A., i. 702.

Ludwig, Alexander, See also Franz Sachs.

Ludwig, Ernst, and Gustav Tschermak. Angra dos Reis meteorite, 1910, A., ii,

Ludwig, Kurt. See Otto Nikolaus Witt. Ludwig, W., the action of heat on the lecithin-phosphoric acid contained in pastry, 1908, A., ii, 744.

Ludwinowsky, S., and Josef Tambor, synthesis of 1-hydroxy-3-methyl-

flavone, 1907, A., i, 75. Lücker, F. See Hugo Neubauer.

Lüdecke, Karl. See Richard Willstätter.

Lüdert, Hugo, estimation of manganese by the persulphate method, 1904, A., ii, 448.

Lüdke, Hermann, the toxin of dysentery, 1906, A., ii, 187.

Lüdy & Co., preparation of menthyl α-bromoisovalerate, 1909, A., i, 497.

Lührig, Heinrich, estimation of Prussian blue in spent gas-purifying material, 1903, A., ii, 111.

examination of butter as regards its

purity, 1906, A., ii, 205. composition of lemon juice, 1906, A.,

ii, 482.

Lührig, Heinrich, and W. Becker, estimation of manganese in water, 1907, A., ii, 303.

Lührig, Heinrich, Adolf Beythien, L. Waters, Adolf Juckenack, Fritz Morschöck, and Alfred and Mieczyslaw Dominikiewicz, fruit juice statistics, 1906, A., ii, 193.

Lüken, G. See Alfred Koch.

Lüning, Otto, estimation of acids in hydrogen peroxide by titration, 1909, A., ii, 826. composition of the Fehling (copper)

solution, 1912, A., ii, 303.

Lüning, Otto. See also Julius Tröger. Lüppo Cramer, tanning and absorption compounds of gelatin, 1907, A., i, 1098.

some oxides as tanning material, 1908, A., i, 377.

blue erythrosin silver, 1908, A., i, 669.

Lüppo Cramer, latent photographic image as a colloidal compound, 1908, A., ii. 378.

simplest method of preparing Carey Lea's photo-haloids, 1908, A., ii,

the silver hydrogel in photographic films, 1908, A., ii, 841, 945, 1024.

tanning and adsorption compounds of

gelatin, 1909, A., i, 275.

retarding action of bromides in photographic developers as a colloidochemical process, 1909, A., ii, 284.

detection of traces of chlorides in gelatin, 1909, A., ii, 1050.

the differently-coloured forms of silver,

1911, A., ii, 394.

Lüthje, Hugo, influence of castration,

1904, A., ii, 189.

formation of sugar from protein, 1905, A., ii, 99. protein synthesis in the animal body.

1906, A., ii, 690.

Lüthje, Hugo. See also Gustav Embden. Lüttgen, Gustav, preparation of nitrobenzoic acids from the corresponding nitrotoluenes, 1911, A., i, 128.

Lüttig, O., Walter Hartmann, and C. Peterke, the Zeeman effect for copper, iron, gold, chromium, nickel. palladium, manganese, and argon in the visible spectrum, 1912, A., ii,

Luff, Bernard Dunstan Wilkinson, and Frederic Stanley Kipping, organic derivatives of silicon. Part VII. The synthesis of dl-sulphobenzylethylisobutylsilicyl oxide, 1908, T., 2004; P., 224.

organic derivatives of silicon. Part VIII. The resolution of dl-sulphobenzylethylisobutylsilicyl oxide and the properties of the optically active acids, 1908, T., 2090; P., 236.

the resolution of asymmetrical derivatives of phosphoric acid, 1909, T.,

1993; P., 256.

Luff, Bernard Dunstan Wilkinson, and William Henry Perkin, jun., experiments on the synthesis of the terpenes. Part XV. Δ^3 -m-Menthenol(8) and $\Delta^{3:8(9)}$ -m-menthadiene, 1910, T., 2147; P., 249.

experiments on the synthesis of the terpenes. Part XVI. Resolution of dl-1-methyl- Δ^3 -cyclohexene-3carboxvlic acid and synthesis of the d- and l-modifications of Δ^3 -mmenthenol(8) and \$\Delta^{3:8(9)}\$-m-menthadiene, 1911, T., 518; P., 57.

Luff, Bernard Dunstan Wilkinson, William Henry Perkin, jun., and Robert Robinson, m-hemipinic and asaronic acids, 1910, T., 1131; P.,

Luff, Bernard Dunstan Wilkinson. also Frederic Stanley Kipping.

Luft, Max, synthetical bases from 4-aminoantipyrine, 1906, A., i, 118. Luftensteiner, H. See Paul Pfeiffer.

Luginin, Wladimir Fedorowitsch, latent heat of vaporisation of aniline, o-toluidine, certain of their derivatives, and other organic substances, 1903, A., ii, 7.

thermal properties of salicylaldehyde,

1904, A., ii, 537.

heat of vaporisation of aniline, 1904, A., ii, 606.

latent heat of vaporisation of carvacrol and anethole, 1905, A., ii, 801.

determination of heat liberated on addition of bromine to unsaturated compounds, 1910, A., ii, 486.

Luginin, Wladimir Fedorowitsch, and Georges Dupont, heat of combination of hydrogen bromide with ethylenic compounds, 1910, A., ii,

heats of fusion of substances melting near the atmospheric temperature. 1911, A., ii, 369.

cryoscopy in paracetaldehyde, 1912, A., ii, 1040.

Luginin, Wladimir Fedorowitsch, and Iwan A. Kablukoff, heat developed on the addition of bromine to certain unsaturated substances, 1907, A., ii, 72.

thermal changes in the dissolution of unsaturated substances and their bromine additive compounds in carbon tetrachloride, 1907, A., ii, 437.

Luginin, Wladimir Fedorowitsch, and A. N. Schükareff, thermal study of some alloys of copper and aluminium. II., 1903, A., ii, 271.

Lugner, Ivar. See Hjalmar von Feilitzen.

Luig. See Karl Bernhard Lehmann.

Luithlen, Friedrich, reciprocal cation ratio with different diets and in the case of acid poisoning, 1912, A., ii, 792.

mineral metabolism in a rabbit fed on oats with sodium oxalate, 1912, A., ii, 955.

changes in the chemistry of the skin by different diets and poisons, 1912, A., ii, 958.

Lukens, Hiram S., and Edgar Fahs Smith, electrolysis of the haloids of the alkaline earth metals, 1907, A., ii. 988.

Lukin, Mstislaw, sterilisation of milk with hydrogen peroxide, with special reference to Budde's process, 1905, A.,

ii, 647, 758.

Lukin, W. N. See Efim Semen London. Lukomnik, J., plasteins. I., 1907, A., i, 371.

Lukowsky, Marian. See Karl Löffler. Luksch, Alfred, condensations of o-aldehydrocarboxylic acids with ketones, 1905, A., i, 68.

Luksch, Ernst. See Hans Rupe.

Lumia, Corrado, have phosphatic and potassium manures a direct action on cultivated plants? 1903, A., ii, 176.

Lumière, Auguste, Louis Lumière, and Henri Barbier, antipyrylsemicarbazide, 1905, A., i, 475.

acetylation in aqueous solutions, 1905,

A., i, 642.

action of ethyl chlorocarbonate on aromatic glycines, 1906, A., i, 245. stability of aqueous and alcoholic solu-

tions of acetic anhydride, 1906, A.,

i. 791.

Lumière, Auguste, Louis Lumière, and J. Chevrotier, action of artificial oxydases on the tetanus toxin, 1904, A., ii, 429.

preparation and properties of protoplasmic extracts of blood corpuscles,

1905, A., ii, 642.

Lumière, Auguste, Louis Lumière, and Félix Perrin, action of chloroacetamide on some aromatic amines, 1903, A., i, 832.

action of chlorosulphonic acid on

guaiacol, 1904, A., i, 157. diethylisosuccinic acid, 1904, A., i,

action of chloroformodiethylamide on alcohols and phenols, 1904, A., i, 559.

action of dicyanodiamide on the primary aromatic amine hydrochlor-

ides, 1905, A., i, 249.

aromatic nitrocarbonic esters and their reduction products, 1905, A., i,

action of chloroformodiethylamide on nitrophenols and reduction of the corresponding derivatives, 1905, A., i. 588.

Lumière, Auguste, Louis Lumière, and Alphonse Seyewetz, solubility of trioxymethylene in solutions of sodium sulphite, 1903, A., i, 150.

Lumière, Auguste, Louis Lumière, and Alphonse Seyewetz, the acid reaction of alums, and the influence of this acidity in the action of chrome alum on gelatin, 1903, A., ii, 150.

composition of gelatin rendered insoluble by chromium salts and the theory of the action of light on gelatin in presence of chromates. Part I., 1904, A., i, 210.

hyposulphites of aromatic bases, 1905, A., i, 157.

composition of gelatin impregnated with potassium dichromate and rendered insoluble by subsequent exposure to light, 1905, A., i, 847.

composition of gelatin rendered insoluble by exposure to light in presence of chromic acid or chrom-

ates, 1905, A., i, 848. antioxidation of solutions of sodium sulphite, and anti-oxidising agents.

1905, A., ii, 379.

decomposition and preservation sodium hyposulphite as anhydrous powder and in aqueous solution, 1905, A., ii, 706.

composition of "dichromated" gelatin which has spontaneously become insoluble in the dark, 1906, A., i,

325.

the rendering insoluble of gelatin during photographic development, particularly by the use of pyrogallol developers, 1906, A., i, 614.

the rendering insoluble of gelatin by oxidation products of phenols, 1906,

A., i, 915.

action of alums and aluminium salts on gelatin, 1906, A., i, 916.

the rendering insoluble of gelatin by formaldehyde, 1906, A., i, 999. use of compounds of bases with sul-

phurous acid as photographic developers, 1907, A., i, 124.

the rendering insoluble of gelatin by benzoquinone, 1907, A., i,

573.

composition and properties of the salts formed in the fixing of silver bromide and chloride gelatin plates, 1907, A., ii, 866.

action of alkalis on organic developers,

1907, A., ii, 921.

phenomena of the "precipitation" and "insolubilisation" of gelatin, 1908, A., i, 710.

action of quinones and their sulphonic derivatives on photographic images from silver salts, 1910, A., ii, 916.

Lumière, Auguste, Louis Lumière, and Alphonse Seyewetz, differentiation by chemical development of latent images obtained by means of silver chloride and bromide emulsions, 1911, A., ii, 353.

Lumière, Louis. See Auguste Lumière. Lummel, H. J. van. See Charles Marius

van Deventer.

Lumpp, Hermann. See Julius Schmidt.
Lumsden, John Scott, a new vapour density apparatus, 1903, T., 342;
P., 40.

a new form of pyrometer, 1903, T.,

349; P., 41.

the reduction products of anisic acid,

1905, T., 87; P., 14.

the physical properties of heptoic, hexahydrobenzoic, and benzoic acids and their derivatives, 1905, T., 90; P., 14.

the liquid volume of a dissolved substance, 1906, P., 306; 1907, T., 24.

Lund, V. Koren. See Heinrich Gold-schmidt.

Lund, Wilhelm. See Julius Bredt.
Lundberg, John, condition of chromates and dichromates in aqueous solution, 1907, A., ii, 967.

hydrolysis of sodium borates, 1909,

A., ii, 978.

Lundell, Gustave Ernst Fred. See

Arthur Wesley Browne.

Lundén, Harald, catalysis of ethyl acetate by nitric acid in presence of alkali nitrates, 1904, A., ii, 719. theory of amphoteric electrolytes,

1906, A., ii, 265, 828.

relation between the coefficients of affinity and the hydrolysis of the salts of isonitrosoketones, 1907, A., ii, 443.

criteria of pseudo-acids, 1907, A., ii,

hydrolysis of the salts of weak acids and weak bases and its variations with the temperature, 1908, A., ii, 164.

influence of temperature on the internal energy and the free energy of electrolytic dissociation of weak acids and bases, 1909, A., ii, 116.

phenol and m-nitrophenol as acids, 1910, A., i, 245.

dissociation constant of tropine and its variation with temperature, 1910, A., i, 698.

dependence of the influence of neutral salts on the concentration of the acid in catalytic reactions, 1912, A., ii, 148.

Lundén, Harald, influence of salts on the solubility off ethyl acetate in water, considered as a neutral salt action, 1912, A., ii, 911.

Lundén, Harald, and D. Gardner, internal (total) and free energy in certain cases of electrolytic dissociation,

1912, A., ii, 892.

Lundén, Harald, and William Tate, simple toluene regulator and shaking machine for thermostats, 1906, A., ii, 831.

Lundeqvist, Gunnar. See Hans von Euler.

Lundsgaard, Christen, the reaction of the blood, 1912, A., ii, 777.

Lundsgaard, Christen. See also Karl Albert Hasselbalch.

Lundström, E. See Thor Ekecrantz.

Lunelund, Harald, the structure of certain spectral lines and the Zeeman effect in weak magnetic fields, 1911, A., ii, 237.

Lunge, Georg, behaviour of nitrous acid towards methyl-orange, 1903, A.,

ii, 575.

estimation of sulphur in pyrites, 1904, A., ii, 82; 1907, A., ii, 50.

volumetric analysis, 1904, A., ii, 289. analysis of sodium nitrite, 1904, A., ii, 515.

use of hydrogen chloride in volumetric analysis, 1904, A., ii, 587. estimation of sulphuric acid in the

presence of iron, 1904, A., ii, 587. application of potassium tetraoxalate in titration, 1904, A., ii, 771.

theory of the lead chamber process,

1905, A., ii, 157. estimation of combined sulphuric acid by the processes of Lunge and of

Silberberger, 1905, A., ii, 350. assay of concentrated nitric acids by the specific gravity, 1905, A., ii, 651.

Lunge, Georg, and Ernst Berl, reactions between nitric oxide and oxygen or atmospheric air, 1905, A., ii, 84.

estimation of mixtures of sulphuric and nitric acids, 1906, A., ii, 49.

oxides of nitrogen and the leadchamber process, 1906, A., ii, 438.

estimation of the oxides of nitrogen and theory of the lead-chamber process, 1907, A., ii, 863, 948.

Lunge, Georg, and Hermann Grossmann, Parr's method for estimating the heat of combustion, 1905, A., ii, 628.

Lunge, Georg, and George Paton Pollitt, preparation of sulphur trioxide by means of the contact action of iron oxide, 1903, A., ii, 70. Lunge, Georg, and K. Reinhardt, catalytic preparation of sulphur trioxide. 1904, A., ii, 724.

Lunge, Georg, and August Rittener, estimation of carbon dioxide alone or in admixture with hydrogen sulphide or chlorine, 1907, A., ii, 51.

Lunge, Georg, and R. Stierlin, estimation of sulphuric acid by means of barium chloride in the presence of interfering substances, 1906, A., ii, 124.

estimation of sulphur in reasted zinciferous pyrites and similar ores, 1906, A., ii, 195.

Lungo, Carlo del, capillary force of evaporation, 1912, A., ii, 131.

Lungwitz, P. See J. Scheiber. Luniak, Andreas, condensation products of aldehydes of the aliphatic series with phenol, 1904, A., i, 495; 1908, A., i, 416.

crotonic anhydride, 1909, A., i, 284,

action of ethyl bromoacetate and zinc on the anhydrides of monobasic acids, 1910, A., i, 90.

Luniak, Andreas. See also Fischer, and Alexander M. Saytzeff.

Lunini, Claudio. See Attilio Purgotti. Lunkenheimer, Fritz, the ratio of the intensities of the series lines of hydrogen in the canal ray spectrum, 1911, A., ii, 950; 1912, A., ii, 402.

Joseph, spectrum of silicon; spectrum of fluorine, 1905, A., ii,

presence of europium in stars, 1907, A., ii, 456.

Lurie, Mark. See Rudolf Fittig.

Lury, Justin S. de, cobaltite from Northern Ontario, 1906, A., ii, 680.

Lury, Ralph E. de, general method of calculation in kinetics: the method of areas; a method of approximate effective averages, 1906, A., ii, 729. rate of oxidation of arsenious acid by chromic acid, 1907, A., ii, 247.

the induction by arsenious acid of the reaction between chromic acid and hydriodic acid, 1907, A., ii, 247.

Lusby, S. G., experimental study of the large ions in the air, 1910, A., ii, 10. the mobility of the positive flame ion, 1911, A., ii, 245.

Lusby, S. G., and T. Ewing, rate of decay of the excited radioactivity from the atmosphere in Sydney, 1908, A., ii,

Luschnikoff. M. See Nikolaus J. Demjanoff.

Lusini, Valerio, behaviour of salol and betol towards various solvents, 1904, A., i, 397.

resolution of salol in the organism,

1904, A., ii, 359.

Lusk, Graham, inversion of sucrose in the stomach, 1904, A., ii, 187.

influence of work in phloridzin diabetes, 1907, A., ii, 188.

metabolism in phosphorus poisoning, 1907, A., ii, 799.

"specific dynamic action" of protein,

1908, A., ii, 514. influence of cold and exercise on sugar excretion in phloridzin glycosuria,

1908, A., ii, 612. production of sugar from glutamic acid ingested in phloridzin glycosuria,

1908, A., ii, 612.

fate of the amino-acids in the organism, 1910, A., ii, 520.

a method of removing glycogen from the human subject, 1911, A., ii, 215. does dextrose arise from the digestion

of cellulose? 1911, A., ii, 311. animal calorimetry. III. Metabolism after the ingestion of dextrose and fat, including the behaviour of water, urea, and sodium chloride solutions, 1912, A., ii, 1889.

Lusk, Graham, and Arthur R. Mandel, diabetes mellitus, 1905, A., ii, 187.

Lusk, Graham. See also Arthur R. Mandel, A. I. Ringer, Percy Goldthwait Stiles, and Horatio B. Williams. Lussana, Filippo. See Emil Abder-

halden.

Lussana, Silvio, thermal properties of solids and liquids, 1903, A., ii, 713; 1910, A., ii, 589.

specific heats of gases, 1906, A., ij, 70. influence of pressure and temperature on the electrolytic conductivity of solutions, 1911, A., ii, 462; 1912, A., ii, 623.

specific heat of liquids at constant pressure for different pressures and temperatures, 1912, A., ii, 1135.

Lussky, Herbert O., physiology of lymph. XI. The fractional coagulation of lymph, 1910, A., ii, 226. the acetonitrile test for thyroid sub-

stance in the blood, 1912, A., ii, 612.

Lust, Franz Alexander, anti-substances against crotin in the normal organism, 1905, A., ii, 48.

Lustig, Fritz. See Wilhelm Prandtl. Luterbacher, A. See Adolf Kaufmann. Luther, Alfred, methylene and other derivatives of m-dihydroxybenzenes,

1907, A., i, 128.

Luther, August. See Felix Benjamin Ahrens.

ner, Robert [Thomas Diedrich], hydrolysis of mercuric chloride, Luther, 1904, A., ii, 337.

the unit of combining weights, 1905,

A., ii, 448.

chemical transfer of metallic potentials, 1905, A., ii, 668.

numerical values of electrode potentials, 1906, A., ii, 5.

ozone, 1906, A., ii, 80. dissociation of sulphuric and arsenic

acids, 1907, A., ii, 610.

addition of indigo in titrations with methyl- or ethyl-orange, 1908, A., ii, 62.

a laboratory pump, 1908, A., ii, 270. thermodynamics of the cell: Hg, HgCl, PbCl₂, Pb, 1911, A., ii, 577.

Luther, Robert, and Francis Joseph Brislee, behaviour of unattackable anodes, especially in the electrolysis of hydrochloric acid, 1903, A., ii, 708.

anodic P.D.-current curve for hydrochloric acid at platinum electrodes,

1905, A., ii, 135.

Luther, Robert, and George Shannon Forbes, quantitative study of the photochemical reaction between quinine and chromic acid, 1909, A., ii,

Luther, Robert, and Emanuel Goldberg, kinetics of photochemical reactions. I. Retardation of photochemical chlorine reactions by oxygen; relation to photochemical induction and deduction, 1906, A., ii, 641.

Luther, Robert, and John Kenneth Harold Inglis, ozone as an oxidation

agent, 1903, A., ii, 406.

Luther, Robert, and B. Krsnjavi, complex compounds of carbonic acid with heavy metals, 1905, A., ii, 705.

Luther, Robert, and A. Leubner, colour of alkaline solutions of quinol and of their oxidation products, 1912, A., i, 254.

dissociation of quinhydrone in aqueous

solution, 1912, A., i, 366.

solubility of silver chloride and bromide in sodium sulphite solutions, 1912, A., ii, 450.

Luther, Robert, and Frank Henry Mac-Dougall, reaction between chloric acid and hydrochloric acid, 1906, A., ii, 436.

kinetics of the reaction between chloric and hydrochloric acids; a reaction of the eighth order, 1908, A.; ii, 361.

Luther, Robert, and Arthur C. Michie. electromotive behaviour of mixtures of uranyl and uranous salts, 1909, A., ii,

Luther, Robert, and Joh. Plotnikoff, pseudo-reversible photochemical processes; photochemical cyclic action. 1908, A., ii, 140.

Luther, Robert, and F. Pokorny, electrochemical behaviour of silver and its

oxides, 1908, A., ii, 277.

Luther, Robert, and Thomas Francis Rutter, oxidation reduction processes. I. Reduction of chromic acid, 1907, A., ii, 555.

iodometric estimation of chlorates,

1907. A., ii, 810.

Luther, Robert, and George Victor Sammet, chemical and electrical examination of the equilibria: HIO3 + 5HI $= 3I_2 + 3H_2O$ and $HBrO_3 + 5HBr$ $= 3 \text{Br}_2 + 3 \text{H}_2 \text{O}, 1905, A., ii, 508.}$

Luther, Robert, and Nikolai Schiloff, classification and theory of coupled oxidation and reduction processes,

1904, A., ii, 244.

Luther, Robert, and Fritz Weigert, reversible photochemical reactions in homogeneous systems. I. Anthracene and dianthracene, 1904, A., ii. 463: 1905, A., ii, 785.

Lutschinsky, magnetic transformation of

lead, 1909, A., ii, 641.

Latschinsky, J. J., new colour reactions of diphenylamine, 1912, 1219.

Luttringer, Armand. See Edmond Emile Blaise.

Lutz, Georg. See Fritz Straus.

Lutz, Louis, leucine and tyrosine as sources of nitrogen for plants, 1905, A., ii, 276.

comparative assimilability of ammonium salts, amides, amines, and nitriles, 1905, A., ii, 548.

the analysis of hæmoglobin, 1912, A.,

ii, 612.

comparison of "total" and "nitric" nitrogen in parasitic and sapro-1912, phytic plants,

Lutz, [Jacob] Oskar, some cases of the wandering of oxygen in the molecule. II. Action of ammonia on alkyl-substituted monobromosuccinic acids, 1903, A., i, 147.

optically isomeric malonobenzylamic

acids, 1904, A., i, 561.

[benzylmalimides], 1904, A., i, 831. Giustiniani's benzylmalimide, 1905, A., i, 191.

Lutz. [Jacob] Oskar, antimonyl potassium tartrate as a standard for iodimetry, 1906, A., ii, 577.

a new test for iron, 1907, A., ii, 581. synthesis of optically active dibenzylaspartic and dibenzylmalamic acids. 1908, A., i, 345.

use of borax, etc., beads in analysis, 1908, A., ii, 226.

partial inversion of optical antipodes, 1910, A., i, 230.

characteristic reaction of maleic acid,

1910, A., i, 879.

Lutz, Oskar, and Richard Swinne, the detection of arsenic acid in the presence of arsenious acid by means of magnesia mixture, 1909, A., ii, 1052; 1910, A., ii, 156.

Lutz, Oskar, and A. Tschischikoff, indirect estimation of carbon dioxide in

salts, 1905, A., ii, 203.

Lutzau, Gustav von. See Richard Meyer.

Lutze. See August Michaelis.

Lux, Emil. See Julius Tröger.

Lux, Paul, structure of retene, 1908, A., i, 873; 1910, A., i, 239. retene, 1910, A., i, 745.

Lux, Paul. See also Rudolf Wegscheider. Luzzatto, Alberto M., oxaluria, 1903, A., ii, 315.

behaviour of allantoin in the body,

1903, A., ii, 563.

Luzzatto, Riccardo, a case of pentosuria with excretion of optically active arabinose, 1904, A., ii, 832.

decomposition of acids of the propionic series by physiological methods,

1906, A., ii, 111.

a case of chronic pentosuria, 1908, A., ii, 1059.

Luzzatto, Riccardo, and Giuseppe Satta, behaviour of iodoso-, iodoxy-, and iodonium-compounds in the animal organism. I. Behaviour of iodosobenzene, 1910, A., ii, 433.

behaviour of iodoso-, iodoxy-, and iodonium compounds in the animal organism. II. Behaviour of iodoxybenzene, 1910, A., ii, 984.

the behaviour of o-iodoanisole in the

organism, 1911, A., ii, 1015. behaviour of p-iodoanisole in the animal organism, 1912, A., ii, 965.

Luzzatto, Riccardo. See also Riccardo

Luzzi, Enrico. See Luigi Balbiano. Lwoff, Aron, reaction between diazocompounds and azo-dyes, 1908, A., i, 483.

Lwoff, S. D., influence of enzymes on the respiration of plants, 1911, A., ii, 641. Lwoff, Viktor. See Dmitri Wagner.

Lyford, C. Allan, action of barium peroxide and hydrogen peroxide on formaldehyde, 1907, A., i, 823.

Lyford, E. F. See Alpheus Grant Woodman.

Lyle, William G. See Philip Adolph Kober.

Lyman, Henry. See Otto Folin.

Lyman, John Franklin, chemistry of muscle and liver of reptiles, 1908, A., ii, 769.

Lyman, John Franklin. See also Lafayette Benedict Mendel.

Lyman, Theodore, behaviour of a potassium amalgam cathode in a vacuum

tube, 1903, A., ii, 196. ionisation of gases by light and the

spark spectrum of aluminium in the Schumann region, 1912, A., ii, 721.

Lynch, Jordan Roche. See Nathaniel Henry Alcock.

Lynn, A. J. See Moses Gomberg.

Lyon, Elias Potter, artificial parthenogenesis, 1903, A., ii, 558.

rhythms of susceptibility and of carbon dioxide production in cleavage, 1904, A., ii, 352.

centrifugalisation of Arbacia eggs, 1906, A., ii, 179.

the catalase of echinoderm eggs before and after fertilisation, 1910, A., ii,

Lyon, Elias Potter, and L. F. Shackell, autolysis of fertilised and unfertilised echinoderm eggs, 1910, A., ii, 629.

Lyon, George, action of poisons on kidney and spleen, 1904, A., ii, 630.

Lyon, Thomas Lyttleton, and James A. Bizzell, the relation of certain nonleguminous plants to the nitrate content of soils, 1911, A., ii, 1025.

Lyon, William, approximate estimation of commercial glucose in fruit products,

1906, A., ii, 809.

Lyons, Albert Brown, certain reactions of the cinchona alkaloids, 1904, A., ii, 847.

hæmatoxylin as an indicator in the titration of phosphoric acid, 1908, A., ii, 532.

Lyons, Robert Edward, and G. C. Bush, di-a-naphthyl selenide and telluride, 1908, A., i, 417.

Lyons, Robert Edward, and Campbell C. Carpenter, chemical examination and calorimetric test of Indiana peats, 1908, A., ii, 890.

Lyons, Robert Edward, and Frederick Lafayette Shinn, estimation of selenium in organic compounds, 1903, A., ii, 326. Lythgoe, Hermann C., optical properties of castor oil, cod-liver oil, neatsfoot oil, and a few essential oils, 1905, A., ii, 619.

Lythgoe, Hermann C., and Clarence E. Marsh, the detection of benzoic acid in coffee extract, 1912, A., ii, 699.

Lythgoe, Hermann C. See also Albert Ernest Leach.

Lyttkens, H., and J. Sandgren, the distribution of reducing substances in rabbit's blood, 1910, A., ii, 785.

the distribution of reducing substances in human blood, 1911, A., ii, 301. the distribution of reducing substances

in the blood of mammals, 1911, A., ii, 994.

Lyttkens, H. See also Ivar Bang.

M.

Maag, Rudolf. See Irma Goldberg, Fritz Ullmann, and Alfred Wohl.

Maar, Vilh. See Christian Bohr.

Maaren-Jansen, A. van der. See Julius Bredt.

Maarse, J. See Andreas Smits.

Maas, Johanna, and Julius Sand, hexathiceyano-salts of molybdenum, 1908, A., i, 397, 513, 961; 1909, A., i, 637.

Maas, Johanna. See also Julius Sand. Maase, C. See Ernst Friedmann.

Mass, Emil, reduction of metanicotine with sodium and absolute alcohol, 1905, A., i, 543.

cytisine, 1908, A., i, 563.

Maass, Emil, and Adolf Hildebrandt, reduction of metanicotine with sodium and absolute alcohol. II., 1906, A., i, 980.

Maass, Otto, and Douglas McIntosh, basic properties of oxygen: compounds of the halogen acids with benzene derivatives containing oxygen, 1911, A., i, 289.

basic properties of oxygen; twocomponent systems of the halogen hydrides, with organic substances containing oxygen, 1912, A., i, 825.

Maass, Theodor A., [pharmacological] action of ββ-dichloroisopropyl carbamate (aleudrin), 1912, A., ii, 967.

Maass, Theodor A. See also Leopold Spiegel.

Maass, W. See Edgar Wedekind.
Mabery, Charles Frederic, apparatus for continuous vacuum distillation, 1903, A., ii, 266.

Mabery, Charles Frederic, and Joseph Howard Mathews, viscosity and lubrication, 1908, A., ii, 741.

Mabery, Charles Frederic, O. H. Palm, and Otto J. Sieplein, composition of petroleum. I. Hydrocarbons in Ohio Trenton limestone petroleum. II. Hydrocarbons in Canadian petroleum with high boiling points. III. Hydrocarbons in Santa Barbara crude oil. IV. Separation of solid paraffin hydrocarbons from petroleum without distillation. V. The solid paraffin hydrocarbons that collect in oil wells in Pennsylvania. VI. Composition of commercial paraffin. VII. Composition of commercial paraffin. VIII. Composition of commercial vaseline, cosmolline, and similar products, 1905, A., i, 313.

Mahery, Charles Frederic, and William O. Quayle, composition of petroleum; sulphur compounds and unsaturated hydrocarbons in Canadian petroleum.

1906, A., i, 394.

Mabery, Charles Frederic, and Lee Shepherd, method for determining the index of refraction of solid hydrocarbons with the Pulfrich refractometer; index of refraction of the solid hydrocarbons in petroleum, 1903, A., ii, 345.

McAdam, Dunlap Jamison, jun., atomic weight of vanadium, 1911, A., ii, 117.

McAdam, Dunlap Jamison, jun., and C. A. Pierle, solubility of sodium metavanadate, 1912, A., ii, 561.

McAdam, Dunlap Jamison, jun., and Edgar Fahs Smith, atomic weight of fluorine, 1912, A., ii, 549.

McAdam, Dunlap Jamison, jun. Se

also Roger Clark Wells.

Macadie, William, reactions of photo-

graphic developers with unboiled milk, 1907, A., ii, 410.

a rapid and delicate method of detecting bile-pigments in urine, 1908, A., ii. 743.

A., ii, 743.

McAfee, A. McD. See John Livingston
Rutgers Morgan.

Macallum, Archibald Bruce. See Otto

Macallum, Archibald Byron, inorganic constituents of Medusæ, 1903, A., ii, 441.

the palæochemistry of the ocean in relation to animal and vegetable protoplasm, 1904, A., ii, 495.

distribution of potassium in animal and vegetable cells, 1905, A., ii, 270.

the silver reaction in animal and vegetable tissues, 1905, A., ii, 736.

Macallum, Archibald Byron, glomerular excretion under certain conditions, 1907, A., ii, 708.

the inorganic constituents of the blood in vertebrates and invertebrates and its origin, 1910, A., ii, 970.

Macallum, Archibald Byron, and (Miss) Clara C. Benson, composition of dilute urine, 1909, A., ii, 506.

Macallum, Archibald Byron, and (Miss) M. L. Menten, distribution of chlorides in nerve cells and fibres, 1906, A., ii, 182.

Macallum, E. N. See John Cunningham McLennan.

nam mcLennan

Macara, Thomas, volumetric method for the estimation of carbon dioxide, 1904, A., ii, 516.

McBain, James William, dissociation of cadmium iodide, 1905, A., ii, 371. rate of migration of complex ions, 1906, A., ii, 145.

adsorption formulæ, 1907, T., 1683;

P., 209.

mechanism of the adsorption ("sorption") of hydrogen by carbon, 1910, A., ii, 21.

the use of phenolphthalein as an indicator; the slow rate of neutralisation of carbonic acid, 1912, T., 814; P., 106.

the dissociation of ternary electrolytes,

1912, A., ii, 893.

McBain, James William, (Miss) Elfreida Constance Victoria Cornish, and Richard Charles Bowden, studies of the constitution of soap in solution: sodium myristate and sodium laurate, 1912, T., 2042; P., 237.

McBain, James William, and Oliver Charles Minty Davis, possible general relationship between the structure of organic compounds and their equilibria,

1912, A., ii, 33.

McBain, James William, and (Miss) Clara Millicent Taylor, electrical conductivity of soap solutions, 1910, A., ii,177. constitution of soap solutions: solutions of "sodium palmitates," 1911,

A., i, 349.

Macbeth, Alexander Killen, Baly and Krulla's hypothesis of fluorescence,

1912, P., 271.

Macbeth, Alexander Killen, and Alfred
Walter Stewart, isoerucie acid, 1912,
P., 68.

Macbeth, Alexander Killen, Alfred Walter Stewart, and Robert Wright, the reciprocal influence of unsaturated centres and its effect on the general absorptive power of compounds, 1912, T., 599; P., 71.

MacBride, B. M. See Roemer Rex Renshaw.

McBride, Russel S., equilibrium in the system mercuric chloride-pyridine, 1910, A., ii, 401.

standardisation of potassium permanganate solution by sodium exalate, 1912, A., ii, 494.

McCabe, Charles K., gravimetric estimation of sulphur in iron and steel, 1905, A., ii, 761.

McCallum, James. See Arnold William

Gregory.

MacCallum, John Bruce, action of saline purgatives, 1903, A., ii, 742; 1904, A., ii, 63.

local application of saline purgatives to the peritoneal surface to the intestine, 1904, A., ii, 191.

the action of purgatives and their inhibition by calcium salts, 1904, A., ii, 755.

factors influencing secretion, 1906, A., ii, 376.

action of vegetable cathartics on the isolated centre of a jelly-fish, 1907, A., ii, 186.

McCandlish, Douglas. See Julius Berend Cohen, and Henry Richardson Procter.

McCarthy, Ellen S. See Louis Monroe Dennis.

McCaudless, J. M., and F. C. Atkinson, a bacteriological method for estimating available organic nitrogen, 1912, A., ii, 90.

McCaughey, Robert S., estimation of volatile fatty acids in fæces, 1911, A.,

ii, 666.

McCaughey, William J., effect of ferric and cupric salt solutions on gold, 1910, A., ii. 42.

McCaughey, William J. See also Frank Kenneth Cameron.

McCaw, Eloise Chesley. See Joseph Hoeing Kastle.

McCay, David, hæmosozic value of blood-serum, 1908, A., ii, 403.

McCay, David. See also William Dunbar Sutherland.

McCay, Le Roy Wiley, action of hydrogen sulphide on alkaline solutions of zine salts, 1908, A., ii, 431.

separation of tin and antimony, 1909, A., ii, 351.

analysis of tin-antimony alloys, 1910, A., ii, 1003.

McCay, Le Roy Wiley, and William Foster, jun., trithio-oxyarsenic acid, 1904, A., ii, 253, 813.

Maccioni, Enrico. See Ernesto Puxeddu.

McCleland, Nial Patrick, bimolecular glycollaidehyde, 1911, T., 1827; P., 224; 1912, P., 247.

McCleland, Nial Patrick. See also

John Edward Purvis.

McClelland. John Alexander, ionisation in atmospheric air, 1904, A., ii, 111. emanation given off by radium, 1904, A., ii, 306.

penetrating radium rays, 1904, A., ii,

secondary radiation, 1905, A., ii, 495. secondary radiation (Part II) and atomic structure, 1905, A., ii, 496. secondary β-rays, 1908, A., ii, 650.

McClelland, John Alexander, and Felix E. W. Hackett, secondary radiation from compounds. III., 1906, A., ii, 413.

absorption of β-radium rays by matter, 1907, A., ii, 420.

McClelland, W. H. See Harry Mon-

mouth Smith.

McClenahan, Frank Mitchell, constitu-tion of hydrated thallic chloride, 1904, A., ii, 661.

development of fat in the black walnut (Juglans nigra), 1909, A., ii,

McClenahan, Frank Mitchell. See also Frank Austin Gooch.

McClendon, J. F., nucleo-protein in the yolk platelets of the frog's egg; and the black pigment, 1910, A., ii, 54. echinochrome, a red substance in sea urchins, 1912, A., i, 520.

the effects of alkaloids on the development of fish (Fundulus) eggs, 1912,

A., ii, 1196.

McClendon, J. F., and Philip Henry Mitchell, how do isotonic sodium chloride solution and other parthenogenic agents increase oxidation in the sea urchin's egg? 1912, A., ii, 273.

McClung, Robert Kenning, absorption of a-rays, 1906, A., ii, 138.

McClure, C. H. See Samuel Wilson

McClure, C. W. See Roy Graham

Hoskins. McCollum, Elmer Verner. nuclein

synthesis in the animal body, 1909, A., ii, 1033.

the nature of the repair processes in protein metabolism, 1912, A., ii, 63. creatinine excretion of the pig, 1912,

A., ii, 72. a comparison of the nutritive value of the nitrogen of the oat and wheat grains for the growing pig, 1912, A., ii, 366.

McCollum, Elmer Verner, the relation between nitrogen retention and rise of creatinine excreted during growth in the pig, 1912, A., ii, 866.

McCollum, Elmer Verner, and W. A. Brannon, disappearance of pentosans from the digestive tract of the cow.

1909, A., ii, 1033.

McCollum, Elmer Verner, and J. G. Halpin, synthesis of lecithin in the

hen, 1912, A., ii, 368.

McCollum, Elmer Verner, and Educin Bret Hart, a phytin-splitting enzyme in animal tissues, 1908, A., ii, 713.

experiments in feeding "dissected"

milk, 1912, A., ii, 365.

McCollum, Elmer Verner. See also Edward Bartow, Edwin Bret Hart,

and Treat Baldwin Johnson.

McCombie, Hamilton, and John Wilfrid Parkes, the condensation of a-ketoβ-anilino-aβ-diphenylethane and its homologues with ethyl chlorocarbonate and thionyl chloride, 1912, T., 1991;

McCombie, Hamilton, and (Miss) Ethel Parry, condensations of cyanohydrins. Part I. Condensation products from anisaldehydecvanohydrin and cinnamaldehydecyanohydrin, 1909, T., 584;

P., 95.

Hamilton, and Harold McCombie. Archibald Scarborough, the condensaof a-keto-\(\beta\)-anılino-\(\alpha\)-phenylethane and its homologues with carbonyl chloride, phenylcarbimide and phenylthiocarbimide, 1912, P.,

McCombie, Hamilton. See also Clement William Bailey, Sidney Albert Brazier, Horace Leslie Crowther, and Arthur Ernest Everest.

MacConkey, Alfred, lactose fermenting bacteria in fæces, 1905, A., ii, 601. liquefaction of gelatin by Bacillus

cloque, 1906, A., ii, 113. bacteriology of milk, 1906, A., ii, 699. differentiation of lactose-fermenting bacilli, 1909, A., ii, 510.

McConnan, James, 1-phenyl-3:4-5-trimethylpyrazole, 1904, A., i, 940.

disalicylamide, 1907, T., 196; P., 18.

McConnan, James, and Morris Edgar

Marples, benzoyl derivatives of Nmethylsalicylamide, 1907, T., 193;

McConnan, James, and Arthur Walsh Titherley, labile isomerism among acyl derivatives of salicylamide, 1906, T., 1318; P., 238.

McCov, Herbert Newby, equilibrium in the system composed of sodium carbonate, sodium hydrogen carbonate, carbon dioxide, and water, 1903, A, ii, 413.

ionisation constants of phenolphthalein and the use of this substance as an indicator, 1904, A., ii, 512.

origin of radium, 1904, A., ii, 528. an improved portable gas generator,

1904, A., ii, 555. radioactivity as an atomic property,

1905, A., ii, 366. relation between the radioactivity and

the composition of uranium compounds, 1906, A., ii, 142.

two new methods for the determination of the secondary ionisation constants of dibasic acids, 1908, A., ii, 466.

relation between the ionising power and the dielectric constants of solvents, 1908, A., ii, 657.

McCoy, Herbert Newby, and George C. Ashman, preparation of urano-uranic oxide and a standard of radioactivity, 1909, A., ii, 148.

McCoy, Herbert Newby, and Herbert Horace Bunzel, speed of oxidation, by air, of uranous solutions; volumetric estimation of uranium, 1909, A., ii, 406.

volumetric estimation of uranium,

1909, A., ii, 441.

McCoy, Herbert Newby, and Henry Max Goettsch, absorption of the a-rays of

uranium, 1907, A., ii, 5.

McCoy, Herbert Newby, and William C. Moore, organic amalgams; substances with metallic properties composed in part of non-metallic elements, 1911, A., i, 270.

McCoy, Herbert Newby, and William H. Ross, relation between radioactivity and composition of thorium compounds, 1906, A., ii, 415.

specific radioactivity of uranium,

1908, A., ii, 80.

specific radioactivity of thorium and the variation of the activity with chemical treatment and with time, 1908, A., ii, 81.

McCoy, Herbert Newby, and Herbert J. Smith, equilibrium between alkaliearth carbonates, carbon dioxide, and

water, 1911, A., ii, 380.

McCoy, Herbert Newby, and Charles Darwin Test, equilibrium between sodium carbonate, sodium hydrogen carbonate, and water. II., 1911, A., ii, 379.

McCoy, Herbert Newby, and Franklin West, physical and chemical properties of some organic amalgams, 1912, A., i, 539.

McCrackan, Robert F. See Floyd Jay

Metzger.

William, McCracken, catalysis. Catalysis of imino-esters, 1908, A., ii, 572.

McCrae, John, the rotatory power of maldiamide, maldi-n-propylamide, and maldibenzylamide, 1903, T., 1324; P., 230.

interaction between chloric and hydr-

iodic acids, 1903, P., 225.

analyses of some animal excrements, 1905, A., ii, 348.

Kobert's reagent as a test for salicylic

acid, 1911, A., ii, 1142.

McCrae, John, and William E. Wilson. distribution of sulphur dioxide between water and chloroform, 1903, A., ii, 474.

McCrea, R. H., deduction from van der Waal's equation, 1907, A., ii, 240. isomerism of ethyl acetoacetate, 1908,

A., i, 759. modified chlorine absorption appara-

tus, 1910, A., ii, 344.

McCrea, R. H., and A. Wilson, ignition point of sulphur, 1907, A., ii, 679.

McCrudden, Francis H., behaviour of uric acid in urine and the effect of alkalis on the solubility of uric acid in urine, 1904, A., ii, 358.

composition of bone in osteomalacia,

1906, A., ii, 783.

effect of castration on metabolism in osteomalacia, 1906, A., ii, 876.

effect of castration on metabolism, 1908, A., ii, 405; 1910, A., ii, 321.

quantitative separation of calcium and magnesium in the presence of phosphates and small amounts of iron, devised especially for the analysis of foods, urine, and fæces, 1910, A., ii, 243.

chemical analysis of a bone from a case of human adolescent osteomalacia,

1910, A., ii, 330.

the excretion of morphine under the influence of intestinal irritants, 1910, A., ii, 528.

the products resulting from the putrefaction of fibrin by Clostridium carnofætidus, and the Rauschbrand bacillus, 1910, A., ii, 988.

a glucose-protein compound in Ascaris lumbricoides, 1911, A., ii, 415.

albumin and globulin in the ovaries of Barbus fluviatus and the pike, 1911, A., ii, 415.

McCrudden, Francis H., the toxic action of certain fish ovaries, 1911, A., ii, 421.

estimation of calcium in the presence of magnesium and phosphates; estimation of calcium in urine, 1911, A., ii, 1136.

McCrudden, Francis H. See also J. E. Goldthwait.

McCutcheon, Thomas P., jun., results in electro-analysis, 1907, A., ii, 988.

McCutcheon, Thomas P., jun., and Edgar Fahs Smith, electrolysis of metallic chloride solutions with the use of rotating silver anode and mercury cathode, 1907, A., ii, 988.

McDaniel, Alonzo Simpson, absorption of hydrocarbon gases by non-aqueous

liquids, 1911, A., i, 829.

McDaniel, Alonzo Simpson. See also

Louis Kahlenberg.

McDavid, James Wallace, equilibrium in the ternary system: water, potassium carbonate, potassium ethyl dipropylmalonate, 1910, A., ii, 837.

specific volume of solutions of tetrapropylammonium chloride, 1912, A.,

ii, 433.

McDavid, James Wallace, William Henry Perkin, jun., and Robert Robinson, the exhaustive alkylation of tetrahydroberberine, 1912, T., 1218; P.,

McDermott, F. Alex., preparation of platinum-black, 1910, A., ii, 304. new modification of the Kipp gas

generator, 1910, A., ii, 947. luciferesceine, the fluorescent material present in certain luminous insects,

1911, A., i, 396.

some experiments on the formation of ammonia from its elements, 1911,

A., ii, 389.

hippuric acid as the cause of the failure of the spectroscopic test for hæmoglobin in urine, 1911, A., ii,

stability of the photogenic material of the Lampyride and its probable chemical nature, 1911, A., ii, 1113.

preparation of stanuic iodide and its solubility in certain organic solvents, 1912, A., ii, 53.

McDermott, F. Alex. See also Joseph Hoeing Kastle, and Norman Roberts. McDole, Guy R. See Frederick Jacob

Alway, and Samuel Avery.

McDonald, David Paterson, nature of the clay-substance of fireclay of Glenboig, Lanarkshire, 1910, A., ii, 723.

McDonald. David Paterson. See also Thomas Stewart Patterson.

Macdonald, George Grant, opsonic content of the serum in the course of acute pneumonia, 1906, A., ii, 296.

Macdonald, John Smyth, basophil granules in nerve, 1905, A., ii, 405.

migration of potassium and the injury

current, 1905, A., ii, 545. chlorides in nerve-fibres, 1907, A., ii,

contraction of striated muscle, 1908,

A., ii, 712. calorimetric observations on man, 1912,

A., ii, 462. Macdonald, John Smyth, and F. F.

Finch, potassium salts in nerve-fibres, 1907, A., ii, 637.

Macdonald, W. Kelman, fat removal in peripheral nerve-degeneration, 1911, A., ii, 1006.

MacDougall, Frank Henry, salt solutions and the law of mass action, 1912, A., ii. 826.

MacDougall, Frank Henry. See also Robert Luther.

Macé de Lépinay, Jules [Charles Antonin], the possibility of showing by a contrast phenomenon the objective action of n-rays on luminous calcium sulphide, 1904, A., ii, 307.

MacEwen, Basil Charles. See Alexander Thomas Cameron, and Otto Flaschner.

Macfadyen, Allan, influence of the prolonged action of the temperature of liquid air on micro-organisms, and the effect of mechanical trituration at the temperature of air on photogenic bacteria, 1903, A., ii, 167.

Macfadyen, Allan, and Sydney Rowland, intracellular toxin of the typhoid

bacillus, 1903, A., ii, 168.

McFarland, David Ford. See Hamilton Perkins Cady, Treat Baldwin Johnson. and Henry Lord Wheeler.

McFarlane, John, and Arnold William Gregory, modified evolution method for the estimation of sulphur in pigiron, 1906, A., ii, 390.

estimation of carbon dioxide and carbon, 1906, A., ii, 802.

McGeorge, William, occurrence of lactic acid in sisal, 1912, A., ii, 1204.

McGill, Anthony, direct estimation of free carbon dioxide in natural waters, 1904, A., ii, 367.

McGougan, A. G. See Henry Andrews

Bumsted.

McGowan, George, and Robert Brooke Floris, estimation of arsenic in fuels, 1905, A., ii, 354.

McGowan, John Pool, simple method for filling toluene thermoregulators. 1909, A., ii, 380.

the fate of hen's corpuscles when injected intravenously in rabbits, 1910,

A., ii, 317.

origin of immune substance, 1911, A., ii, 309.

McGrath, S. J. See William Maurice

Dehn.

McGuigan, Hugh, decomposition-tension

of salts and their anti-fermentative properties, 1904, A., ii, 248.

the oxidising power of various sugars and the oxidising power of different tissues, 1907, A., ii, 636.

utilisation of sugars by the tissues,

1908, A., ii, 406.

glycolysis, 1908, A., ii, 406.

adrenalectomy and glycosuria, 1910, A., ii, 630.

excretion of formaldehyde, ammonia, and hexamethylenetetramine, 1912, A., ii, 371.

McGuigan, Hugh, and Clyde Brooks, the mechanism of experimental glycosuria,

1907, A., ii, 376.

McGuigan, Hugh, and C. L. von Hess, glycolysis as modified by removal of the pancreas and by the addition of antiseptics, 1912, A., ii, 368, 787.

McGuigan, Hugh. See also Albert

Prescott Mathews.

McGuire, J., the feeding of the frog's heart, 1906, A., ii, 39.

Mach, Felix, poppy and poppy-seed cake, 1903, A., ii, 175.

solubility of soil constituents, 1905,

A., ii, 54.

determination of the strength of solutions employed in nitrogen determinations, 1906, A., ii, 49.

estimation of citrate-soluble and total phosphoric acid in basic slag, 1906, A., ii, 50.

estimation of phosphoric acid in manures, 1907, A., ii, 395.

Mach, Felix. See also Th. Dietrich.

McHargue, James S. See Joseph Hocing
Kastle.

Mache, Heinrich, radioactivity of the Gastein thermal springs, 1905, A., ii, 367.

Mache, Heinrich, and Stefan Meyer, radioactivity of the Bohemian mineral springs: Karlsbad, Marienbad, Teplitz-Schönau-Dux, and Franzensbad, and of St. Joachimsthal, 1905, A., ii, 498.

radioactivity of some springs in the Southern Viennese thermal zone,

1905, A., ii, 787.

Mache, Heinrich, and Stefan Meyer, radium standards, 1912, A., ii, 520.

Mache, Heinrich, and Travis Rimmer, disintegration products of radium in the atmosphere, 1907, A., ii, 3.

Machenbaum, Stanislaus, Brazilian copal, 1912, A., i, 123.

Columbia copal, 1912, A., i, 124.

Machida, S., influence of calcium and magnesium salts on certain bacterial actions, 1906, A., ii, 380.

Machiedo, L. See Ludwig Moser.

Macht, David I. See John Jacob Abel. McIlhiney, Parker Cairns, the bromine absorption of oils, 1903, A., ii, 340.

MacInnes, Duncan A. See Edward W. Washburn.

Macintire, B. G. See James Flack Norris.
McIntire, W. H., a modified drying tube, 1911, A., ii, 329.

McIntosh, Douglas, potential differences with saturated solutions, 1903, A.,

ii, 526.

the basic properties of oxygen at low temperatures; additive compounds of the halogens with organic substances containing oxygen, 1905, T., 784; P., 64, 120, 226.

basic properties and the quadrivalence

of oxygen, 1905, A., i, 254.

basic properties of oxygen: compounds of organic substances containing oxygen with nitric, sulphuric, and chlorosulphonic acids, 1905, A., i, 677.

basic properties of oxygen; additive compounds of the halogen acids and organic substances containing oxygen, 1906, A., i, 481.

physical properties of liquid and solid

acetylene, 1907, A., i, 458.

basic properties of oxygen, 1908, A., i, 596.

heat of formation of quadrivalent oxygen compounds, 1908, A., ii, 355. basic properties of oxygen; compounds of dimethylpyrone and the halogen hydrides, 1910, A., i, 331.

basic properties of oxygen: compounds with bromine and iodine, 1910, A.,

i, 808.

two-component systems. I. Etherhydrobromic acid, ether-chlorine, and ether-bromine, 1911, A., i, 256.

McIntosh, Douglas, and Frederick Murray Godschall Johnson, an amalgam thermometer, 1912, A., ii, 827. McIntosh, Douglas, and Bertram Dillon

conducting solvents. I., 1904, A., ii, 533.

McIntosh, Douglas, and Bertram Dillon Steele, liquefied hydrides of phosphorus, sulphur, and the halogens as

See also Ebenezer McIntosh, Douglas. Henry Archibald, Howard Turner Barnes, P. H. Elliott, Arthur Stewart Eve, Otto Maass, Frederick Murray Godschall Johnson, Bertram Dillon Steele, and James Wallace Walker.

MacIvor, Ralph Waldo Emerson, antimony pentaiodide, 1903, A., ii, 154. certain tellurium minerals and the action of sulphur monochloride on

them, 1903, A., ii, 205.

gravimetric estimation of tellurium, 1903, A., ii, 328.

Mack, Wilhelm Robert, peptone in plant seeds, 1904, A., ii, 762; 1905, A., ii, 474.

Mackarell, William Wright, Benjamin Moore, and William Thelwall Thomas, the presence of insoluble salts of calcium (oxalate and phosphate) in renal calculi in large amount in a preponderating number of cases, and the bearing of this finding on calcium metabolism in gout and allied conditions, 1910, A., ii, 732.

MacKay, George Moir Johnstone, hydroxylamine, 1907, A., ii, 540.

transference experiments with mixtures of potassium chloride and sulphate in aqueous solution, 1911, A., ii, 366.

MacKay, George Moir Johnstone. See also William Crowell Bray.

McKee, James L. See Emil Fromm. McKee, Ralph Harper, preparation of cyanamides, 1906, A., i, 732. oxygen ethers of the dialkylcarbamides,

1909, A., i, 635.

ethyl cyanoanilide-o-carboxylate, 1912, A., i, 139.

McKee, Ralph Harper, and Elvin J. Berkheiser, water of crystallisation as affected by light, 1908, A., ii, 1003. McKelvy, E. C. See N. S. Osborne.

McKendrick, Anderson Gray, chemical dynamics of serum reactions, A., ii, 618.

McKenna, Charles F., testing fire-proof

wood, 1903, A., ii, 516.

McKenzie, Alexander, the esterification of r-mandelic acid by menthol and borneol, 1904, T., 378; P., 41.

studies in asymmetric synthesis. I. Reduction of menthyl benzoylformate. II. Action of magnesium alkyl haloids on menthyl benzoylformate, 1904, T., 1249; P., 178.

studies in asymmetric synthesis. The asymmetric synthesis of l-lactic acid; the optical activity of fermentation lactic acid, 1905, T.,

1373; P., 224.

McKenzie, Alexander, studies in asymmetric synthesis. IV. The application of Grignard's reaction for asymmetric syntheses, 1906, T., 365; P., 61.

configuration of the stereoisomeric dibromosuccinic acids, 1911, P., 150; 1912, T., 1196; P., 160.

McKenzie, Alexander, and Fred Barrow, experiments on the Walden inversion. Part VII. Action of phosphorus pentachloride and of thionyl chloride on optically active hydroxy-acids and esters, 1911, T., 1910; P., 232.

McKenzie, Alexander, and George William Clough, the displacement of halogen in l-phenylchloroacetic acid by hydroxy- and methoxy-groups; a contribution to the chemistry of the Walden inversion, 1908, T., 811; P., 91; discussion, P., 92.

experiments on the Walden inversion. Part II. The interconversion of the optically active mandelic acids, 1909, T., 777; P., 70.

experiments on the Walden inversion. Part IV. The interconversion of the optically active phenylmethylglycollic acids, 1910, T., 1016; P.,

experiments on the Walden inversion. Part VI. Conversion of the optically active a-hydroxy-a-phenylpropionic acids into a-chloro-a-phenylpropionic acids, 1910, T., 2564; P.,

experiments on the Walden inversion. Part VIII. a-Amino-a-phenylpropionic acids, 1912, T., 390; P., 40.

McKenzie, Alexander, and Arthur Harden, the biological method for resolving inactive acids into their optically active components, 1903, T., 424 ; P., 48.

McKenzie. Alexander, and Herbert Brooke Perren Humphries, studies in asymmetric synthesis. Part VIII. The asymmetric synthesis of l-mandelic acid, 1909, T., 1105; P., 164.

experiments on the Walden inversion. Part III. Optically active B-hydroxy-B-phenylpropionic acids and the β-bromo-β-phenylcorresponding propionic acids, 1910, T., 121; P., 7.

McKenzie, Alexander, and Geoffrey Martin, optically active glycols derived from the phenyl-lactic acids. Part I., 1912, P., 326.

McKenzie, Alexander, and Hermann August Müller, racemisation by alkali as applied to the resolution of r-mandelic acid into its optically active isomerides, 1907, T., 1814; P., 234.

studies in asymmetric synthesis. Part VII. The influence of the d-amyl group, 1909, T., 544; P., 88.

McKenzie, Alexander, and Herbert Bryan
Thompson, racemisation phenomena
during the hydrolysis of optically
active menthyl and bornyl esters
by alkali, 1905, T., 1004; P.,
184.

measurements of the velocities of saponification of the *l*-menthyl and *l*-bornyl esters of the stereoisomeric mandelic acids, 1907, T., 789; P., 113.

McKenzie, Alexander, and Henry Wren, studies in asymmetric synthesis. V. Asymmetric syntheses from l-bornyl pyruvate, 1906, T., 688; P., 107.

studies in asymmetric synthesis. The asymmetric synthesis of the optically active tartaric acids, 1907, T., 1215; P., 188.

the preparation of l-benzoin, 1908, T., 309; P., 25; discussion, P., 25.

optically active glycols derived from l-benzoin and from methyl l-mandelate, 1910, T., 473; P., 54.

experiments on the Walden inversion.
Part V. The interconversion of the optically active α-hydroxy-β-phenylpropionic acids, 1910, T., 1355; P., 181.

Mackenzie, Arthur Stanley, deflexion of a-rays from radium and polonium, 1905, A., ii, 790.

secondary radiation from a plate exposed to rays from radium, 1907, A., ii, 596.

Mackenzie, Arthur Stanley. See also Henry Jermain Maude Creighton. Mackenzie, Alister Thomas. See (Sir)

Mackenzie, Alister Thomas. See (Sir)
Thomas Richard Fraser.

McKenzie, Colin Ernest. See Friedrich William Semmler.

McKenzie, Ivy. See Carl Hamilton Browning.

Mackenzie, John Edwin, a simple lecture experiment to illustrate simultaneously three stages of oxidation, 1909, A., ii, 393.

dimethoxyphenyl-p-tolylmethane; preliminary note, 1910, P., 170.

methylethylammonium chlorides, 1912, A., i, 9.

Mackenzie, John Edwin, and Alfred Francis Joseph, the action of sodium methoxide and its homologues on benzophenone chloride and benzylidene chloride. Part II., 1904, T., 790; P., 124; discussion, P., 125.

Mackenzie, John Edwin, and Hugh Marshall, the trithionates and tetrathionates of the alkali metals. Part

I., 1908, T., 1726; P., 199.

Mackenzie, James F., and Leonard

Frskine Hill, the influence of alcohol
on the power to hold the breath and

work, 1910, A., ii, 1079.

Mackenzie, James F. See also Leonard Erskine Hill.

McKenzie, Kenneth. See Alfred Archibald Boon.

Mackenzie, Kenneth, mechanism of milk secretion, 1912, A., ii, 184.

Mackenzie, Kenneth Gerard. See Treat Baldwin Johnson, and Clifford Richardson.

Mackenzie, Thomas Dingwall. See Frederick Soddy.

Mackey, John Francis, some esters of antimony trioxide, 1909, T., 604; P., 98.

Mackey, John Francis. See also William Robert Lang.

Mackie, Alexander Hendry. See John Alexander Macwilliam.

McKie, J. F. See Anton Julius Carlson.

Mackie, William, presence of heavy
metals in sandstones, 1904, A.. ii, 53.
estimation of carbon dioxide in air,
1905, A., ii, 355.

Mackie, William Campbell. See Diarmid Noël Paton.

McLachlan, John, study of the reactions of hydrogen peroxide, 1903, P., 216; discussion, P., 217.

M'Lachlan, William, excretion of allantoin in thymus feeding, 1906, A., ii, 470.

McLauchlan, William Henry, influence of salts on the solubility in water of hydrogen sulphide, iodine, and bromine, 1903, A., ii, 716.

McLaughlin, C. B. See Henry Clapp Sherman.

Maclaurin, James Scott, occurrence of pentathionic acid in natural waters, 1910, P., 10.

Maclaurin, Jumes Scott, and Willie Donovan, rapid estimation of iron in iron ores, 1909, A., ii, 833.

MacLaurin, Robert Dawson. See Charles

Loring Jackson.

McLean, F. C. See Anton Julius Carlson.

Maclean, Hugh, action of muscarine and pilocarpine on the heart, 1904, A., ii, 758; 1909, A., ii, 254. Fehling's test for dextrose in urine,

1906, A., ii, 255.

influence of creatinine in modifying the reactions of sugar in urine, 1907, A., ii, 406.

some applications of safranine as a test for carbohydrates, 1907, A., ii,

the quantitative recovery of choline from lecithin, 1908, A., i, 396.

a monoaminodiphosphatide in eggyolk, 1908, A., ii, 963; 1909, A., ii, 499.

amount of choline in the lecithin of heart muscle, 1908, A., ii, 967.

the nitrogen of lecithin and other phosphatides, 1909, A., i, 128, 547. the lecithin of egg-yolk, 1909, A., i, 282.

estimation of oxalic acid in urine,

1909, A., ii, 524.

the relationship of diastatic efficiency to average glycogen content in tissues and organs, 1910, A., ii,

the phosphatides of the kidney, 1912, A., ii, 1191.

purification of phosphatides, 1912, A., ii. 1192. MacLean, Hugh, and Lancelot Hutchin-

son, hæmolytic action of certain bile derivatives, 1909, A., ii, 816. Thomas

MacLean, Hugh, and Owen Williams, the so-called fat of tissues and organs, 1910, A., ii, 142.

MacLean, Hugh. See also Arthur Harden.

McLellan, Basil Gordon. See Samuel Henry Davies.

McLennan, John Cunningham, radioactivity of lead and other metals, 1907, A., ii, 731.

radioactivity of ordinary metals and the penetrating radiation from the

earth, 1908, A., ii, 648.

the electric charges acquired in high vacua by insulated potassium salts and other radioactive substances, 1910, A., ii, 678.

the diffusion of actinium emanation and the active deposit produced by

it, 1912, A., ii, 889.

series lines in the arc spectrum of mercury, 1912, A., ii, 1016.

constitution of the mercury green line $\lambda = 5461$ and the magnetic resolution of its satellites by an echelon grating, 1912, A., ii, 1017.

McLellan, John Cunningham, and E. F. Burton, radioactivity of metals generally, 1903, A., ii, 621.

McLennan, John Cunningham, and W. T. Kennedy, radioactivity of potassium and other alkali metals, 1908, A., ii,

750.

McLennan, John Cunningham, and E. N. Macallum, the intensity of the earth's penetrating radiation at different altitudes and a secondary radiation excited by it, 1911, A., ii, 960.

McLeod, A. F., aldol, pentaerythrose, and the action of copper acetate on the

hexoses, 1907, A., i, 172.

Macleod. (Miss) Annie Louise, comparison of certain acids containing a conjugated system of double linkings, 1910, A., i, 845.

Macleod, (Miss) Annie Louise. See also

Elmer Peter Kohler.

Macleod, John James Rickard, temperature and carbon dioxide excretion in rats kept in very moist or very dry atmospheres, 1907, A., ii, 184.

action of muscle juice on the heart,

1907, A., ii, 793.

experimental glycosuria. I., 1907,

A., ii, 800.

experimental glycosuria. II. Glycogenolytic fibres in the great splanchnic nerve, 1908, A., ii, 770.

experimental glycosuria. IV. Cause of the hyperglycæmia produced by asphyxia, 1909, A., ii, 168.

estimation of reducing substances in blood, 1909, A., ii, 442.

post-mortem glycogenolysis, 1909, A.,

Macleod, John James Rickard, and J. Dolley, experimental glycosuria, 1905, A., ii, 544.

Macleod, John James Rickard, and Howard D. Haskins, estimation of carbamates, 1905, A., ii, 123.

carbamates, 1906, A., ii, 377.

endogenous purine excretion in man,

1906, A., ii, 874.

Macleod, John James Rickard, and R. G. Pearce, experimental glycosuria. V. The distribution of glycogenolytic ferment in the animal body, especially of the dog, 1910, A., ii, 144.

experimental glycosuria. VI. The distribution of glycogen over the liver under various conditions; post-mortem glycogenolysis, 1911 A., ii, 219.

Macleod. John James Rickard, and R. G. Pearce, experimental glycosuria. VII. The amount of glycogenase in the liver and in the hepatic blood as affected by stimulation of the splanchnic nerve, 1911, A., ii, 1009.

studies in experimental glycosuria. VIII. The relationship adrenal glands to sugar production by the liver, 1912, A., ii, 371.

Macleod, John James Rickard, and H. O. Ruh, experimental glycosuria. III. Influence of stimulation of the great splanchnic nerve when the liver is deprived of its blood supply, 1908, A., ii, 770.

Macleod, John James Rickard. See also William Bulloch, and Leonard Erskine

McLester, James S. See Emil Abderhalden.

McLintock, W. F. P., datolite from the Lizard district, Cornwall, 1910, A., ii,

McMahon, Charles Alexander, bowenite from Kashmir, 1903, A., ii, 303.

MacMahon, Patrick Sarsfield. David Leonard Chapman.

McMaster, LeRoy. See Harry Clary Jones, and Edward Harrison Keiser.

McMillan, Andrew. See Thomas Stewart Patterson, and Paul Rabe.

William D. See William McNally, Jay Hale.

McNamara, W. See Charles Olden Bannister.

James Gibson, Bacillus McNaught. typhosus simulans, 1906, 190.

McNeil, H. C., constitution of certain natural silicates, 1906, A., ii, 457.

McNicoll, David. See James Colguhoun Irvine.

Macnider, William de B., and Samuel A. Matthews, action of magnesium sulphate on the heart, 1907, A., ii, 981.

McPhedran, Fletcher, the hæmolytic power of fatty acid, 1912, A., ii, 371.

McPherson, R. H. See William Lash

MacPherson, Warren. See Henry Augustus Torrey.

MacPherson, William, and Cecil Boord, action of substituted hydrazines on Borthotoluquinone, 1911, A., i, 818.

McPherson, William, and Wilbur L. Dubois, action of a-benzoylphenylhydrazine on halogen derivatives of quinones, 1908, A., i, 461.

McPherson, William, and H. J. Lucas, action of unsymmetrical benzoylphenylhydrazine on o-benzoquinone. 1909, A., i. 193.

Macquaire, Paul, tyrosine as an agent for the fixation of iodine in the preparation of iodopeptones, 1912,

A., i, 58.

Itwo compounds formed by iodine and tyrosine obtained by the tryptic hydrolysis of proteins], 1912, A., i, 354.

MacRae, Duncan. See James Edward Mills.

MacRae, J. A. See W. O. Walker. Macri, V., analysis of iron ores and slags, 1906, A., ii, 495.

Macri, V. See also Augusto Chwala.

Macumber, R. H., and Charles George Lewis Wolf, an electrically heated and controlled thermostat, 1904, A., ii, 805.

McWeeney, Edmond Joseph, the value of benzidine for the detection of minute traces of blood, 1910, A., ii, 84.

McWhorter. John E. See John Livingston Rutgers Morgan.

McWilliam, Andrew, and Ernest J. Barnes, some physical properties of 2% chromium steels, 1910, A., ii, 1071.

influence of 0.2% vanadium on steels of varying carbon content, 1911, A., ii, 1092.

heat-treated 3% nickel steels, 1911, A., ii, 1092.

MacWilliam, John Alexander, action of certain oxidising agents on blood pigments, 1908, A., i, 585.

MacWilliam, John Alexander, Alexander Hendry Mackie, and Charles Murray, intravascular injection of salts and nucleo-protein, 1904, A., ii, 195.

Maddalena, L:, new vein of nephelitic basalt containing nosite (nosean) in Vincentino, 1908, A., ii, 864.

chemico-mineralogical observations on beryls from Elba, 1912, A., ii, 775.

Maddocks, W. H. See Lionel Guy Radcliffe.

Madelung, Walter, mixed narcosis and combined narcosis, 1910, A., ii, 529.

strongly coloured holo- and meriquinonoid imonium salts of benzidine and their use for determining the active value of oxidising agents, 1911, A., i, 323.

relation of hæmoglobin derivatives and peroxydases to inorganic cata-

lysts, 1911, A., i, 411. holo- and meri-quinonoid salts of benzidine, 1911, A., i, 678.

Madelung, Walter, new method of preparation of substituted indoles, 1912,

A., i. 499.

Maderna, Gaetano, the precipitation of ammonium phosphomolybdate in presence of organic acids, 1910, A., ii, 804.

precipitation of arsenic acid by ammonium molybdate, 1910, A., ii, 896. detection of arsenic acid in presence of phosphoric acid, 1910, A., ii, 896.

rotatory power of tartaric and malic acids in presence of ammonium molybdate and sodium phosphate,

1910, A., ii, 915.

Maderna, Gaetano, and Giulio Coffetti, estimation of nitrous acid and its separation from nitric acid, 1907, A., ii, 812.

Maderna, Gaetano. See also Giulio

Coffetti.

Madinaveitia, Antonio, analysis of fats, 1912, A., ii, 816.

Madinaveitia, Antonio. See also Richard

Willstätter.

Madsen, Erik Höst, condensation of aldehydes with phenolcarboxylic acids, 1907, A., i, 423; 1909, A., i, 162. the herapathite reaction, 1907, A., ii,

Madsen, John Percival Vissing, secondary γ-radiation, 1909, A., ii, 365.

the scattering of the β -rays of radium, 1910, A., ii, 7.

Madsen, John Percival Vissing. See also William Henry Bragg.

Madsen, Thorvald, toxins and anti-toxins. IV., 1905, A., ii, 407. Madsen. Thorvald, and Hideyo Noguchi,

toxins and anti-toxins. II. and III., 1905, A., ii, 407.

Madsen, Thorvald, and Osv. Streng, influence of temperature on the de-composition of "anti-substances" (agglutinins), 1910, A., ii, 319.

Madsen, Thorvald, and L. Walbum, toxins and anti-toxins. I., 1905,

A., ii, 407.

Madsen. Thorvald. See also Svante Arrhenius.

Mäkelt, Ehrhart. See Herbert Freund-

Makinen, Eero, estimation of alkalis in silicates by fusion with calcium chloride, 1912, A., ii, 297.

Maetzke, Georg, digestion in dogs with artificial anus, 1905, A., ii, 837.

Maey, [Hermann Rudolf] Eugen, specific volume as the determining criterion of chemical combination in metal alloys. II., 1905, A., ii, 146.

Maffezzoli, Francesco. See Ludwig Gattermann, and Conrad Willgerodt.

Maffia, Paul, equilibrium in the adsorption by Graham's ferric oxide hydrosol, 1912, A., ii, 145.

Maffia. Paul. See also Alfred Lottermoser.

Maggi, Giovanni. See Luigi Frances-

Maggiacomo, F. See Francesco Carlo Palazzo.

Magie, William F., specific heat of solutions, 1910, A., ii, 265.

Magini, R., ultra-violet absorption spectra of ortho-, meta-, and paraisomerides. I., 1903, A., ii, 706; 1904, A., ii, 107.

ultra-violet rays and stereochemical isomerism, 1904, A., ii, 107. ultra-violet spectra of a tautomeric

compound, 1904, A., ii, 305.

measurement of surface tension by the method of maximum pressure of small bubbles, 1910, A., ii, 932.

measurements of surface tension, 1911, A., ii, 258.

Magli, Gennaro. See Arnaldo Piutti.

Magnan, A., properties of the pigments from batrachians, 1907, A.; ii, 566. Magnanimi, Roberto, the influence of

hydrocyanic acid on the excretion of sulphur in the urine, 1912, A., ii, 71. Magnanini, Gaetano, determination of

the hardness of waters, 1906, A., ii,

observations not in good agreement with the existence of atoms and molecules, 1911, A., ii, 710.

the alleged colour of the ions, 1912,

A., ii, 142.

Magnanini, Gaetano, and Adolfo Venturi, inversion of sugar in plastered wines, 1903, A., ii, 231.

Magnier de la Source, Louis. See Antoine Villiers.

Magnin, Georges, new method for the destruction of organic matter by bromine, specially applicable in toxicology, 1911, A., ii, 1035.

Magnus, Alfred, measurement of specific

heats, 1910, A., ii, 262.

calculation of electromotive forces from thermal measurements, 1910, A., ii, 581.

Magnus, Alfred, and F. A. Lindemann, relation between the specific heats of solid substances and temperature, 1910, A., ii, 580.

Magnus, Rudolf, lipase of the liver, 1904, A., ii, 628.

the surviving intestine, 1905, A., ii, 466.

Magnus, Rudolf, action of synthetical bile acids on the pancreatic decomposition of fats, 1906, A., ii, 691.

the action of morphine. I., 1907, A.,

ii. 42.

the constipating action of morphine,

1908, A., ii, 412.

Magnus, Rudolf, and (Miss) S. C. M. Sowton, elementary action of digitalis substances, 1910, A., i, 986.

Magnus, Rudolf. See also John Newport

Langley.

Magnus-Alsleben, Ernst, the toxicity of the normal intestinal contents, 1905, A., ii, 746.

Magnus-Levy, Adolf, combination of glycuronic acid with optical antipodes, 1907, A., i, 228.

the formation of glycine, 1907, A.,

ii, 977.

the behaviour of benzovlated aminoacids in the organism, 1907, A., ii,

the behaviour of formylated aminoacids in the organism, 1907, A., ii, 977.

benzoylglycuronic acid in sheen's urine after ingestion of acid, 1907, A., ii, 979.

the content in the human organs of chlorine, calcium, magnesium, iron, water, protein, and fat, 1910, A., ii, 426.

Magnus-Levy, Adolf. See also H. A.

Klein.

Magnusson, John Peter, equilibrium between ammonia and hydrogen sulphide, 1907, A., ii, 241.

Magnusson, John Peter. See also Hector Russell Carveth.

Magri, A. See Nazareno Tarugi.

Magri, Giuseppe, new thermometer for cryoscopic and ebullioscopic measurements at low temperatures, 1904, A., ii, 537.

radioactivity of thermal mud deposited from the Bagni di Lucca (Tuscany),

1907, A., ii, 64.

investigations with inorganic solvents at low temperatures; apparatus, 1907, A., ii, 237.

liquid hydrogen sulphide as a solvent,

1907, A., ii, 453.

origin of red ochre deposited from the thermal waters of the baths of Lucca, 1907, A., ii, 971.

Magri, Giuseppe, and Guido Ercolini, quantitative separation of iron from titanium and aluminium; application of a diaphragm to quantitative electrolytic analysis, 1907, A., ii, 400.

Magri, Giuseppe. See also Ubaldo Antony.

Magson, Egbert Hockey. See Thomas Martin Lowry.

Maguire, Joseph A. See Julius A. Nieuwland.

Mahin, Edward G. See Harry Clary Jones.

Mahla, Friedrich, citronellaldoxime and its transformation product, 1903, A., i. 264.

Mahler, E. von, detection of saccharin, 1905, A., ii, 127.

Mahler, Otto. See Karl Auwers.

Mahler, P., action of air on coal, 1910, A., ii, 607.

Mahler, P., and J. Denet, presence of a small quantity of carbon monoxide in the atmosphere of coal mines, 1910, A., ii, 1060.

Mahler, P., and E. Goutal, employment of combustion under pressure in the estimation of carbon in steels, 1911, A., ii, 937.

use of oxygen under pressure for the estimation of carbon in iron alloys,

1912, A., ii, 807.

Mahoux, J. See H. Astruc.

Mai, Alfred. See Wilhelm Muthmann. Mai, Carl, detection of arsenic in the ashes of cremated bodies, 1905, A., ii, 61.

estimation of arsenic in toxicology,

1905, A., ii, 763.

detection and estimation of arsenic in cemetery soil, 1909, A., ii, 345.

influence of freezing on the composition of milk, 1912, A., ii, 580.

Mai, Carl, and Hugo Hurt, the evolution of hydrogen for Marsh's arsenic test, 1905, A., ii, 61.

electrolytic estimation of small quantities of arsenic, 1905, A., ii, 284.

Mai, Carl, and C. Rath, constituents of the fruits of Copaifera mopane, 1905, A., ii, 851.

colorimetric estimation of small quantities of morphine, 1906, A., ii, 817.

Mai, Julius, gasometric work by means of V. Meyer's vapour density principle, 1909, A., ii, 89.

compounds of phosphorus and sulphur,

1911, A., ii, 484.

compounds of sulphur and phosphorus. II. Syntheses with yellow phos-

phorus, 1911, A., ii, 719.

Mai, Julius, and Friedrich Schaffer, phosphorus sesquisulphide, 1903, A.,

ii, 363.

Mai, Julius, and Max Silberberg, gasometry by means of Victor Meyer's vapour density apparatus, 1903, A., ii, 98.

[reactions of] cobalt and nickel, 1903,

A., ii, 216.

Mai, Julius. See also Harry Waldemar Bresler.

Maidorn, R., the chemical action of blood poisons which produce anæmia, 1912, A., ii, 1082.

Maier, Johann. See Richard Emil

Meyer.

Maier, Rudolf, an apparatus for the measurement of the vapour pressures of dilute aqueous solutions, 1910, A., ii, 183.

Maige, A., respiration of flowers, 1906,

A., ii, 192.

Maige, A., and G. Nicolas, influence of the concentration of sugar solutions on respiration [of seedlings], 1908, A., ii, 773.

Maignon, F. A., alcohol and acetone in the tissues and fluids of the body, 1905, A., ii, 406.

variations in muscular glycogen, 1907,

A., ii, 898.

general mechanism of the transformation of glycogen into dextrose in the muscles and tissues, 1908, A., ii, 53.

Maignon, F. A. See also Jean Cadéac,

and Clement Vaney.

Maigret, E., solubility of lime and magnesia in solutions of sodium chloride with or without sodium hydroxide; application to the separation and estimation of the two substances, 1905, A., ii, 482.

Mailey, R. D. See Harry Manley

Goodwin.

Mailhe, Alphonse, action of an oxide or a metallic hydroxide on the solutions of salts of other metals; mixed basic salts, 1908, A., ii, 142.

catalytic action of finely divided

metals, 1905, A., i, 501. hydrogenation of aldoximes, 1905,

A., i, 571.
reduction of ketoximes; new synthesis

of amines, 1905, A., i, 635. new method of preparing olefines,

1906, A., i, 129. new syntheses of amines by means of finely-divided nickel, 1906, A., i, 560.

action of finely divided metals on aliphatic acids, 1909, A., i, 452. Mailhe, Alphonse, action of finelydivided metals on the aliphatic acid anhydrides, 1909, A., i, 692.

catalytic reactions by means of metallic

oxides, 1910, A., i, 807.

new colouring matters derived from p-aminodiphenyl ether, 1912, A., i, 548.

nitro-derivatives of diphenylene oxide, 1912, A., i, 553.

new azo-colouring matters from aminodiphenylene oxide, 1912, A., i, 667.

Mailhe, Alphonse, and Marcel Murat, action of sulphur and selenium on magnesium cyclohexyl chloride, 1910, A., i, 374.

1910, A., i, 374. reduction of nitro-derivatives by

spongy copper, 1910, A., i, 830. synthesis of alcohols in the cyclohexane

series, 1911, A., i, 126.

catalytic hydrogenation of cyclic oximes; synthesis of arylamines, 1911, A., i, 535.

decomposition of mixed phenyl oxides in presence of nickel and hydrogen,

1912, A., i, 183.

halogen derivatives of phenolic ethers, 1912, A., i, 254.

nitro-derivatives of diphenyl ether, 1912, A., i, 346.

haloid derivatives of ditolyl ethers, 1912, A., i, 348.

Mailhe, Alphonse. See also Paul Sabatier.

Maillard. See Georges Urbain.

Maillard, Louis C., constitution of the colouring matters of indigo, 1903, A., i, 761.

indoxyl in urine, 1903, A., ii, 563. chloroformic urinary pigments, 1903, A., ii, 563.

nature of urinary indican, 1904, A., ii,

Ehrlich's diazo-reaction, 1904, A., ii,

neutral sulphur and Ehrlich's diazoreaction, 1904, A., ii, 194.

estimation of indoxyl by nitration of indigo dyes, 1904, A., ii, 303.

indoxyl pigments, 1904, A., ii, 500. scatoxyl and the origin of scatolic pigments, 1905, A., ii, 271.

the chromogen of so-called scatole-red, 1906, A., ii, 185.

non-existence of urocarmine as a new and definite colouring matter, 1908, A., i, 486.

the distribution of nitrogen amongst the various products in human urine, 1908, A., ii, 1056. Maillard, Louis C., constitution of indirubin, 1910, A., i, 138; 1911, A., i, 326.

action of colloidal sulphur on sulphur metabolism sulphoconjugation, 1911,

A., ii, 622.

condensation of amino-acids in presence of glycerol: cycloglycylglycines and polypeptides, 1912, A., i, 13.

action of amino-acids on sugars; formation of substances resembling mel-

anins, 1912, A., i, 169.

Maillard, Louis C., and Lucien Graux, existence of hydrogen carbonates in mineral waters and the supposed anomalies in the osmotic pressure values, 1906, A., ii, 218.

Maillard, P., new method of working in the estimation of sugars by Bonnan's

process, 1909, A., ii, 945.

Main, Hugh, estimation of the ash and sugar in syrups by the determination of the electrical conductivity, 1911, A., ii, 446.

Mair, Leopold. See Wilhelm Schlenk. Mair, William, survival of Bacillus

typhosus in soil, 1908, A., ii, 315. sewage purification, 1909, A., ii, 171. Mair. William. See also James Lorrain

Smith.

Maire, M., reactions of B-chloroethyland vinyl-ketones, 1908, A., i, 247. action of nitrogen-containing reagents on the carbonyl group of B-chloroethyl- and alkyl vinyl-ketones, 1908, A., i, 290.

Maire, M. See also Edmond Emile

Blaise.

Maisch, Karl. See Alexander Gutbier. Maitland, Andrew Gibb, tantalite and gadolinite from Western Australia, 1909, A., ii, 59. aitland, William, the iodine and

Maitland, ferric-ferrous potentials, 1906, A., ii,

328.

Maitland, William, and Richard Abegg, iodides of thallium: their limits of existence and valency; a case of inorganic tautomerism, 1906, A., ii, 542.

Maitland, William. See also Fritz Haber, and Francis Robert Japp.

Majewski, I., estimation of copper in pyrites, 1911, A., ii, 335.

Majima, Rikō, elæostearic acid, 1909, A.,

i, 204. . main constituent of Japanese lac; urushiol and urushiol dimethyl ether, 1909, A., i, 402.

main constituent of Japanese lac. II. Oxidation of urushiol dimethyl ether

by ozone, 1909, A., i, 945.

Majima, Rikō, oxidation of aniline. II., 1911, A., i, 216.

Majima, Rikō, and Yoshihiko Aoki, oxidation of aniline. III., 1911, A., i, 992.

Majima, Rikō, and Shun-ichi Chō, main constituent of Japanese lac, 1907, A.,

Majima, Rikō, and Eiichi Kobayashi, condensation of alkylguanidines with ethyl acetoacetate, etc., 1908, A., i,

Majima, Riko, and Teppei Okada, the main constituent of Japanese lac. III. Catalytic reduction of urushiol, 1912, A., i, 883.

Majima, Rikō. See also Tamemasa Carl Dietrich Harries, and Haga,

Richard Willstätter.

Majler, Etta. See Fritz Ephraim.

Majone, Vincenzo, benzylphenyl salicylate, 1905, A., i, 278.

Majone, Vincenzo. See also Marussia Bakunin.

Major, Moriz. See Adolf Sieverts.

Maki, S., and S. Tanaka, regeneration of over-limed soil, 1906, A., ii, 892.

Makita, F. See Otto Cohnheim.

Makoshi, Kojiro, the alkaloids of Chinese corydalis tubers, 1908, A., i, 825. protopine of Japanese corydalis roots

(Corydalis vernyi), 1908, A., i, 908. the aconitines from Japanese aconite

tubers, 1909, A., i, 669.

Makovetzki, A. E., simplified analysis of the metals of the fifth group in the presence of magnesium, 1907, A., ii, 300.

pressure and composition of the vapours of aqueous solutions of the ether of ethylene glycol, 1908, A., i, 753.

vapour pressure of aqueous acetone solutions, 1908, A., ii, 353.

relation between the compositions of the vapour and solution with binary mixtures exhibiting a maximum or minimum [pressure], 1909, A., ii, 215.

determination of the composition of constant boiling-point mixtures having maximum vapour pressures and their quantitative separation by distillation, 1910, A., ii, 101.

Makovetzki, A. E. See also D. D. Gad-

Makower, Walter, molecular weights of radium and thorium emanations, 1905, A., ii, 220.

method of transmission of the excited activity of radium to the cathode,

1905, A., ii, 792.

Makower, Walter, effect of high temperatures on radium emanation, 1906. A., ii, 259.

the number, and the absorption by matter, of the β-particles emitted by radium, 1909, A., ii, 204.

volatility of radium-A and radium-C,

1909, A., ii, 456.

Makower, Walter, and Evan Jenkin Evans, the deflexion by a magnetic field of radium-B on recoil from radium-A, 1910, A., ii, 1023.

Makower, Walter, and Henry R. Noble, measurement of the pressure coefficient of oxygen at constant volume and different initial pressures, 1904, A., ii,

Makower, Walter, and Sydney Russ, effect of high temperatures on radium emanation and its products, 1907, A., ii, 421.

decay of radium-B and -C at high temperatures, 1908, A., ii, 449.

the recoil of radium-C from radium-B, 1910, A., ii, 91.

scattering during radioactive recoil,

1911, A., ii, 172.

Makower, Walter. See also Kasimir
Fajans, H. G. J. Moseley, and Sydney

Makowetzky, Alex., formation of hydrogen peroxide, nitric acid, and ammonia in the are discharge, using water as one electrode, 1911, A., ii,

Makowka, Oskar, behaviour of some noble metals towards acetylene, 1907, A., ii, 403.

metallic acetylene compounds, 1908, A., i, 328.

osmium, 1908, A., ii, 393.

replacement of formic acid by its esters, especially as concerns its behaviour towards bicarbonate solutions, 1909, A., i, 694.

Makowka, Oskar. See Hugo Erdmann.

Maksimoff, N. See O. Walter.

Malacarne, Mario. See Giovanni Calvi. See Pavel Iw. Malachoff. Boris.

Petrenko-Kritschenko. Malagnini, Giovanni. See Enrico Rimini.

Malaquin, Paul, new test for strychnine, 1910, A., ii, 165.

new method of preparing ozone by chemical means, 1911, A., ii, 387.

Malarski, Henryk, and Léon Marchlewski, the chlorophyll group. IV. Zinc chlorophyll and zinc prophyllotaonin, 1909, A., i, 947.

Malarski, Henryk, and Léon Marchlewski, the chlorophyll group, VII. Chlorophyllan, allochlorophyllan, and chlorophyllpyrrole, 1910, A., allochlorophyllan, i, 692.

chlorophyll group. VIII. Formation of phyllotaonin from chloro-

phyllan, 1910, A., i, 865.

chlorophyll group. IV. The estimation of chlorophyll in plants, 1910, A., ii, 362.

the chlorophyll group. XVI. Anhydro-β-phyllotaonin, 1912, A., i,

Malcolm, John, influence of pituitary gland substance on metabolism, 1904, A., ii, 58.

inter-relationship of calcium magnesium excretion, 1905, A., ii,

Malcolm, John. See also Frank Fitchett.

Malden, Walter, condition of blood in men engaged in aniline dyeing and in the manufacture of nitrobenzene and its compounds, 1907, A., ii, 981.

Malden, Walter. See also Walter

Ernest Dixon.

Malenfant, R., estimation of casein and lactose in milk, 1912, A., ii, 1218.

Malengreau, Fernand, n-dibutylcarb-

inol, 1907, A., i, 376.

Malengreau, Fernand, and A. Lebailly, synthetical homocholines, 1910, A., i, 545.

Malengreau, Fernand, and Georges Prigent, velocity of hydrolysis of glycerolphosphoric acid, 1911, A.,

hydrolysis and constitution of lecithin, 1912, A., i, 331.

Malengreau, Fernand. See also Emil Abderhalden.

Basilius, Malenković, nutrition wood-destroying fungi, 1906, A., ii, 477.

Malenück, W. D., chemistry of prota-I. Protamine from the spermatozoa of the Caspian sturgeon, Accipenser guldenstädtii, 1908, A., i. 1030.

Malerba, Carmelo, antipyretic action of isosuccinic acid derivatives of aniline, p-toluidine, and p-aminophenol, 1906, A., ii, 693.

Malfatti, Hans, Kjeldahl's method, 1903, A., ii, 754.

why does the urine become cloudy on boiling? 1906, A., ii, 785.

iron sulphide, 1908, A., ii, 192; 1909, A., ii, 581.

Malfatti, Hans, method for the estimation of ammonia in urine, 1908, A., ii. 531.

lævulose in urine, 1909, A., ii, 331. formaldehyde titration of amino-acids in urines, 1909, A., ii, 837; 1910,

A., ii, 662. preparation of colourless alcoholic potassium hydroxide, 1911, A., ii,

Malfatti, Hans. See also Artur Konschegg.

Malfitano, Giovanni, influence of oxygen on proteolysis in presence of chloroform, 1903, A., ii, 159.

the physical units of protein matter and the part played by lime in their coagulation, 1905, A., i, 846.

the colloidal state, 1905, A., ii, 14. electrolytic conductivity of colloidal solutions, 1905, A., ii, 72.

colloidal ferric chlorides, 1905, A., ii, 459.

starchy substances studied by the aid of our knowledge of the colloidal state, 1906, A., i, 804.

the composition of colloidal ferric hydroxychloride in relation to the concentration of hydrochloric acid in the containing fluid, 1906, A., ii, 33.

influence of salts intimately united with albuminous material and with enzymes on proteolysis, 1906, A., ii, 100

variations in the size of the granules of colloidal ferric hydroxychloride, 1906, A., ii, 450.

osmotic pressure of colloidal ferric hydroxychloride, 1906, A., ii, 526. electrical conductivity of colloidal

ferric chloride, 1906, A., ii, 647. physico-chemical properties of the colloidal particles or granules, 1909,

A., ii, 473. the micellary or "colloidal" state, 1911, A., ii, 102.

certain arbitrary distinctions which are made in theoretical chemistry, 1911, A., ii, 377.

crystalloids and colloids; basic ferric chloride, 1912, A., ii, 240.

crystalloids and colloids or molecular and micellary states, 1912, A., ii, 337.

Malfitano, Giovanni, and Léopold Michel, cryoscopy of colloidal solutions of ferric hydroxychloride, 1907, A., ii 94.

hydrolysis of ferric chloride, 1907, A., ii, 692. Malfitano, Giovanni, and Léopold Michel, hydrolysis of ferric chloride. II. Action of hydrochloric acid, 1908, A., ii, 111.

hydrolysis of ferric chloride; effect of the valency of the negative ions,

1908, A., ii, 288.

hydrolysis of ferric chloride; influence of neutral salts, 1908, A., ii, 1042.

Malfitano, Giovanni, and (Mile.) A. Moschkoff, coagulation of starchy material by freezing, 1910, A., i, 301.

purification of starch, 1910, A., i, 817.

dextrinisation of starch by desiccation, 1912, A., i, 240.

deflocculation of starch, 1912, A., i, 608.

Malherbe, P., apparatus for the estimation of carbon dioxide in carbonates, 1907, A., ii, 719.

Malinowski, Wiatscheslau. See Wilhelm Steinkopf.

Maljaroff, K. L. See Alexander M. Nastukoff.

Maljisheff, B. V. See Petr Petrovič von Weimarn.

Malkaln, V. I. See Alexander M. Nastukoff.

Malkomesius, Philipp, and Robert

Malkomesius, Philipp, and Robert Albert, humic acid, 1905, A., i, 119. Malkomesius, Philipp. See also Theodor

Mallet. Edouard, and Philippe Auguste Guye, electrolysis of alkali chlorides. III. Use of diaphragms of oxide of iron, 1906, A., ii, 649.

Mallet, Edouard. See also Louis Friderich, and Philippe Auguste Guve.

Mallet, John William, stony meteorite from Coon Butte, Arizona, 1906, A., ii, 370.

interaction of mercury with alloys of other metals, 1908, A., ii, 187.

Mallinckrodt, Edward, jun., and Edward A. Dunlap, meconic acid in the U.S.P. opium assay and certain meconates, 1905, A., ii, 777.

Mallison, Heinrich. See Otto Wallach. Mallmann, Franz, formaldehyde in wine,

1904, A., ii, 521.

Mallory, William J., uric acid excretion in gout and rheumatoid arthritis, 1911, A., ii, 219.

Mally, Josef. See Hans Meyer.

Malmgren, (Frl.) Signe M., syntheses in the camphor group with magnesium powder, 1903, A., i, 103, 710. Malmgren, (Frl.) Signe M. See also Alfred Werner.

Malmström, Rurik, theory of electrolytic dissociation, taking account of the electrical energy, 1906, A., ii, 67.

Malosse, H., specific rotatory power of camphor in acetone solution, 1911,

A., i, 730.

the density of camphor as deduced from the densities of its solutions in different solvents, 1912, A., i, 636.

Malschevsky, S. P. See Eugen von Biron.

Malschewsky, W. See O. Walter.

Maltese, Raffaele, derivatives of nitro-1:3:4-xylenol, 1907, A.,

2:6-dinitro-4-amino-m-xylene, 1909,

A., i, 466.

Maltese, Raffaele. See also Giorgio Errera.

Malvezin, Philippe, diastases in wine diseases, 1905, A., ii, 749.

origin of the colour of red grapes,

1908, A., ii, 887.

partition-coefficient and its application to the estimation of volatile acids in wines, 1909, A., ii, 444.

a new apparatus for fractional dis-

tillation, 1909, A., ii, 826.

a new cupric salt and its application as a fungicide for diseases of the vine and other plants, 1910, A., i, 91; ii, 151.

oxidation taking place in wines, 1910,

A., ii, 151,

estimation of dry extract in wines,

1910, A., ii, 461.

rapid estimation of the volatile acidity of wines and fermented beverages, 1911, A., ii, 342.

a new treatment of wine, 1911, A., ii,

estimation of tannin in wines, 1911, A., ii, 779.

action of nitrogen on wines, 1911, A.,

ii, 916. estimation of tannin in solutions and especially in wines, 1912, A., ii, 612.

Malysheff, B. V. See George Nicolae-

vich Antonoff.

Mameli, Efisio, ebullioscopic behaviour of phenols, alcohols, oximes, and acids in benzene solutions, 1903, A., ii, 711.

action of magnesium methiodide on

piperonal, 1904, A., i, 668.

methylpiperonyl ether, 1904, A., i, 743.

Mameli, Efisio, action of magnesium ethyl iodide on piperonaldehyde; new synthesis of isosafrole, 1904, A., i, 1023; 1905, A., i, 203.

ethylpiperonyl ether, 1905, A., i, 203. positions of the NO2 and NH2 groups in the mononitro- and amino-derivatives of piperonylaldehyde and piperonylic acid, 1906, A., i, 93.

new apparatus for the extraction of

liquids, 1906, A., ii, 79.

position of the iodine in the two known iodoguaiacols, 1908, A., i,

cubebin, 1908, A., i, 20; 1909, A., i,

503.

4:5-dinitro-1:2-catechol methylene ether; [4:5-dinitro-1:2-methylenedioxybenzene], 1909, A., i, 711.

hydroxyazo-derivatives obtained from 4-amino-1:2-catechol methylene ether [4-amino-1:2-methylenedioxybenzene], 1909, A., i, 854.

m-nitro-p-aminophenylarsinic acid,

1909, A., i, 980.

chloroacetic acid as a cryoscopic sol-

vent, 1910, A., ii, 182.

diazoamino- and aminoazo-derivatives obtained from aminomethylenedioxybenzene, 1911, A., i, 510. electrical conductivity of the chloro-

acetic acids in aqueous solution,

1911, A., ii, 459.

substances which mask the colour reactions of strychnine, 1911, A., ii, 552.

Mameli, Efisio, and Ezio Alagna, action of magnesium propyl iodide on piperonaldehyde, 1905, A., i, 889.

Mameli, Efisio, Cesare Bignami, and Raimondo Bonu, formation of acetophenones from derivatives of propyl-

benzene, 1909, A., i, 721.

Mameli, Efisio, Cesare Bignami, Raimondo Bonu, and Edoardo Brocca, saturated a-hydroxy-\beta-alkyloxy-derivatives of aromatic olefines with propenyl chains, 1909, A., i, 714.

Mameli, Efisio, and Enrico Boi, methylenecatechol and certain of its deriv-

atives, 1906, A., i, 743.

Mameli, Efisio, and Aldo Patta, p-iodophenylarsinic acid and arsenious p-iodophenyl iodide, 1909, A., i,

preparation and properties of p-iodophenylarsinic acid and certain of its derivatives. I., 1910, A., i, 531.

p-iodophenylarsinic acid and some of its derivatives. II. Pharmacological action, 1911, A., ii, 911.

Mameli, Efisio, and Aldo Patta, p-iodophenylarsinic acid and some of its derivatives. III. Action on metabolism, on the circulation, and on trypanosomes, 1911, A., ii, 912.

Mameli, Efisio, and Giuseppe Pinna, p-iodoguaiacol, 1908, A., i, 263.

Mameli, Efisio, and Andrea Sanna, modifications of Say's stereometer, 1903, A., ii, 199.

Mameli, Efisio. See also Giuseppe Oddo. Mameli, Eva, and Gino Pollacci, recent researches on chlorophyllian photosynthesis, 1908, A., ii, 881.

assimilation of free atmospheric nitrogen by plants, 1910, A., ii, 645.

assimilation of atmospheric nitrogen by higher plants, 1911, A., ii, 759.

Mamlock, Leonard. See Carl Liebermann, and Richard Wolffenstein.

Mammola, Giacomo. See Luigi Balbiano.

Mampel, J. See Robert Stollé.

Manaresi, A. See Giuseppe Plancher. Manasse, Albert. See Carl Neuberg.

Manasse, Armand, proportion of lecithin in egg yolk, 1906, A., ii, 781.

estimation of [small quantities of] sugar in urine, 1907, A., ii, 201.

Manasse, Ernesto, oxalite from Cape d'Arco (Island of Elba), 1910, A., ii, 967.

mizzonite from Cape d'Arco (Island of

Elba), 1910, A., ii, 967.

melanterite and fibroferrite from the Cetine mine, Siena, 1911, A., ii, 499.

petrography of the colony Eritrea, 1912, A., ii, 566.

Manasse, Otto, synthesis of aromatic alcohols, 1903, A., i, 28.

hydroxycamphor, 1903, A., i, 42.

Manasse, Otto, and Ernst Samuel, reactions of camphorquinone, 1903, A., i, 45.

Manasse, Wilhelm. See Hermann Leuch's.

Manceau, Emile, chemical characters of wines from vines attacked by mildew, 1904, A., ii, 144.

Manchot, Wilhelm, theory of oxidation processes, 1903, A., ii, 151.

combustion of cadmium, 1906, A., ii, 285.

autoxidation and oxidation with nitric oxide, 1906, A., ii, 842.

formation of oxides of nitrogen in the ozone generator, 1908, A., ii, 272. test for ozone in flames, 1909, A., ii,

993; 1910, A., ii, 344.

Manchot, Wilhelm, the action of ozone on metals and the cause of passivity, 1909, A., ii, 1003.

condensation of benzaldehyde with guaiacol, 1910, A., i, 314.

diazo-derivatives of [1:2:4]-triazole, 1910, A., i, 442.

compounds of nitric oxide with iron and blood-pigment, 1910, A., ii, 416.

compounds of nitric oxide with cupric

salts, 1910, A., ii, 956.

the supposed nitrososulphonic acid of Raschig (Sabatier's nitrosodisulphonic acid) and the theory of the lead chamber process, 1910, A., ii, 1055.

silicates with linked silicon atoms, 1910, A., ii, 1060.

isomerism of anils (Schiff's bases). III., 1911, A., i, 36.

valency of the metal in blood-pigments, and the estimation of their gas-combining power; a critical study, 1911, A., i, 96.

Raschig's nitrosulphonic acid, "blue

acid," 1911, A., ii, 107.

the volatilisation of vanadic acid by means of hydrofluoric acid, 1912, A., ii, 561.

blue acid (the reduction product of nitrous-sulphuric acid). III., 1912, A., ii, 637.

the capacity of the blood-pigment to combine with gases, 1912, A., ii, 953.

Manchot, Wilhelm, and Wilhelm Brandt, cuprous compounds of ethylene and of carbon monoxide, 1910, A., i, 85.

union of oxygen in blood, 1910, A., ii, 137.

Manchot, Wilhelm, and Hermann Fischer, silicon chains, 1908, A., ii, 46.

Manchot, Wilhelm, and John Albert Newton Friend, cuprous compounds of carbon monoxide, 1908, A., ii, 375.

Manchot, Wilhelm, and John Ralph Furlong, isomerism of anils (Schiff's bases), 1909, A., i, 805; 1910, A., i, 33.

Manchot, Wilhelm, and Julius Haas, Kachler's ethylene-ferrous chloride,

1912, A., i, 933.

Manchot, Wilhelm, and B. Heffner, the chemical constitution of titaniferous iron ores, 1912, A., ii, 265.

Manchot, Wilhelm, and Friedrich Huttner, ferrous compounds of nitric oxide. II., 1910, A., ii, 414.

- Manchot, Wilhelm, and Wilhelm Kampschulte, action of ozone on metallic silver and mercury, 1907, A., ii,
 - acid properties of ozone, 1908, A., ii, 101.
- Manchot, Wilhelm, and August Jean Kieser, double silicides of aluminium, 1905, A., ii, 165.

constitution of silicides. II. Double aluminium silicides, 1906, A., ii,

- Manchot, Wilhelm, and Richard Kraus, constitution of chromic acid, 1906, A., ii, 364.
 - chromium dioxide and the constitution of chromium trioxide, 1906, A., ii, 859.
- Manchot, Wilhelm, and Paul Krische, action of ammonium sulphide on ketones and the conversion of thiopinacones into hydrocarbons, 1905, A., i, 142.
- Manchot, Wilhelm, Ernest Wyndham Merry, and Pierre Woringer, iron salts which combine with carbon monoxide, 1912, A., i, 955.

 Manchot, Wilhelm, and Robert Noll,

derivatives of triazole, 1906, A., i,

Manchot, Wilhelm, and Bertil Palmberg, phenol-quinone isomerism of the Schiff's bases of aromatic hydroxyaldehydes, 1912, A., i, 349.

Manchot, Wilhelm, and Paul Richter, auto-oxidation of tervalent titanium.

1906, A., ii, 172.

oxidation of tervalent titanium. II., 1906, A., ii, 172.

aluminium titanide, 1908, A., ii, 40. Manchot, Wilhelm, and Otto Wilhelms, formation of peroxide in the case of iron, 1903, A., ii, 152.

peroxidation of chromous compounds,

1903, A., ii, 153.

Manchot, Wilhelm, John Charles Heinrich Withers, and Conrad

- Oltrogge, compounds with triple linkings, 1912, A., i, 230. Manchot, Wilhelm, Christian Zahn, and Georg Kränzlein, thio-derivatives of aromatic aldehydes and ketones and their desulphurisation, 1906, A., i, 752.
- Manchot, Wilhelm, and Karl Zechentmayer, ferrous compounds of nitric oxide, 1907, A., ii, 93.

Manchot, Wilhelm. See also Henri Moissan.

Mancini, G. See Gennaro Calcagni. Mancini, J. See Mario Raffo.

- Mancini, Stefano, urochrome. III.. 1908, A., i. 1028.
 - the composition and properties of white-blood corpuscles, 1910, A., ii,
 - the residual carbon of the blood, 1910, A., ii, 727.
 - the residual carbon in human blood under normal and pathological conditions, 1911, A., ii, 504.
- Mandel, Arthur R., alloxuric bases in aseptic fevers, 1904, A., ii, 275.
 - paralactic acid, 1905, A., ii, 182. xanthine as a cause of fever, 1908, A.,
- Mandel, Arthur R., and Graham Lusk, lactic acid in intermediary metabolism, 1906, A., ii, 463.
- Mandel, Arthur R. See also Graham Lusk.
- Mandel, H. See Ernst Friedmann.
- Mandel, John Alfred, the scission products of the nucleo-protein of milk glands, 1910, A., i, 147.
- Mandel. John Alfred, and Edward Kellogg Dunham, a purine-hexose compound, 1912, A., i, 320.
- Mandel, John Alfred, and Holmes Condict Jackson, origin of glycuronic acid, 1903, A., ii, 314.
- Mandel, John Alfred, and Phæbus A. Levene, distribution of glucothionic acid in the animal organism, 1905, A., ii, 736.
 - preparation and analysis of nucleic acids. XI. Nucleic acid from the mammary glands of the cow, 1906, A., i, 125.
 - nucleic acids. XII. Nucleic acid of the kidney, 1906, A., i, 468.
 - pyrimidine bases of the nucleic acid obtained from fishes' eggs, 1906, A., ii, 375.
 - hydrolysis of spleen nucleo-protein, 1907, A., i, 807.
 - glucothionic acid in leucocytes, 1907, A., ii, 565.
- Mandel, John Alfred, and Carl Neuberg, glucothionic acid, 1908, A., 1029.
 - naphtharesorcinol as a reagent for certain aldehyde- and keto-acids, 1908, A., ii, 993.
- Mandel, John Alfred. See also Phæbus A. Levene.
- Mandelbaum, R. calcium monoborates, 1909, A., ii, 666.
 - estimation of boric acid, 1909, A., ii,
- Mandelbaum, Samuel. See Karl Bernhard Lehmann.

Mandl, Alfred, complex zirconium com-

pounds, 1904, A., i, 135.

Mandl, Alfred, and Franz Russ, shaking machine, 1906, A., ii, 154.

irregularities in the combination of nitric oxide and oxygen, 1908, A., ii, 272.

Mandowsky, K. See Arthur Binz.

Manea, André, estimation of gallotannic acid in tanning materials, 1906, A., ii, 504.

colour reaction of oleic acid; quick method of identifying vegetable fibre, 1909, A., ii, 190.

Manewsky, N. See Michael I. Konowaloff.

Manget, and Marion, a new reaction of formaldehyde, 1903, A., ii, 115.

detection and estimation of ammonia in waters by means of diaminophenol, 1903, A., ii, 390.

reagent for aldehydes, 1903, A., ii, 580.

580,

Mangin, Louis, new observations on callose, 1910, A., i, 653.

Mangubi, B. V. See Hypolyt A. Trephilieff.

Manicke, Paul. See Hermann Kunz-Krause.

Manley, John Job, apparent change in weight during chemical reaction, 1912, A., ii, 928.

Manley, John Job. See also Victor

Herbert Veley.

Mann, Edward Alexander, and Walter Holinshed Ince, the poison plant of Western Australia, 1907, A., i, 871.

Mann, Edward Alexander, and Charles E. Stacy, the Allen-Marquardt process for the estimation of higher alcohols, 1907, A., ii, 134.

Mann, Frank C. See Dennis Emerson

Jackson.

Mann, Guido, use of the orcinol reaction for the detection of sugar in urine, 1905, A., ii, 487.

Mann, Gustav. See Karl Auwers.

Mann, (Miss) Gladys Ruby. See John Theodore Hewitt.

Mann, Harold Hart, enzymes of the tea leaf, 1903, A., ii, 388.

Mann, Sidney A. See Waldemar Koch.
Mann, Wolfgang, estimation of small
quantities of lead in alloys of antimony, copper, and tin, 1910, A., ii,
898.

Mannassewitch, E. See Georges Darier.
Mannessier, Anna. See Giuseppe
Oddo.

Mannheim, Emil, tetra-alkylarsonium bases, 1905, A., i, 758.

Mannich, Carl, conversion of methyl nonyl ketone into the isomeric ethyl octyl ketone, 1903, A., i, 678.

carbohydrate with high molecular weight from the roots of *Heteropteris pauciflora*, 1904, A., i, 853.

tautomerism of cyclohexanone, 1906,

A., i, 432. condensation of cyclohexanone, 1907, A., i, 205.

triphenylene, 1907, A., i, 205.

arbutin and its synthesis, 1912, A., i, 884.

Mannich, Carl, and W. Drauzburg, aminoacetates of phenols, 1912, A., i, 848.

Mannich, Carl, and Friedrich L. Hahn, synthesis of α-amino-ketones by means of hexamethylenetetramine, 1911, A., i, 648.

Mannich, Carl, and Vasile H. Hâncu, preparation of adipic acid from cyclohexanol, 1908, A., i, 245.

tautomerism of cyclic monoketones,

1908, A., i, 275.

Mannich, Carl, and O. Hübner, pyridylacetylcatechol and related bases, 1911, A., i. 565.

Mannich, Carl, and Willy Jacobsohn, syntheses in the adrenaline series, 1909, A., i, 321.

hydroxyphenylalkylamines and dihydroxyphenylalkylamines, 1910, A., i, 167.

Mannich, Carl, Willy Jacobsohn, and Paul Neumann, the adrenaline series, 1910, A., i, 411.

Mannich, Carl, and Reinhold Kuphal, chlorides of amino-acids, 1912, A., i, 217.

benzylamine derivatives, 1912, A., i, 850.

Mannich, Carl, and Hans W. Priess, detection of boric acid in foods, 1908,

A., ii, 429.

Mannich, Carl, and Franz Zernik, "neuronal" (bromodiethylacetamide), 1908, A., i, 399.

Mannich, Carl. See also Karl W. Rosenmund, and Hermann Thoms.

Manning, Charlotte R. See Francis Gano Benedict.

Manning, M. F. See Oskar Klotz.

Manning, Rodger J., ethyl tannate, 1910, A., i, 851.

Manning, Rodger J., and William Robert Lang, estimation of boric acid, alone and in the presence of phosphoric acid, 1906, A., ii, 491.

estimation of boric acid and borates in foodstuffs and commercial products,

1907, A., ii, 813,

Manning, Rodger J., and Maximilian Nierenstein, constitution of tannin, 1912, A., i, 566.

Mannino, Antonio, and Linda di Donato, preparation of halogenated anilides,

1908, A., i, 826.

Mannino, Antonio. See also Guido Bargellini, and Mario Levi-Malvano. Manoiloff, E., action of nickel salts on

micro-organisms, 1907, A., ii, 380.

Manoliu, Dimitrie. See Emil Abderhalden.

Mansfield, Geza, the choline test in cerebrospinal fluid, 1904, A., ii, 623.

narcosis and deficiency of oxygen.

1909, A., ii, 750.

narcosis and want of oxygen. The effect of deprivation of oxygen on the resting current of frog's skin, 1910, A., ii, 222.

Mansfield, Geza, and B. Farkas, narcosis and want of oxygen. III. The action of narcotics and oxygen-withdrawing on germinating seeds, 1912, A., ii, 79.

Mansfeld, Johannes. See Roland Scholl. Mansier, calorimetric assay of mustard,

1906, A., ii, 640.

retention of chemical substances by filter paper, 1907, A., ii, 906.

assay of essence of turpentine by bromine; estimation of free bromine by sodium formate, 1909, A., ii, 1056.

Manson, D. D. See Isaac Levin. Manteufel, P. See Paul Uhlenhuth. Mantovani, Eugenia. See Giuseppe

Oddo. Manuel, E. V. See George Bell Frankforter, and Willis Boit Holmes.

Manuelli, Antonio, action of sulphur on solutions of metallic salts, 1906, A., ii, 607.

Manuelli, Antonio. See also Giuseppe Bruni.

Manuelli, Camillo, utilisation of leucite, 1908, A., ii, 386.

Manuelli, Camillo, and Bruno Gasparinetti, thorium hydrogen, thorium rubidium, and thorium cæsium sulphates, 1903, A., ii, 375.

Manuelli, Camillo, and Guido Lazzarini, electrolysis of solutions of selenious

acid, 1909, A., ii, 230.

Manuelli, Camillo, and Concetto Maselli, condensation of o-diamines phthalonic acid, 1906, A., i, 308.

Manuelli, Camillo, and Gulfiero Silvestri, condensation of o-phenylenediamine with phthalonic acid, 1904, A., i, 784.

Manville, O., variations of state exhibited by amorphous carbon under the influence of temperature and the action of oscillations of temperature, 1906, A., ii, 439, 537.

Manwaring, Wilfred H., analytical methods of serum pathology, 1903,

A., ii, 208.

quantitative methods with hæmolytic serum, 1907, A., ii, 973.

Manwaring, Wilfred H. See also Emil Abderhalden.

Manz. Hermann. See Wilhelm Prandtl. Manzella, Eugenio, estimation of moisture in natural solid fuels, 1906, A., ii, 489.

methods for determining the hydraulic value of volcanic pozzuolana, 1906, A., ii, 493.

Italian pozzuolanas; a Sicilian poz-

zuolana, 1912, A., ii, 352. Manzetti, Riccardo. See Italo Bellucci. Maquenne, Léon [Gervais Marie], solid acid from the oil of Elæococca vernicia, 1903, A., i, 62.

transformation of starch paste, 1903, A., i, 679; 1904, A., i, 17, 227.

isoglucosamine, 1904, A., i, 18.

formation and saccharification of reverted starch, 1904, A., i, 294.

nature of raw starch, 1904, A., i, 294. starch, 1904, A., i, 800.

determination of melting points, 1904, A., ii, 383.

preparation of B-methylglucoside. 1905, A., i, 415.

apparatus to show the production of ozone during the combustion of coal gas, 1905, A., ii, 382.

absolute desiccation of vegetable substances, 1906. A., ii. 129.

the properties of pure starch, 1908, A., i, 249.

composition of starch grains, 1908, A., i, 320.

[assimilation of carbon by plants], 1911, A., ii, 760.

Maquenne, Léon, and Em. Demoussy, toxicity of certain salts towards green leaves, 1910, A., ii, 801.

determination of respiratory quotients, 1912, A., ii, 1201.

Maquenne, Léon, Auguste Fernbach, and Jules Wolff, transformation and coagulation of starch paste, 1904, A., i, 228.

Maquenne, Léon, and William Goodwin, the phenylcarbamates of sugars, 1904, A., i, 371.

cellose, 1904, A., i, 799. semicarbazones of reducing sugars, 1904, A., i, 947.

Maquenne, Léon, and Louis Philippe, ricinine, 1904, A., i, 339.

constitution of ricinine, 1905, A., i, 80.

Maquenne, Léon, and Eugène Roux, constitution, saccharification and reversion of starch paste, 1905, A., i, 511.

influence of reaction on the activity of amylase, 1906, A., i, 327.

diastatic saccharification, 1906, A., i,

new properties of malt-extract, 1906, A., ii, 623.

Maragliano, Giuseppe. See Angelo Angeli.

Marais. H., example of isodimorphism : [ethylammonium haloids], 1909, A., i,

Maraldi, Guglielmo, excretion of bromal hydrate in the urine, 1903, A., ii, 442.

Marantonio, Mario. See Guido Bargellini, Federico Giolitti, and Mario Levi-Malvano.

Marben, Emil. See Hugo Simonis. Marburg, Richard. See Ludwig Wolff.

Marc, Robert, behaviour of selenium towards light and temperature, 1904, A., ii, 105; 1906, A., ii, 280, 742; 1907, A., ii, 453.

separation of the final monazite fractions; preparation of pure gadolinium oxide, 1904, A., ii, 174.

allotropic forms of selenium, 1906, A., ii, 226.

phosphorescence (cathode-luminescence) spectra of rare earths and the new elements: ionium, incognitum, and victorium, 1906, A., ii, 360.

crystallisation from aqueous solutions, 1908, A., ii, 160; 1909, A., ii, 798; 1910, A., ii, 834; 1912, A., ii, 336.

alum, 1909, A., ii, 47, 146.

crystallisation from aqueous solutions. V. Adsorption by crystals, 1911, A., ii, 193.

adsorption from solution, 1911, A., ii,

velocity of crystallisation and dissolution, 1911, A., ii, 265; 1912, A., ii, 336.

melting point of silicates, 1912, A., ii, 552.

the determination of the concentration of colloidal solutions by means of the new liquid interferometer, 1912, A., ii, 745.

Marc, Robert, new method for the determination of the concentration of colloidal solutions and the investigation of drainage waters, 1912, A., ii, 1150.

Marc, Robert, and Walther Wenk, crystallisation from aqueous solutions.

III., 1909, A., ii, 983.

Marc, Robert. See also Hermann Thiele. Marcelet, H., estimation of carbon monoxide, especially in tobacco smoke. 1908, A., ii, 533.

Marcelin, René, spontaneous crystallisation, 1909, A., ii, 302.

mechanism of irreversible phenomena, 1911, A., ii, 27.

Marcello, F. See Ezio Comanducci. March, François. See Albin Haller.

Marchadier, L., indirect fermentative oxidations; course of the reaction in the oxidation of quinol, 1905, A., i, 342.

Marchadier, L. See also Emile Bourquelot.

Marchal, Émile. See Émile Laurent. Marchand, H. See E. Kayser.

Marchese, Carmelo, condensation of diketohydrindene [1:3-indanedione] with phthalic anhydride, 1907, A., i, 941.

certain methods of estimating lead peroxide in minium, 1907, A., ii,

911.

Marchese, Carmelo. See also Giovanni Romeo.

Marchetti, Guerriero. See Angelo Angeli, and Eugenio Morelli.

Marchionneschi, Mario, solubility of morphine in ethyl ether, 1907, A., i, 634.

preparation of propaldehyde, 1907, A., i, 824.

Marchionneschi, Mario. See also Nazareno Tarugi.

Marchlewski, [Paul] Léon [Theodore], inactivity of mesotartaric acid, 1903, A., i, 148.

chlorophyll, hæmoglobin, and lipochrome, 1903, A., i, 667.

phylloerythrin, a new derivative of chlorophyll, 1904, A., i, 261.

relationship of chlorophyll and hæmoglobin, 1904, A., i, 463; 1907, A., i, 368.

probable identity of phyllogrythrin and cholehæmatin, 1904, A., i, 909.

identity of phylloerythrin, bilipurpurin, and cholehematin, 1905, A., i, 500.

chlorophyll, 1905, A., i, 540; 1907, A., i, 867.

Marchlewski, [Paul] Léon [Theodore], the origin of cholehæmatin (bilipurpurin), 1905, A., i, 847.

phylloxanthin, 1908, A., i, 99; 1912,

A., i, 203.

the chlorophyll group, 1908, A., i, 199.

nearest acid derivatives of the chlorophyllins, 1908, A., i, 560.

blood-pigment, 1908, A., i, 843; 1909, A., i, 749.

carrotene from carrots, 1908, A., ii, 886.

the chlorophyll group. III. New method of decomposition in the chemistry of chlorophyll, 1909, A., i. 174.

hæmopyrrole, 1910, A., i, 188; 1912,

A., i, 646.

phylloporphyrin, 1910, A., i, 330. colouring matter of blood, 1910, A., i,

the existence of two chlorophyllins, 1911, A., i, 553.

green and yellow dyes of Florideæ, 1911,

A., ii, 1125.

phylloporphyrins, 1912, A., i, 288. azo-dyes of substituted pyrroles, 1912, A., i, 399.

the chlorophyll group. XVII. The spectral properties of the two chlorophyllans, 1912, A., i, 791.

Marchlewski, Léon, and J. Marszałek, chemical nature of allochlorophyll, 1911, A., i, 735.

Marchlewski, Léon, J. Marszałek, and Z. Leyko, the chlorophyll group; the duality of the chlorophyllans and allochlorophyllan, 1911, A., i, 898.

Léon, and Ladislaus Marchlewski, Matejko, bixin; the colouring matter of Bixa orleana. I., 1906, A., i, 760.

Marchlewski, Léon, Ladislaus Matejko, Antoni von Korczyński, and Tadeusz Koźniewski, natural colouring matters, 1907, A., i, 435.

Marchlewski, Léon, and St. Mostowski, colouring matter of blood.

1907, A., i, 738. Marchlewski, Léon, and St. Piasecki, simple method of preparation phylloporphyrin, 1908, A., i, 357.

Marchlewski, Léon, and J. Rettinger, blood-pigment. VIII., 1908, A., i,

hæmopyrrole, 1908, A., i, 710.

Marchlewski, Léon, and J. Robel, azodyes derived from 2:4-dimethylpyrrole and hæmopyrrole, 1910, A., i, 206.

Marchlewski, Léon, and J. Robel, the chlorophyll group. IV. Phylloporphyrin, 1911, A., i, 552.

the chlorophyll group. X. Pl hæmin. II., 1911, A., i, 735. Phyllo-

the chlorophyll group. XII. 8-Phylloporphyrin, 1912, A., i, 289.

a-phyllohæmin and the formula of a-phylloporphyrin, 1912,

Marchlewski, Léon, and B. Zurkowski, the chlorophyll group. XIII. Porphyrins from phyllocyanin and phyll-

oxanthin, 1912, A., i, 289.

Marchlewski, Léon. See also L. Barabasz, Jozef Buraczewski, H. Goldmann, J. Grabowski, J. Hetper, Lad. Hildt, C. Alfred Jacobson, Tadeusz Koźniewski, Lad. Leyko, Z. Leyko, and Henryk Malarski.

Marciano, A. See Arnaldo Piutti.

Marcille, René, estimation of nitrates in waters containing chlorine, 1909, A., ii, 829.

analysis of oils, 1910, A., ii, 1122. absorption spectrum of oils, 1910, A.,

ii, 1121. mode of action of sulphur in combating oidium, 1911, A., ii, 429.

some tests for the determination of the purity of turpentine oils, 1912, A., ii. 870.

Marcilly, L., hydroxypivalic acid [8hydroxy-aa-dimethylpropionic acid], 1904, A., i, 219.

Marcilly, L. See also Edmond Emile Blaise.

Marck, A. See Georg Bredig.

Marck, J. L. B. van der, bile in human milk, 1907, A., ii, 187.

Marckwald, Eduard, and Fritz Frank, assay of gutta-percha, 1903, A., ii, 110.

Marckwald, Eduard. See also Fritz

Marckwald, Leo, separation of o- and pchloronitrobenzenes, 1903, A., i,

introduction of a definite number of halogen atoms into volatile organic compounds, 1903, A., i, 806.

Marckwald, Willy, radioactive constituents of bismuth from Joachimsthaler pitchblende, 1903, A., ii, 81, 733.

asymmetric synthesis, 1904, A., i, 221,

derivatives of the amyl alcohols from fusel oil. IV., 1904, A., i, 362.

radium, 1904, A., ii, 171. radiotellurium, 1905, A., ii, 159, 623.

Marchwald, Willy, actinium and emanium, 1905, A., ii, 497.

ium, 1905, A., ii, 497. radioactivity of uranyl double salts, 1906, A., ii, 143.

polonium and radiotellurium, 1906, A., ii, 721.

uranium ores from German East Africa, 1907, A., ii, 182.

atomic weight of tellurium, 1908, A., ii, 33.

polonium, 1908, A., ii, 454.

radioactivity, 1908, A., ii, 550.

a uranium ore from German East Africa, 1910, A., ii, 221.

mesothorium, 1911, A., ii, 8.

the international radium standard, 1912, A., ii, 823.

Marckwald, Willy, and Arthur Foizik, atomic weight of tellurium, 1910, A., ii, 604.

Marckwald, Willy, Heinrich Greinacher, and Karl Herrmann, radioactivity constant of radiotellurium, 1905, A., ii, 623.

Marckwald, Willy, and László Karczag, ditolane hexachloride, 1907, A., i, 690.

optically active methyl hydrogen esters of the tartaric acids, 1909, A., i, 361.

Marckwald, Willy, and Bruno Keetman, ionium, 1908, A., ii, 144.

Marckwald, Willy, and Richard Meth, amide formation between optically active α-aminoethylbenzenes, 1905, A., i, 272.

optically active substances which do not contain an asymmetric atom, 1906, A., i, 360.

4-methylcyclohexylidene-1-acetic acid, 1906, A., i, 584, 663.

stereoisomeric cinnamic acids, 1906, A., i, 585.

Erlenmeyer jun.'s brucine cinnamates, 1906, A., i, 880.

Marckwald, Willy, and Ernst Nolda, derivatives of the amyl alcohols from

fusel oil, 1909, A., i, 350.

Marckwald, Willy, and David McLaren

Paul, transformation of racemic
compounds into the corresponding
optically active forms, 1905, A., i, 285.

conversion of racemic compounds into optically active compounds, 1906, A., i, 958.

Marckwald, Willy, and K. Rudzik, researches in the pyridine series. III., 1903, A., i, 514.

Marckwald, Willy, and Alexander Smith Russell, the radium content of some uranium earths, 1911, A., ii, 360. Marcus, E., and Wilhelm Biltz, the chemical composition of the Stassfurt salt clays, 1910, A., ii, 968.

Marcus, E. See also Wilhelm Biltz.

Marcuse, Gotthelf, the behaviour of alkaline earths in metabolic experi ments with caseinogen and edestin, 1906, A., ii, 464.

Marcusson, Julius, theory of saponification, 1906, A., i, 924; 1907, A., i,

0/4.

optical activity of mineral oil, 1907, A., i, 466. the optically active constituents of

mineral oil, 1908, A., ii, 394. estimation of "benzine" and benzene hydrocarbons in oil of turpentine,

1912, A., ii, 497.

Marcusson, Julius, and Hans Döscher, estimation of sulphur and of halogens in organic substances, 1910, A., ii, 543.

Marcusson, Julius. See also David
Holde.

Marden, John W. See Arthur Becket Lamb.

Mare, Frédéric de, and Charles Jacobs, alloys and electrolytic depositions of radium, 1912, A., ii, 315.

Mareeuw. See Driessen Mareeuw. Marek, J., the sap of Asclepias syriaca,

1904, A., ii, 73, 141.

a simple gas pressure regulator, 1905, A., ii, 448. use of a layer of copper oxide or copper

oxide and asbestos 5 cm. in length, instead of the usual long layer in elementary organic analysis, 1906, A., ii, 496, 802.

mercury seal instead of cork or indiarubber in organic analysis, 1907, A., ii, 909; 1909, A., ii, 617.

organic analysis by combustion without the use of an oxygen-carrier, 1912, A., ii, 297.

Marenin, N., new model of the calorimeter of N. A. Hesehus, and determination by its means of the specific heat of alloys of tin and bismuth, 1909, A., ii, 117.

Mareš, F., physiological protoplasmic metabolism and purine formation, 1910, A., ii, 973.

Maret, Al. See Otto C. Billeter.

Marfori, Pio, absorption and assimilation of organic compounds of phosphorus, 1908, A., ii, 1052.

Margaillan, L., separation of sucrose and lactose by the Bulgarian ferment, 1910, A., ii, 162.

Margolinsky, Simon. See August Klages.

Margolis, M. See Reginald Oliver Herzog.

Margosches, Benjamin Max, influence of oxides and salts of rare elements on Skraup's quinoline synthesis, 1904, A., i, 818.

silver chromate, 1904, A., ii, 731;

1907, A., ii, 23.

estimation of alkalis in silicates by L. Smith's method, 1905, A., ii, 421. use of benzene or toluene as indicator

in iodometry, 1905, A., ii, 552. behaviour of phenolphthalein towards highly concentrated alkali hydroxides, 1907, A., i, 218.

See also Margosches, Benjamin Mux.

Hugo Ditz.

Marguery, Félix, unsymmetrical compounds of the malonic series, 1905, A., i, 507.

synthesis of aromatic \(\beta\)-ketonic esters,

1905, A., i, 527.

Maria, G. de, existence of laurene, 1903, A., i, 843.

Mariasz, G. See Ludwik Bruner.

Marie, Charles, hydroxyhenzylphosphinic acid, 1903, A., i, 220.

two acids containing phosphorus derived from methyl ethyl ketone, 1903, A., i, 328.

some phosphorus acid derivatives of benzophenone and methyl propyl

ketone, 1903, A., i, 379.

electrolytic reduction of unsaturated acids, 1903, A., i, 605.

action of hypophosphorous acid on diethyl ketone and on acetophenone, 1903, A., i, 678.

some mixed derivatives of hypophosphorous acid, 1904, A., i, 723.

preparation and properties of hypophosphorus acid, 1904, A., ii, 481.

molecular elevation of the boiling point of mixtures of volatile liquids, 1904, A., ii, 804.

phosphorus acid derivatives of ketones and aldehydes, 1905, A., i, 17. electrolytic reduction of the nitro-

cinnamic acids, 1905, A., i, 554. electrolytic oxidation of platinum,

1907, A., ii, 698. electrolytic reduction of oleic to stearic

acid, 1908, A., i, 244. the oxidisability of platinum, 1908,

A., ii, 299. supertension of viscosity, 1909, A., ii,

Marie, Charles, and L. J. Bunel, estimation of persulphates, 1903, A., ii, 752. Marie, Charles, and A. Lucas, estimation of phosphorous acid, 1907, A., ii, 717.

Marie, Charles, and Raymond Marquis, properties of sodium sulphate solution, 1903, A., ii, 358.

condition of sodium sulphate in solu-

tion, 1904, A., ii, 16.

action of carbon dioxide on solutions of sodium nitrite, 1904, A., ii, 252, 333.

Mariller, C., boiling point of mixtures of water and [ethyl] alcohol, 1911, A., i, 513.

laws of distillation of liquid binary mixtures, 1911, A., ii, 254.

binary liquid solutions, 1911, A., ii, 583.

Marincola Cattaneo. Renato. See Domenico Carbone.

See Nicola Parravano. Marini. Carlo. Marino, D., new apparatus, 1912, A., ii. 1049.

Marino, F., action of living microbes on a solution of azure-blue in methyl alcohol, 1906, A., ii, 189.

Marino, Luigi, alums of iridium sesqui-

oxide, 1903, A., ii, 376.

electromotive behaviour of vanadium, 1904, A., ii, 412.

iridium sesquisulphate and its alums, 1905, A., ii, 43.

electromotive behaviour of molybdenum and its analogies with that of chromium, 1905, A., ii, 796.

electrolytic preparation of vanadous salts and properties of vanadous and vanadic salts, 1906, A., ii, 617.

rapid method for obtaining certain cerous salts directly from cerium

dioxide, 1907, A., ii, 690. detection of small quantities of thallic

salts in presence of thallous salts, 1907, A., ii, 720.

new kind of dioxides. I., 1908, A., ii, 106.

structural isomerism; preparation of asymmetric selenites, 1908, A., ii, 833.

a new type of sesquioxides, selenite of lead sesquioxide, and thallic selenite, 1909, A., ii, 575.

peroxidised compounds, 1910, A., ii, 126.

volumetric estimation of selenious acid in alkaline solution by permanganate, 1910, A., ii, 155.

Marino, Luigi, and G. Fiorentino. hydrolytic action of the maltase of

malt, 1907, A., i, 103. Marino, Luigi, and C. Porlezza, luminosity of phosphorus; lecture experiments, 1911, A., ii, 594.

Marino, Luigi, and G. Sericano, physicochemical nature and activity of enzymes, 1906, A., i, 125.

different hydrolytic actions produced by a single enzyme, 1907, A., ii,

810.

Marino, Luigi, and V. Squintani, existence of a new type of dioxides: reaction between selenious acid and manganese dioxide, 1911, A., ii,

asymmetric selenites, 1912, A., i, 127. Marino, Luigi, and A. Toninelli, asymmetric selenites. II. Additive products of piperidine with selenious and sulphurous acids, 1912, A., i, 802.

Marino, Luigi. See also Angelo Angeli. Marino-Zuco, Francesco, new toxin of the urine, 1904, A., ii, 754.

Marino-Zuco, Francesco, and Ida Foa,

ochrein, 1911, A., i, 1049.

Marino-Zuco, Francesco, and L. Giuganino, action of biotoxin on blood, 1910, A., ii, 223.

Marino-Zuco, Francesco, R. Onorato, and L. Giuganino, biotoxin, 1911, A., ii, 1108.

Marino-Zuco, Francesco, and V. Pasquero, clavicepsin, a new glucoside from Secale cornutum, 1911, A., i, 1003.

Marion, optical determination of gliadin in flours, 1906, A., ii, 408.

modifications of the Robin process for butter analysis, 1912, A., ii, 872.

Marion. See also Manget.

Mark, Hans. See Max Siegfried.

Mark, Kenneth Lamartine. See Theodore William Richards.

Markétos, the anhydrous uranyl and

zinc nitrates, 1912, A., ii, 848. Markewicz, M. See Katharina Kowalewsky.

Dmitri, methylisobutylallyl-Marko, carbinol, 1904, A., i, 642.

resolution of a-amino-n-hexoic acid into its optical components, 1908, A., i, 772.

Markoff, I., fermentation processes in the digestive tract of ruminants, 1911, A., ii, 810.

Markoff I., Franz Müller, and Nathan Zuntz, the nitrous oxide method of estimating the quantity of blood in

the body, 1911, A., ii, 1107.

Markovits, Th. von. See Karl Auwers. Markownikoff, Wladimir W., heptanaphthylenes, 1903, A., i, 19, 157. benzene in Grosny naphtha and the

chemical characters of the latter,

1903, A., i, 19.

Markownikoff, Wladimir W., does suberane occur in naphtha? 1903, A., i, 239.

cyclic compounds; oxidation of 2methylcyclohexanone, 1903, A., i,

836; 1905, A., i, 141.

cyclic compounds; oxidation of menthone. pulegone, and \$-methylhexanone; active and racemic pyrotartaric acids and their anhydrides, 1903, A., i, 843.

principle of chemical equilibrium; (isomeric transformation of the aoxides of olefines into aldehydes and ketones), 1903, A., ii, 200.

structure of heptanaphthylenes and some of their compounds, 1904, A.,

i, 383.

cyclic compounds; heptanaphthylenes or methylcyclohexenes, 1904, A., i,

cvelie compounds: heptanaphthene (methylcyclohexane) and its derivatives, 1905, A., i, 760.

obituary notice of, 1905, T., 597. Markownikoff, Wladimir W., and I. Jacob, cyclic compounds; some derivatives of cycloheptane, suberane, disuberyl, and ethylsuberane, 1903, A., i, 239.

Markownikoff, Wladimir W., and Wladimir Smirnoff, derivatives of methylcyclohexane, 1907, A., 418.

Markownikoff, Wladimir W., and George L. Stadnikoff, cyclic compounds; heptanaphthylene, its chlorohydrin, oxide, and chloroketone; structure of the heptanaphthylenes, 1903, A., i, 803.

Markowski, Hermann, viscosities of oxygen, hydrogen, chemically pure and atmospheric nitrogen, and the change of these with the temperature,

1904, A., ii, 652.

Markwalder, Joseph, action of aniline and p-toluidine on methyl y-bromopropyl ketone; synthesis of N-phenylated pyrroline and pyrrolidine derivatives, 1907, A., i, 637.

Markwalder, Joseph. See also Emil

Abderhalden.

Marle, Cornelis Marius van, and Bernhard Tollens, action of formaldehyde on isovaleraldehyde and on cenanthaldehyde, 1903, A., i, 460.

action of formaldehyde and lime on cinnamaldehyde, 1903, A., i,

formaldehyde derivatives of acetophenone, 1903, A., i, 493.

Marle, Ernest Robert, the estimation of carbonates in presence of nitrites, sulphides, or sulphites by means of potassium dichromate, 1909, T., 1491; P., 154.

the action of carbon dioxide on

nitrites, 1909, P., 74.

the arvl ethers of glycide, glycerol, and glycerol-a-monochlorohydrin, 1912, T., 305; P., 5. Marle, Ernest Robert. See also David

Runciman Boyd.

Marlen, van. See Jacob Böeseken. Marmier. Louis, action of ultra-violet light on sodium thiosulphate, 1912, A., ii, 112.

Marmu, Numa. See Alfred Daniel Hall.

Marogna, G. See Francesco Carlo Palazzo. David, blue dyes of the Maron,

diphenylnaphthylmethane series, 1903, A., i, 826.

[anhydro-bases from 4'-nitro-2'-amino-8-hydroxydiphenylamine],

A., i, 350. Maron, David, and D. Salzberg, constitution of the nitro-2:5-dimethylbenziminazole obtained by nitration,

1911, A., i, 1032. Marotta, D., oxidation of phthalacene,

1911, A., i, 980.

Marotta, D. See also Gennaro Calcagni. Marples, Morris Edgar. See James McConnan, and Arthur Walsh Tither-

Marqueyrol, M., estimation of chlorides, chlorates, and perchlorates in a mixture of their salts, 1911, A., ii, 652.

estimation of camphor in smokeless powders, 1911, A., ii, 774.

Marqueyrol, M., and Daniel Florentin, nitrous esters of cellulose, 1911, A., i, 355.

industrial estimation of nitrates and nitric esters, 1911, A., ii, 437.

decomposition of diphenylnitrosoamine by heat, 1912, A., i, 759. quis, Raymond, nitropyromucic acid and its ethyl ester; dinitro-

furfuran, 1903, A., i, 49. new synthesis of o-diazine [pyridazine],

1903, A., i, 370.

derivatives of aminopyromucic acid and of furfury lamine, 1903, A., i, 644. apparatus for estimation of nitrogen, 1903, A., ii, 687.

derivatives and oxidation products of nitropyromucic acid, 1904, A., i, 82.

Marquis, Raymond, nitration of methyl pyromucate: nitropyromucic acid, 1905, A., i, 77.

researches in the furan series, 1905, A., i, 224.

benzhydroxamic and dibenzhydroxamic acids, 1905, A., i, 524.

action of imino-esters and of iminochlorides on organo-magnesium derivatives, 1906, A., i, 434.

hydroxamic acids, 1907, A., i, 123. Marquis, Raymond, See also Charles

Marie.

Marr, Francis S., estimation of calcium carbonate in soils, 1909, A., ii, 938. denitrification and accumulation of nitrogen in soils, 1910, A., ii, 536.

Marr, Francis S. See also Henry Broug-

ham Hutchinson.

Marr. Th. See J. D. Kobus.

Marre, Francis, the relative value of indicators in the acid titration of wines, 1912, A., ii, 1106.

Marre, Francis, and Fr. Stolle, the

active components of Fehling's solu-

tion, 1905, A., i, 738.

Marres, Paul. See Julius Bredt.

Marriage, Ernst, detection of adulteration by colloido-chemical methods, 1912, A., ii, 871.

Marriott, Williams McKim, and Charles George Lewis Wolf, estimation of small quantities of iron, 1906, A., ii, 582.

protein metabolism in poisoning by bromobenzene, 1908, A., ii, 123.

Marriott, Williams McKim. Reston Stevenson, and Charles George Lewis Wolf.

Marro, Giacomo, estimation of carbon dioxide in alkalis and alkali carbonates, 1904, A., ii, 445.

Marro, Giacomo. See also Angelo Mosso. Marrs, L. E. See Floyd Jay Metzger.

Mars, G., apparatus for the estimation of carbide in steel and iron, 1908, A., ii, 429.

Marsais, P. See Léon Lindet.

Marschalk, Charles, 4-benzylcoumaran, 1910, A., i, 55.

metallic calcium and absolute alcohol as reducing agents, 1910, A., i, 269.

determination of the constitution of the coumaran ketones, 1910, A., i, 500.

conversion of oxindole into coumaran-1-one, 1912, A., i, 303.

conversion of oxindole into 2-ketodihydro-1-thionaphthen ("thio-oxindole"), 1912, A., i, 575.

Marschalk, Charles, and Fanny Nicolaiewsky, reduction with metallic calcium and absolute alcohol, 1910, A., i, 476.

Marschalk, Charles. See also Stanislaus von Kostanecki.

See Paul Rabe. Marschall, Oswald.

Marsden, Ernest, the phosphorescence produced by a- and \$\beta\-rays, 1910, A., ii. 565.

Marsden, Ernest, and Thomas Barratt, the probability distribution of the time intervals of a-particles with application to the number of aparticles emitted by uranium, 1912, A., ii, 6.

the a-particles emitted by the active deposits of thorium and actinum,

1912, A., ii, 113.

Marsden, Ernest, and C. G. Darwin, the transformations of the active deposit

of thorium, 1912, A., ii, 823.

Marsden, Ernest. See also Hans Geiger. Marsden, (Miss) Effie Gwendoline, and Samuel Smiles, the synthesis of derivatives of thioxanthone from aromatic disulphides, 1911, T., 1353; P., 207.

Marsden, (Miss) Effic Gwendoline. also Edward Charles Cyril Baly.

Marsden, Fred., constitution of aniline-

black, 1908, A., i, 226.

Marsden, Fred. See also Arthur George Green.

Marsden, Herbert, and Frederic Stanley Kipping, organic derivatives of silicon. Part IV. The sulphonation of benzylethylpropylsilicyl oxide and of benzylethyldipropylsilicane, 1908, T., 198; P., 12.

Marsh, Clarence E. See Herman C.

Lythgoe.

Marsh, James Ernest, phenomena observed when potassium mercuriiodide is dissolved in ether and water, 1910, T., 2297; P., 50; discussion, P., 50.

the action of halogens on mercuricamphor compounds, 1910, T., 2410;

P., 297.

some a'-derivatives of camphor, 1911, P., 283.

asymmetry in the supposed absence of an asymmetric atom, 1911, P., 317.

solutions of halogen double salts in water and ether, 1911, P., 328.

Marsh, James Ernest, and Robert de Struthers, Jersey Fleming densation of ketones with mercury cyanide, 1905, T., 1878; P., 248. di-iodocamphor, 1907, P., 119.

Marsh, James Ernest, and Robert de Jersey Fleming Struthers, some mercury derivatives of camphor, 1907, P., 246; 1909, T., 1777; P., 228.

double salts of potassium iodide with mercuric iodide and dimercuriodocamphor in organic solvents, 1908,

P., 266.

the action of mercuric iodide on ketones in alkaline solution, 1908, P., 266.

the condensation of camphor with mercuric iodide, 1908, P., 267; discussion, P., 268.

Marsh, James Ernest. See also Robert

de Jersey Fleming Struthers.

Marshall, Arthur, influence of impurities on the specific gravity of sulphuric acid, 1903, A., ii, 205.

estimation of the strength of sulphuric

acid, 1903, A., ii, 237.

the vapour pressures of liquid mixtures of restricted mutual solubility; preliminary note, 1904, P., 142.

estimation of moisture in nitroglycerol explosives, 1904, A., ii, 289.

the vapour pressures of binary mixtures. Part I. The possible types of vapour pressure curves, 1906, T., 1350; P., 154.

Marshall, Charles Robertshaw, physiological action of the Jaborandi alkaloids, 1904, A., ii, 430.

chemical constitution and physiological action, 1906, A., ii, 788.

physiological action of tutin, 1906, A., ii, 789.

pharmacological action of certain lactones and the corresponding hydroxy-acids, 1908, A., ii, 1060.

a reversed action during anæsthesia; the action of certain convulsants, 1909, A., ii, 689.

action of substances which temporarily abolish the respiration, 1909, A., ii, 689.

pharmacological action of protocatechyltropeine, 1910, A., ii,

pharmacological action of tutu, the toot plant of New Zealand, 1910, A., ii, 639.

[physiological] action of tetramethylammonium chloride, 1911, A., ii, 754.

Eli Kennerly, jun., and Marshall, Solomon Farley Acree, estimation of diazo-alkyls, 1910, A., i, 723. Marshall, Eli Kennerly, jun. See also

Sidney Nirdlinger.

Marshall, Fr., laboratory apparatus for estimating the absolute and full waterholding capacity of soils, 1912, A., ii, 200.

Marshall, Francis Hugh Adam, the ovarian factor concerned in the recurrence of cestrus, 1912, A., ii, 183.

Marshall, Francis Hugh Adam, and James Mathieson Kirkness, formation of lactose, 1907, A., ii, 113.

Marshall, Hugh, dissociation of the compound of iodine and thiocarbamide. 1903, A., i, 16.

thallic sulphates and double sulphates, 1903, A., ii, 21.

thermostats, 1912, A., ii, 827.

Marshall, Hugh, and David sodium succinates, 1910, T., 1074; P., 114.

Marshall, Hugh, and Alexander Thomas Cameron, succinic acid and its potassium salt, 1907, T., 1519; P., 214.

See also John Edwin Marshall, Hugh. Mackenzie.

Marshall, Harry Taylor. See Raymond Foss Bacon.

Marshall, John, source of error in the use of light petroleum as an extracting medium, 1907, A., ii, 722.

Marshall, John, and Leon A. Ryan, retention of arsenic by animal charcoal, 1903, A., ii, 540.

Marshall, John. See also Leon A. Ryan. Marshall, Joseph. See Julius Berend

Cohen, and Otto Dimroth. Marshall, J. Theodore. See Philip

Adolf Kober.

Marshall, William Edward, the pdimethylaminobenzaldehyde test for indole, 1907, A., ii, 995.

Marsiglia, T., detection of nitrates in wine and must, 1908, A., ii, 894.

Marsiglia, T. See also Giulio Paris. Marszalek, J. See Léon Marchlewski. Martegiani, Ermanno, some derivatives of 3:4-dimethoxypropiophenone, 1912, A., i, 987.

Martegiani, Ermanno. See also Guido Bargellini.

Martin, A. See Ludwig Weiss.

Martin, A. W. See George Bell Frankforter.

Martin, Charles James, fibrin ferments in snake venom, 1905, A., ii, 411. Martin, Charles James. See also (Miss)

Harriette Chick, and E. H. Embley. Martin, E., estimation of alcohol in wine, 1904, A., ii, 520.

Martin, Ernest Gale, rhythm of strips of heart muscle, 1904, A., ii, 426.

Martin, Ernest Gale, inhibitory influence of potassium on the heart, 1904. A., ii. 577.

absorption and consumption of oxygen in heart tissue, 1906, A., ii, 238,

the relations of the inorganic salts of the blood to the contractions of cardiac and skeletal muscle, 1906, A., ii, 461.

the causation of the heart beat, 1912, A., ii, 571.

Martin, F. See Antoine Guntz.

Martin, Friedrich. See Lothar Wöhler. Martin, Geoffrey, contribution to the theory of solution, 1905, A., ii, 234.

the condition which determines the chemical similarity of elements and radicles, 1905, A., ii, 693.

causes why an element often passes from one grade of combination to another without giving rise to intermediate compounds, 1905, A., ii.

who first suggested that the radioactive elements are elements undergoing decomposition at the ordinary temperature? 1911, A., ii, 453.

the connexion between the volatility. fusibility, and density of compounds, and the chemical forces at play within their molecules, 1911, A., ii, 793.

dibenzyl- and diphenyl-silicols and -silicones, 1912, P., 326; A., i, 404. new class of organo-silicon compounds

which evolve hydrogen, 1912, A., i, 819.

Martin, Geoffrey, and Frederic Stanley Kipping, benzyl and ethyl derivatives of silicon tetrachloride, 1909, T., 302; P., 27.

Martin, Geoffrey. See also Frederic Stanley Kipping, and Alexander McKenzie.

Martin, Hilda von, experiments with metallic conductors of very high resistence and the application of the electron theory, 1911, A., ii, 177.

Martin, Henry G., estimation of iron in the presence of its oxides, 1907, A.,

ii, 817.

Martin, Léon, action of bromine on strychnine, 1904, A., i, 446.

Martin, Louis de Saint. See Martin.

Martin, Max, detection of horse and fœtal flesh by the glycogen estimation, 1906, A., ii, 408.

Martin, Norman Andrews. See Harry Ward Foote, and Treat Baldwin Johnson.

Martin, P., magneto-optical Kerr effect for ferro-magnetic compounds, 1912, A., ii, 1039.

Martin, Walter. See Otto Ruff.

Martin, William Blair Morton. See Robert Muir.

Martinand, P., alcoholic fermentation in presence of sulphurous acid, 1909, A., ii, 822.

Martinand, V., presence of sucrase and sucrose in different organs of the vine and in some fruits, 1907, A., ii, 644.

origin of the deposits of the colouring matter of red wines, 1907, A., ii, 904. artificial oxydases and peroxydases,

1909, A., i, 279.

Martine, Camille, preparation of some compounds of α-methyl-δ-isopropyladipic acid, 1903, A., i, 315. menthones, 1904, A., i, 903.

Martine, Camille. See also Albin

Haller.

Martinelli, Medardo. See Luigi Mascarelli.

Martínez-Strong, Pablo, density, refractive index, surface tension, and viscosity of various mixtures of glycerol and water at 18°, 1908, A., i, 807.

colloidal character of the chromopolysulphuric acids, 1910, A., ii, 617.

Martinoff, Walter. See Heinrich Klinger.

Martinsen. See Henri Moissan.

Martinsen, Haavard, kinetics of the nitration reaction, 1905, A., ii, 149; 1907, A., ii, 609.

kinetics of the sulphonation reaction,

1908, A., ii, 572.

Martinsen, Ottocar. See Richard Stoermer.

Martius, Kurt von. See Otto Wallach. Martynowicz, Z., p-xylyl sulphide and its derivatives, 1911, A., i, 196.

Martz, Ernst. See Carl Graebe.

Marum, Artur, the glycogen in organs and acidosis in phloridzin diabetes, 1907, A., ii, 640.

Marx, Alfred. See Gustav Embden.

Marx, Elisabeth. See W. Zaleski.
Marx, F., estimation of the acid and saponification numbers in dark-coloured oils and fats, 1910, A., ii, 360.

Marx, Fritz. See Carl Neuberg. Marx, Hans. See Franz Fischer.

Marx, Hugo, action of quinine on hæmoglobin, 1906, A., i, 546.

Marx, Hugo. See also Stefan von Horoszkiewicz.

Marx, Jos. P. See Joseph Newfield. .

Marx, Karl. See Richard Meyer.

Marx, Theodor. See Arthur Binz, and
Emil Erlenmeyer.

Marx, Wilhelm. See Richard Willstätter.

Maryanovitch, (Mlle.) V. See Alexis Bach.

Maryott, Carlton Howard, use of metallic potassium in estimating the halogens in benzene derivatives, 1911, A., ii, 66.

Mascarelli, Luigi, action of nitric acid on acetylene, 1904, A., i, 277.

double salts of iodoxy-derivatives with mercuric chloride and bromide, 1905, A., i, 869.

behaviour of benzaldehyde in presence of iodoxybenzene and under the action of light, 1906, A., i, 962. the two forms of mercuric iodide, 1906,

A., ii, 757.

existence of additive compounds of aromatic nitro-derivatives with haloid mercury salts, 1907, A., i, 25.

derivatives of diphenyleneiodonium hydroxide; new class of heterocyclic compounds containing iodine in the closed-chain, 1907, A., i, 1021.

cyclohexane as a cryoscopic solvent, 1907, A., ii, 602; 1909, A., ii, 19. equilibria in ternary systems, 1908,

A., ii, 94.

equilibria in ternary systems; additive products of aromatic nitro-derivatives and mercuric chloride, 1908, A., ii, 162.

properties of diphenyleneiodonium hydroxide and of some of its deriva-

tives, 1909, A., i, 94.

homologue of diphenyleneiodonium hydroxide; ditolyleneiodonium hydroxide, 1909, A., i, 907.

estimation of phenol, 1909, A., ii, 353. action of light on benzaldehyde in presence of iodine, 1910, A., i, 389, 746.

the two forms of decahydro-\(\beta\)-naphthol (a particular case in stereochemistry),

1911, A., i, 964.

Mascarelli, Luigi, and Vincenzo Babini, solubility in the solid state between aromatic compounds and the corresponding hexahydrogenated[completely hydrogenated]compounds, 1909, A., ii, 982.

Mascarelli, Luigi, and Armando Blasi, determination of the iodine numbers

of oils, 1907, A., ii, 722.

Mascarelli, Luigi, and Gaetano Bosinelli, action of light on benzaldehyde in the presence of iodine, 1910, A., i, 561.

Mascarelli, Luigi, and Tito Cerasoli, 3:3'-dimethyldiphenyleneiodonium hydroxide and some of its salts, 1910, A., i, 725.

Mascarelli, Luigi, and Antonio Constantino, cyclohexane as a cryoscopic solvent; behaviour of piperidine, 1909,

A., ii, 790.

Mascarelli, Luigi, and Medardo Martinelli, cryoscopic behaviour of iodoxyderivatives in formic acid, 1907, A., ii,

Mascarelli, Luigi, and Iginio Musatty. cyclohexane as a cryoscopic solvent; cryoscopic and ebullioscopic behaviour of ketones dissolved in cyclohexane, 1909, A., ii, 972.

cyclohexane as a cryoscopic solvent; behaviour of cyclohexanone dissolved in cyclohexane, 1909, A., ii, 972.

reciprocal cryoscopic behaviour of subcontaining the 'CO' and 'CH2' respectively, 1910,

A., ii, 390.

Mascarelli, Luigi, and Ugo Pestalozza, mutual solubility of solid aromatic and the corresponding hexahydrogenated compounds, 1907, A., ii, 936.

mutual solubility of solid aromatic and the corresponding hexahydrogenated compounds (equilibrium in the system: phenol-cyclohexanol), 1908; A., i, 527.

Mascarelli, Luigi, and Giacomo Recusani, two forms of decahydro- B-naphthol: peculiar case of stereoisomerism, 1912,

A., i, 761.

Mascarelli, Luigi, and Giacomo Russi, action of light on p-tolualdehyde in the presence of iodine, 1910, A., i, 746.

Mascarelli, Luigi, and Giuseppe Testoni, 2-methylpyrroline and 1:2-dimethylpyrroline, 1904, A., i, 340.

Mascarelli, Luigi, and Baldassarre Toschi, aromatic substances containing multivalent iodine, 1912, A., i, 322.

Mascarelli, Luigi, Baldassarre Toschi, and Tomaso Zambonini, some new derivatives of diphenylmethane, 1910, A., i, 831.

Mascarelli, Luigi, and Luigi Vecchiotti, dicyclohexyl as a cryoscopic solvent,

1910, A., ii, 1036.

Mascarelli, Luigi, See also Giuseppe Bruni, and Giuseppe Testoni.

Mascart, Eleuthère [Elie Nicolas], n-rays, 1906, A., ii, 141.

Maschhaupt, J. G., methods for preparing normal acids, 1906, A., ii, 797.

Maschhaupt, J. G., violet coloration produced in glass by the influence of light, 1908, A., ii, 1003.

change in the reaction of soils by growth of plants and manuring,

1912, A., ii, 1206.

Maschmeyer, A., [esters of citrylidenealkoxyacrylic acids], 1907. A., i.

Mascré, M. See A. Goris. Mašek, B. See B. Kučera.

Maselli, Concetto, condensation of phenacylaniline with certain chloroethers, 1905, A., i, 776.

estimation of certain hydrazides, 1905,

A., ii, 560.

molecular magnitude of oxamide, 1907, A., i, 832.

Maselli, Concetto. See also Camillo Manuelli, and Emanuele Paterno.

Masing, Ernst, the importance of iron for animal oxidations, 1910, A., ii, 631.

the behaviour of nucleic acid in the cleavage of the sea-urchin's egg, 1910, A., ii, 731.

chemical studies in blood regeneration,

1911, A., ii, 993.

the relationship between nuclear material and development, 1911, A., ii, 1111.

mobilisation of sugar in the surviving

liver, 1912, A., ii, 1076.

Masing, G., the formation of alloys by pressure and the reactivity of metals in the solid state, 1909, A., ii, 669. Masing, G., and Gustav Tammann, the

behaviour of lithium towards sodium, potassium, tin, cadmium, and magnesium, 1910, A., ii, 610.

Masing, G. See also Gustav Tammann. Masing, Hugo, composition of the vapour from mixtures of ethyl alcohol and water, 1908, A., i, 751.

the heat of vaporisation of mixtures,

1912, A., ii, 1137.

Masino, G., volumetric estimation of thiocyanic acid with permanganate; its application to volumetric estimation of copper, 1909, A., ii, 1058.

Masius, Morton. See Herbert Freund-

lich.

Masloff, A. A. von., a modification of Nakajama's reaction for bile pigment in urine, 1911, A., ii, 1144.

Mason, Alfred Sidell. See John Kenneth

Harold Inglis.

Mason, Frederick Alfred. See Frederick Daniel Chattaway.

Mason, H. P., new filter tube, 1905. A., ii, 381.

Mason, John Ernest, and John Wilson, note on the incandescent mantle as a catalyst and its application to gas analysis, 1905, P., 296.

Masoni, Giulio, action of manganese sulphate on vegetation, 1911, A., ii,

821

flocculating power of some soluble salts on the clayey substances of soils, 1912, A., ii, 677.

Masoni, Giulio. See also Italo Giglioli. Massaciu, Cornclius. See Robert Pschorr. Massenez, Karl. See Franz Fischer.

Massey, R. E., a comparison of the germicidal power of a disinfectant in solution and in the emulsified state, 1909, A., ii, 1045.

Massini, Paul. See Julius Schmidlin. Massini, Rudolf. See Emil Abderhalden. Massink, A. See Frans Antoon Hubert Schreinemakers.

Masslenikoff. A. See Friedrich Kehr-

mann

Massol, Gustave, thermal study of the acid function of pyruvic acid; influence of ketonic oxygen, 1905, A., ii, 302.

normal proportion of manganese in mistelles [fortified musts], 1907, A.,

ii, 911.

radioactivity of the gases of the thermal spring of Uriage (Isère), 1908, A., ii, 1004.

chemical composition of the deposits from the thermal waters of Uriage (Isère), 1909, A., ii, 495.

chemical composition of the gases evolved from the thermal spring at Uriage (Isère), 1911, A., ii, 123.

radioactivity of the thermal mineral waters of Usson (Ariège), 1912, A.,

ii, 889.

Massol, Gustave, and A. Faucon, latent heat of fusion and specific heat of propionic acid, 1909, A., ii, 791.

latent heat of fusion and specific heat of fatty acids, 1911, A., ii, 852.

absorption of ultra-violet radiation by saturated aliphatic alcohols, 1912, A., ii, 1115.

Massol, Léon, action of ultra-violet rays on starch, 1911, A., i, 356; 1912, A., i, 538.

See also Eugène Boul-Massol, Léon. langer.

Masson, David Orme, the action of hydrogen peroxide on potassium cyanide, 1907, T., 1449; P., 117.

Masson, David Orme, and James Irvine Orme Masson, decomposition of metallic cyanates by water, 1910, A., i, 231.

Masson, David Orme. See also Alexander Charles Cumming, and (Miss) Leila Green.

Masson, Georges, the chemical composition of the root of Asclepias vincetoxicum, 1911, A., ii, 761.

the lævorotatory carbohydrate from the rhizome of Asclepias vince-toxicum, 1912, A., ii, 478.

Cyclamen europæum, 1912, A., ii,

the saponoid of Primula officinalis, 1912, A., ii, 979.

Masson, Henri, synthesis of tertiary alcohols; diphenyl carbinols, 1903, A., i, 28.

composition of oil of cloves; alcoholic and aldehydic constituents, 1909,

A., i, 944.

the principal constituents of labdanum oil; ketonic compounds, 1912, A., i. 280.

Masson, James Irvine Orme, the action of water of crystallisation on calcium carbide, 1910, T., 851; P., 6.

the solubility of electrolytes in aqueous solutions. Part I. Solubility of salts in the corresponding acids, 1911, T., 1132; P., 125.

the solubility of electrolytes in aqueous solutions. Part II. Solubility of oxalic acid in other acids, 1911, P.,

328; 1912, T., 103.

Masson, James Irvine Orme, and (Sir) William Ramsay, an analysis of the waters of the thermal springs of Bath, 1912, T., 1370; P., 183; discussion, P., 183.

Masson, James Irvine Orme. See also David Orme Masson.

Massoulier, Pierre, ionisation in flames, 1905, A., ii, 140.

Mastbaum, Hugo, occurrence of salicylic acid in wines, also in grapes and other fruits, 1903, A., ii, 703.

determination of the saponification number, 1908, A., ii, 439. aluminium apparatus for use in the

laboratory, 1911, A., ii, 106.

Masuda, Niro, invertase, 1910, A., i, 601.

the analysis of brain, especially with regard to the content in cholesterol and fatty acids, 1910, A., ii,

the formation of ethereal sulphates from thiocarbamide, 1910, A., ii, 637.

the excretion of ingested amino-acids in liver diseases involving disturbed metabolism, 1911, A., ii, 631.

Masuda, Niro, the formation of substances of aldehydic character on perfusion of the liver, and the synthesis of acetoacetic acid from ethyl alcohol, 1912, A., ii, 1074.

Matejko, Ladislaus. See Léon March-

lewski.

Materne, O., rapid method of estimating the metals of the arsenic group, exclusive of gold or platinum, 1906, A., ii, 807.

Mathers, Frank Curry, atomic weight of indium, 1907, A., ii, 352.

separation of iron from indium, 1908,

A., ii, 434.

electrolytic formation of selenic acid from lead selenate, 1908, A., ii. 833. preparation of perchloric acid from sodium perchlorate, 1910, A., ii,

electro-deposition of lead from perchlorate solutions, 1911, A., ii, 113.

Mathers, Frank Curry, and Roy S. preparation of ammonium selenite: a new method, 1911, A., ii, 603.

Mathers, Frank Curry, and Albert F. O. Germann, mercurous perchlorate voltameter, 1911, A., ii, 577.

Mathers, Frank Curry, and Carl George Schluederberg, some new compounds of indium, 1908, A., ii, 386.

Mathers, Frank Curry. See also Oliver

W. Brown.

Walter. Mathesius, See Siegfried

Hilpert.

Mathews, Albert Prescott, relation between solution, tension, atomic volume, and physiological action of the elements, 1904, A., ii, 197.

pharmacological action of iodates, bromates, chlorates, other oxidising substances, and some organic drugs, 1904, A., ii, 501.

nature of chemical and electrical stimulation, 1904, A., ii, 627.

nature of chemical and electrical stimulation. II. The tension coefficient of salts and the precipitation of colloids by electrolytes, 1905, A., i,

the toxic and anti-toxic action of salts,

1905, A., ii, 106:

chemistry of cell division, maturation, and fertilisation, 1907, A., ii, 183. pharmacological "action at a distance,"

1907, A., ii, 189.

pharmacological action of ammonium

salts, 1907, A., ii, 189.

spontaneous oxidation of sugars, 1909, A., i, 289.

Mathews, Albert Prescott, and T. H. Glenn, composition of invertase, 1911, A., i, 409.

Mathews, Albert Prescott, and Hugh McGuigan, the oxidising power of cupric acetate solutions, 1907, A., ii, 636.

Mathews, Albert Prescott, and Sydney Walker, spontaneous oxidation of cysteine, 1909, A., i. 289.

action of cyanides and nitriles on the spontaneous oxidation of cysteine;

1909, A., i, 289.

action of iron and cyanides on the spontaneous oxidation of cystine; action of metals and strong salt solutions on the spontaneous oxidation of cysteine, 1909, A., i, 698.

Mathews, Albert Prescott. See also

Herbert Horace Bunzel.

Mathews, Joseph Howard, relation between electrolytic conduction. specific inductive capacity, and chemical activity of certain liquids (with a bibliography of dielectric constants), 1906, A., ii, 3, 327.

osmotic experiments with collodion membranes, 1910, A., ii, 487.

heats of reaction in non-aqueous solu-

tions, 1911, A., ii, 855.

Mathews, Joseph Howard, and Albert F. O. Germann, use of a Dewar flask in measurements of heats of neutralisation, 1911, A., ii, 187.

Mathews, Joseph Howard. See also Lenher, Charles Charles Frederic Mabery, William

Richards.

Mathews, Joseph Keith. See Humphrey Owen Jones.

Mathewson, Champion Herbert, compounds of sodium with tin, 1905, A., ii, 634.

sodium-aluminium, sodium-magnesium, and sodium-zine alloys, 1906,

A., ii, 165.

alloys of sodium with lead, cadmium. bismuth, and antimony, 1906, A., ii,

sodium selenides, 1907, A., ii, 682. sodium-gold alloys, 1911, A., ii, 732.

Mathewson, Champion Herbert, and Horace Lemuel Wells, iodocyanides of potassium and cæsium, 1904, A., i. 20.

compound of mercuric cyanide and cæsium iodide, 1904, A., i, 21.

Mathewson, Walter E., optical rotation and density of alcoholic solutions of gliadin, 1906, A., i, 545.

Mathewson, Walter E., optical rotation of gliadin in certain organic solvents, 1906, A., i, 999.

estimation of gliadin, 1908, A., ii, 443.

Mathewson, Walter E., and J. W. Calvin, estimation of hydrogen peroxide, ferrous salts, and other reducing agents, 1905, A., ii. 704.

Mathias, Emile [Ovide Joseph], heat of vaporisation of liquefied gases, 1905,

A., ii, 372.

the diametral line of acetylene, 1909,

A., ii, 552.

Mathias, Émile, and Heike Kamerlingh Onnes, the rectilinear diameter for oxygen, 1910, A., ii, 771, 829; 1911, A., ii. 387.

Mathieu, Henri, hydrolysis of proteins

by acids, 1909, A., i, 541.

Mathieu, Joh., capillarity of solutions,

1903, A., ii, 13.

Mathieu, L., detection and estimation of sulphurous acid in wines, 1903, A., ii, 99.

estimation of aldehydes in wines and

spirits, 1904, A., ii, 521.

spontaneous oxidation of ethyl alcohol, 1905, A., i, 730.

detection and estimation of sulphurous acid in wines, 1910, A., ii, 650

starch indicator for iodometric titra-

tions, 1910, A., ii, 747. Mathison, Gordon Clunes McKay, phosphorus of urine, 1909, A., ii, 252.

the output of organic phosphorus in

urine, 1909, A., ii, 687.

estimation of phosphorus in urine, 1909, A., ii, 700.

action of asphyxia on the spinal animal, 1911, A., ii, 123.

the effect of potassium salts on the circulation, with special reference to the production of heart-block, 1911, A., ii, 125.

the effects of asphyxia on medullary centres. I. The vaso-motor centre,

1911, A., ii, 617.

the effects of potassium salts on the circulation and on plain muscle, 1911, A., ii, 753.

the influence of acids on the reduction of arterial blood, 1912, A., ii, 179.

Matignon, Camille [Arthème], action of a mixture of oxygen and hydrochloric acid on some metals, 1904, A., ii, 132,

colour reactions of vanadic acid and vinyl alcohol, 1904, A., ii, 214.

condition of a chemical reaction forming a monovariant system, 1905, A., ii, 235.

Matignon, Camille [Arthème], properties of some anhydrous chlorides of rare metals, 1905, A., ii, 391, 458. thermochemistry of neodymium, 1905,

A., ii, 505; 1907, A., ii, 153.

anhydrous neodymium chloride, 1905, A., ii, 525.

samarium sulphates, 1906, A., ii. 88. sulphates of the rare metals, 1906, A., ii, 169.

compounds of the rare metals of the cerium group, 1906, A., ii, 232.

vttrium chloride, 1906, A., ii, 673. ytterbium chloride, 1906, A., ii, 674. neodymium chloride, 1906, A., ii. 675.

preparation of anhydrous chlorides of rare metals; praseodymium chloride; samarium chloride; lanthanum chloride, 1906, A., ii, 675.

formation and preparation of aluminium carbide, 1907, A., ii, 957.

use of sodium as a desiccating agent for gases, 1908, A., ii, 377.

conditions of possibility of certain reactions forming monovariant systems, 1908, A., ii, 465. explosion produced by an ordinary

reagent, 1908, A., ii, 587.

preparation of chloride of thorium, 1909, A., ii, 149.

the apparent retardation of fusion of aluminium, 1909, A., ii, 239.

equilibria between the liquid and solid phases in the system NaCl + H₂O, 1909, A., ii, 390.

action of magnesium on carbon monoxide, 1909, A., ii, 402.

presence of zinc nitride in zinc powder and commercial zines, 1911, A., ii,

synthetic formation of nitrous oxide, 1912, A., ii, 249.

equilibrium of the system: cadmium sulphate-gaseous hydrogen chloride, 1912, A., ii, 441.

the function of valency in the stability of binary metallic compounds, 1912, A., ii, 535.

preparation and heat of formation of magnesium nitride, 1912, A., ii, 644.

spontaneous and progressive destruction of certain objects made of lead,

1912, A., ii, 645.

Camille, and François Matignon, Bourion, general method of preparing anhydrous chlorides, 1904, A., ii, 340,

transformation of oxides and oxygenated salts into chlorides, 1904,

A., ii, 341.

Camille, Matignon, and Francois Bourion, transformation of oxides and oxygenated metallic salts into anhydrous chlorides; application to analysis, 1905, A., ii, 459.

Matignon, Camille, and E. Cazes, a new type of compound in the group of rare metals, 1906, A., ii, 169.

samarous chloride, 1906, A., ii, 675. Matignon, Camille, and Marcel Delépine, thorium chloride, oxychloride, hydride, and nitride, 1907, A., ii, 179.

Matignon, Camille, and Gaston Desplantes, oxidation of metals in the cold in presence of ammonia, 1905, A., ii, 322.

Matignon, Camille, and A. Lassieur, the condition for the formation of magnesium nitride from air, 1912, A., ii,

Matignon, Camille, and René Trannoy, combinations of samarium chloride with gaseous ammonia, 1905, A., ii,

preparation of binary compounds of metals by the alumino-thermic method, 1905, A., ii, 588.

oxidising catalytic agents; generalisation of the lamp without flame,

1906, A., ii, 427. action of ammonia gas on anhydrous neodymium chloride, 1906, A., ii, 449.

rapid preparation of calcium phosphide for the evolution of hydrogen phosphide, 1909, A., ii, 236.

Matschurevitsch, Ippolyt, action of a mixture of ethyl a-bromobutyrate and p-tolualdehyde on zinc; synthesis of \(\beta\)-hydroxy-\(\beta\)-tolyl-\(\alpha\)-ethylpropionic acid, 1907, A., i, 623.

action of zinc on a mixture of p-tolyl methyl ketone and ethyl bromoacetate, 1909, A., i, 304.

synthesis of \(\beta\)-hydroxy-\(\alpha\)-isopropylbutyric acid, 1910, A., i, 89.

synthesis of B-methyl-aB-diethylhydracrylic acid and its properties, 1910, A., i, 815.

action of magnesium and aliphatic halogen derivatives on ethyl chlorocarbonate, 1911, A., i, 257.

synthesis of \(\beta\)-hydroxy-a-ethylbutyric acid, 1911, A., i, 260.

synthesis of aromatic and hydroaromatic alcohols containing the allyl group, 1911, A., i, 961.

Matschurevitsch, Ippolyt. See also E. Grishkewitsch-Trochimowsky.

Matsubara, Kōichi, formation of 4-oxycarbostyril from o-nitrobenzoylacetic acid, 1908, A., i, 915.

Matsubara, Kōichi, and William Henry Perkin, jun., experiments on the synthesis of the terpenes. Part IV. Synthesis of Δ^3 -normenthenol (8); $\Delta^{3;8(9)}$ normenthadiene, normenthanol (8), $\Delta^{8(9)}$ -normenthene, etc., 1905, T., 661; P., 131.

Matsubara, Kōichi. See also Emil Fischer.

Matsui, Motooki, complex ferrimalonates, 1908, A., i, 853.

action of hydrogen sulphide on iminoethers, 1909, A., i, 463. oxidation of quinol by the catalysis of

carbon, 1909, A., i, 468.

acvl derivatives of thioamides, 1910, A., i, 667.

formation of imino-ethers by direct alkylation of acid amides with methyl sulphate, 1910, A., i, 695.

alkylation of acid amides, 1911, A., i,

iminosulphides. I. The condensation of thiobenzamide with benzonitrile, 1911, A., i, 201.

action of hydrogen sulphide on imino-II. Formation of thion esters and acids, 1912, A., i, 261.

See also Mitsuru Matsui, Motooki. Kuhara.

Matsumoto, Hitoshi, protein precipitable by acetic acid in pathological urines, 1903, A., ii, 501.

Matsumoto, Hitoshi. See also Masumi Chikashigé.

Matter, Otto. See Emil Erlenmeyer, jun. Matthaei, Gabrielle L. C., effect of temperature on the assimilation of carbon dioxide by leaves, 1904, A., ii,

Matthaei, Gabrielle L. C. See also Frederick Frost Blackman.

Matthaiopoulos, Georg Th., estimation of casein: determination of its molecular weight, 1908, A., ii, 783.

Matthes, Fritz, the ternary systems silver chloride, bromide and iodide, and lead chloride, bromide, and iodide, 1911, A., ii, 476.

Matthes, Hermann, estimation of crude cacao fibre, 1908, A., ii, 236.

Matthes, Hermann, and Edwin Ackermann, unsaponifiable ingredients of cacao butter and their detection in butter, 1908, A., i, 637.

Matthes, Hermann, and W. Boltze, oil of wallflower seeds, 1912, A., i, 601.

Matthes, Hermann, and A. Dahle, soy bean oil, 1911, A., i, 831. phytosterols of soy bean, 1911, A., i, 858.

Matthes, Hermann, and Walter Heintz, cotton-seed oil, especially the unsaponifiable constituents, 1909, A., i. 572.

unsaponifiable constituents of parsley oil, 1909, A., ii, 754.

unsaponifiable constituents of Japan

tallow, 1910, A., i, 149.

Matthes, Hermann, and Otto Rammstedt,
use of pierolonic acid (dinitrophenylmethylpyrazolone) for evaluating narcotic drugs, etc., 1907, A.,

ii, 592. estimation of some alkaloids by means of picrolonic acid, 1908, A., ii, 75.

Matthes, Hermann, and Otto Rohdich, cacao butter, especially its nonhydrolysable constituents, 1908, A., i, 199, 532.

Matthes, Hermann, and Heinrich Sander, "unsaponifiable matter" of laurel oil, 1908, A., i, 417.

Matthes, Hermann, and Hermann Serger, Extractum tanaceti, 1909, A., i, 945.

Matthes, Hermann, and Fritz Streitberger, the composition of crude cacao fibre, 1907, A., ii, 991.

Matthes, Hermann, and Bernhard Wagner, estimation of aqueous solutions with the Zeiss immersion refractometer, 1903, A., ii, 610.

Matthes, Otto. See Heinrich Kiliani. Matthews, Frank. See James Codrington Crocker.

Matthews, Samuel A., the effect of Eck's fistula on bile formation, 1912, A., ii,

Matthews, Samuel A., and Orville Harry Brown, action of a salt solution in locomotor ataxy, 1904, A., ii, 359.

inhibition of the action of physostigmine by calcium chloride, 1904, A.,

ii, 758.

Matthews, Samuel A., and Dennis Emerson Jackson, action of magnesium sulphate on the heart, 1907, A., ii, 569.

Matthews, Samuel A. See also Dennis Emerson Jackson, William de B. Macnider, Joseph L. Miller, and Oscar Riddle.

Matthies, Wilhelm, glow discharge in vapours of the mercuric haloids,

1905, A., ii, 669.

measurement of potentials in iodine vapour, 1905, A., ii, 793.

glow discharge in the halogens, chlorine, bromine, and iodine, 1906, A., ii, 6.

vapour pressure of sulphur, 1906, A.,

ii, 663.

Matthies, Wilhelm, and H. Struck, the potential gradient in the non-striated positive column of the glow or arc discharge in nitrogen and hydrogen for large current and gas densities, 1912, A., ii, 324.

Mattill, Henry Albright, and Philip Bouvier Hawk, water drinking. VIII. Utilisation of ingested fat under the influence of copious and moderate water drinking with meals, 1911, A., ii, 410; 1912, A., ii, 64.

water drinking. IX. Distribution of bacterial and other forms of fæcal nitrogen and the utilisation of ingested protein under the influence of copious and moderate water drinking with meals, 1912, A., ii, 64.

water drinking. X. Fæcal output and its carbohydrate content under the influence of copious and moderate water drinking with meals, 1912, A., ii, 65.

estimation of fæcal bacteria, 1912,

A., ii, 466.

Mattill, Henry Albright. See also Paul Edward Howe, and Amos William Peters.

Mattisson, Karl. See Bror Holmberg. Mattisson, Max, strychnine oxide, 1906, A., i, 304.

Mattisson, Max. See also Friedrich Kehrmann, and Amé Pictet.

Matton, Kurt, apparatus for meltingpoint determinations, 1910, A., ii, 388.

Matton, Kurt. See also Paul Pfeiffer.

Mattucci, G. See Clemente Montemartini.

Matuschek, Joh., action of iodine on potassium ferro- and ferri-cyanides, 1903, A., i, 800.

preparation of nitro-products of organic compounds, 1905, A., i, 256.

action of ammonium chloride on potassium ferricyanide, 1905, A., i, 422.

a method for the preparation of a mixture of nitric oxide and nitric peroxide, 1905, A., ii, 84.

action of sodium nitrate on native sulphides, 1905, A., ii, 457.

experimental determination of the conditions for the quantitative equimolecular interaction of barium chloride and sodium nitrite and the preparation of barium nitrite, 1907, A., ii, 349.

Matuschek, Joh., and Nenning, the production of chemically active rays in chemical reactions, 1912, A., ii, 116.

Matvéeff. M. M. See Vladimir J. Kurbatoff.

Matz, Benjamin. See Carl Adam Bischoff.

Matzke, Fr. See Paul Pfeiffer.

Mau. W. See Ernst Hermann Riesen-

Maude, A. H., gravimetric estimation of phosphates, 1910,

Maué, Anton, action of bleaching powder on diazotised m-xylidinesulphonic acid, 1904, A., i, 458.

See also Theodor Maué. Anton. Zincke.

Mauermayer, Theodor. See Alfred Ein-

Maugini, A. See Ciro Ravenna.

Mauguin, Charles, action of bromine on ether: bromoacetaldehyde, 1903, A., i, 941.

acid properties of halogenated amides; Hofmann's migration, 1909, A., i,

sodium derivatives of bromo-amides and their rôle in Hofmann's reaction, 1911, A., i, 357.

the internal movement of liquid

crystals, 1912, A., ii, 630. Mauguin, Charles. See also Louis

Jacques Simon. Maurain, Charles, mechanism of the production and the nature of cathodic pulverisations, 1906, A., ii, 65.

Maurain, Charles, and G. Warcollier, action of ultra-violet rays on fermenting cider, 1909, A., ii, 752.

action of ultra-violet light on wine during fermentation, 1910, A., ii, 231.

Maurel, Edouard, minimal intake and excretion of potassium in the urine, 1904, A., ii, 62.

the minimal excretion of nitrogen,

1904, A., ii, 62.

rôle of leucocytes in fibrin formation, 1904, A., ii, 191.

minimal fatal doses of sparteine sulphate, 1904, A., ii, 198.

toxicity of sparteine sulphate, 1904, A., ii, 198.

Maurenbrecher, August Daniel, phenylhydrazones of a series of aldehydes, 1906, A., i, 985.

Maurenbrecher, August Daniel, and Bernhard Tollens, carbohydrates of cocoa, 1906, A., ii, 884.

tea, 1906, A., ii, 886.

Maurenbrecher, August Daniel. also Pieter van Romburgh, and Bernhard Tollens.

Maurer, Ed., austenite, 1908, A., ii,

the hardening and tempering of iron and steel, 1909, A., ii, 317.

Mauri, L. See H. Cantoni.

Maurice, H. See Charles Dhéré.

Mauricheau-Beaupré, Paul, combustion of acetylene in oxygen, 1906, A., i, 129.

a qualitative test for phosphorus, 1906, A., ii, 578.

a new method for the preparation of pure hydrogen, 1908, A., ii, 829.

Mauritz, Béla, zeolites from Nadap, Hungary, 1911, A., ii, 46. some rock-forming minerals from

Hungary, 1912, A., ii, 177.

Mauron, Louis. See Augustin Bistrzvcki.

Mauthner, Ferdinand, phenothioxins, 1905, A., i, 461.

o-o-dihydroxydiphenyl sulphide, 1906, A., i, 421.

phenothioxins and naphthathioxins, 1906, A., i, 447.

preparation of diaryl sulphides, 1906, A., i, 948.

synthesis of trimethylgallaldehyde, 1908, A., i, 348.

trimethylgallaldehyde [3:4:5-trimethoxybenzaldehyde]; synthesis of methylsinapic acid, 1908, A., i,

synthesis of trimethylhomogallic acid (methyliridic acid), 1908, A., i, 986. Claisen's acid cyanide synthesis, 1909, A., i, 160.

general synthesis of phenylated fatty acids, 1910, A., i, 115. synthesis of glucosyringic acid, 1910,

A., i, 677.

synthesis of a new gallacetophenone trimethyl ether, 1910, A., i, 680.

synthesis of glucovanillic acid and of gluco-p-hydroxybenzoic acid, 1911, A., i, 647.

synthesis of methyl digallate pentamethyl ether, 1911, A., i, 725.

combination of phenolearboxylic acids, 1912, A., i, 267, 858.

new synthetic glucosides, 1912, A., i, 574.

Mauthner, Ferdinand. See also Paul Friedländer, Carl Liebermann, and Fritz Ullmann.

Mauthner, Julius, cholesterol. I. Addition of hydrogen chloride, 1906, A., i, 579.

cholesterol. II. Specific rotations of cholestene and cholestane derivatives, 1906, A., i, 663.

Mauthner, Julius, cholesterol, III. Transformation of cholestene, 1907, A., i, 921.

cholesterol. IV., 1909, A., i, 714.

cystine, 1912, A., i, 335.

Mauthner, Julius, and Wilhelm Suida, cholesterol, 1903, A., i, 625; 1904, A., i, 49.

Mauz, Paul. See Rudolf Hefelmann, and Otto Sackur.

Mauzelius, Robert, estimation of ferrous oxide in rock analyses, 1908, A., ii, 538

Mayrogordato, Anthony E. See Percival Hartley.

Mawrow, Franz, divanadyl hypophos-

phite, 1907, A., ii, 782. Mawrow, Franz, and G. Mollow, estima-

tion of silver, 1909, A., ii, 183.

Mawson, Douglas, and William Ternent Cooke, phosphate minerals from Elder Rock, South Australia, 1908, A., ii,

397. Mawson, Douglas, and T. H. Laby, preliminary observations on radioactivity and the occurrence of radium in Australian minerals, 1908, A., ii, 917.

Max, Jules, chlorides of certain acylamino-acids, 1909, A., i, 926.

Maximenko, M.S. See Nicolai A. Pushin. Maximoff, N. A., chemical means of protecting plants from frost, 1912, A., ii, 476, 980.

Maximowitsch, Sergius, a new process for making electrolytic iron, 1905, A.,

ii, 253.

Maximowitsch, Stephan, albumin from the blood-serum of the cow, 1906, A., i, 224.

albumin from the serum of horse's blood deposited on dialysis into water, 1910, A., i, 343.

Ralph Nelson, iodometric Maxson, estimation of gold in dilute solution, 1903, A., ii, 697.

limit of error in the volumetric estimation of small amounts of gold, 1904, A., ii, 593.

estimation colorimetric of small amounts of gold, 1906, A., ii, 496.

Maxted, Edward B. See Franz Fischer.

Maxwell, Samuel Steen, effect of salt solutions on cilia, 1905, A., ii, 269. chemical stimulation of cerebrum,

1906, A., ii, 240, 871.

is the conduction of a nerve impulse a chemical or a physical process? 1907, A., ii, 977.

May, Alfred. See Daniel Vorländer. May, Clarence B. See Hannah Stevens. May, Clarence Earl, decomposition of uric acid by means of dilute sodium hydroxide solutions, 1911, A., ii, 1131.

phosphotungstic acid as a clarifying agent in urine analysis, 1912, A., ii,

May, Clarence Earl, and William John Gies, estimation of mucoid in urine, blood, and tissue extracts, 1907, A., ii, 826.

May, Clarence Earl. See also Marston Taylor Bogert.

May, David William, and P. L. Gile, catalase of soils, 1909, A., ii, 928.

May, Otto (London), blood supply and nutrition of the pancreas, 1904, A., ii.

May, Otto (Strassburg), fruits of Sapindus rarak, 1906, A., ii, 301.

May, Otto B. See Virgil Coblentz. May, Percy, aromatic antimony com-

pounds. Part I. The oxidation and nitration of triphenylstibine, 1910, T., 1956; P., 218.

aromatic antimony compounds; preliminary note, 1910, P., 142.

aromatic antimony compounds. II. The action of the chlorides of antimony on aniline and its derivatives, 1911, T., 1382; P., 124.

note on the monosodium salt of 1-nitroso-2-naphthol-3:6-disulphonic acid,

1911, P., 141.

aromatic antimony compounds. Part III. Some primary aryl derivatives, 1912, T., 1033; P., 5.

aromatic antimony compounds. Part IV. Compounds of antimony trichloride with diazonium chlorides, 1912, T., 1037; P., 96.

May, Percy, and Samuel Smiles, some reactions of the sulphoxylic acids,

1912, P., 329.

May, Percy. See also John Cannell Cain. May, Richard. See Julius Bredt.

Mayeda, M., action of alkalis, lithium salts, and lithium water on the gastric secret, 1907, A., ii, 106.

detection of tryptophan and phenylalanine, 1907, A., ii, 591.

amyloid protein, 1909, A., i, 274. the protein component of chondromucoid, 1909, A., i, 274.

Mayen, Hans. See Ludwig Wolff.

Mayer, Adolf [Eduard], proposals for a rational series of sieve numbers, 1903, A., ii, 98. humic acids of grey sand and brown

sandstone, 1905, A., ii, 55.

example of how analysis of soil may be of use, 1906, A., ii, 249.

Mayer, André, complexes of pure albumin, 1906, A., i, 998.

Mayer, André, and Edouard Salles. electrical transport of inorganic col-

loids, 1908, A., ii, 458.

Mayer, André, and Georges Schæffer, the production in vivo and in vitro of precipitins for ovalbumin by means of antigens of a chemically definite nature, 1903, A., ii, 868.

Mayer, André, Georges Schæffer, and Emile F. Terroine, influence of the reaction of the medium on the size of colloidal granules, 1908, A., ii, 24.

physico-chemical investigations on soaps considered as colloids, 1908,

A., ii, 264.

Mayer, André. See also Henri Bierry.

and Victor Henri.

Mayer, Arthur, influence of thiogyanates on metabolism; the amount of thiocyanate in saliva and urine, 1904, A., ii, 423.

Mayer, Arthur. See also Albert Neu-

mann

Mayer, Charles, condensations of phenols and aromatic amines with benzylideneaniline, 1904, A., i, 784. condensation of imines with a-ethyl-

enic ketones, 1904, A., i, 832. condensation of imines with aldehydes

and ketones, 1905, A., i, 214. condensation of imines with ketones nitromethane, 1905, A., and

condensation of benzylideneaniline ethyl acetonedicarboxylate, with

1905, A., i, 429.

properties of B-anilinoketones derived from fatty ketones, 1905, A., i,

Mayer, Charles. See also Paul Petit.

Mayer, Eugen. See Richard Willstätter. Mayer, Erwin W., modification of Volhard's method of estimating manganese, 1908, A., ii, 71.

Mayer, Erwin W. See also Oskar Baudisch, Friedrich Wilhelm Semmler,

and Richard Willstätter.

Mayer, Friedrich, estimation of acid and saponification numbers in darkcoloured oils and fats, 1910, A., ii, 361.

analysis of graphite, 1911, A., ii,

Mayer, Fritz, thiosalicylic [o-thiolbenzoic] acid and thioxanthone, 1909, A., i, 405.

derivatives of thiosalicylic acid and of thioxanthone, 1909, A., i, 823; 1910, A., i, 260.

Mayer, Fritz, diphenyl derivatives, 1911, A., i. 869.

synthesis of phenanthraquinones, 1912, A., i, 478.

Mayer, Fritz. See also Theodor Curtius. and Martin Freund.

Mayer, Hans, electrical method for measuring the changes produced in chromate-gelatin films by light, 1909. A., ii, 362.

Mayer, Heinrich G. See Gustav Heller. Mayer, Josef. See Hermann Staudinger. Mayer, Karl, preparation of 1-phenyl-

5-methyl-3-pyrazolone and its deriva-

tives, 1903, A., i, 370.

Mayer, Mario, aldehyde sulphites of vegetable alkaloids, 1911, A., i, 223. action of sulphurous acid on aldehydoaminic bases, 1912, A., i, 251.

pinene and camphor, 1912, A., i, 572. Mayer, Mario. See also Mario Betti. Mayer, Martin. See Leo Langstein.

Mayer, Max, and V. Altmayer, equilibrium of methane, 1907, A., i, 457.

syntheses of methane by means of calcium hydride, 1908, A., i, 845. relationships between nickel

hydrogen, 1908, A., ii, 950.

Mayer, Max, Friedrich Henseling, V. Altmayer, and J. Jacoby, some gas reactions, 1909, A., i, 753.

Mayer, Max. See also Theodor Curtius. Mayer, Otto, chromates of polyvalent

metals, 1903, A., ii, 550.

[silver dichromate], 1905, A., ii, 86. detection of acetoacetic acid in urine, 1906, A., ii, 501.

estimation of lead, 1906, A., ii, 581.

detection and estimation of albumin in urine, 1907, A., ii, 996.

the estimation of iron in water, 1912, A., ii, 809.

Mayer, Otto von. See Hartwig Franzen. and Paul Jannasch.

Mayer, Paul, intermediate carbohydrate metabolism. I. Ethylene glycol and glycolaldehyde, 1903, A., ii, 495. excretion of glycuronic acid, 1903,

A., ii, 501. hæmatein and hæmalum, 1904, A., i,

909.

behaviour of a B-diaminopropionic acid in the body, 1904, A., ii, 631.

lecithin-sugar and jecorin and the physico-chemical behaviour of sugar in the blood, 1906, A., i, 915.

fission of lipoid substances by lipase and the optical antipodes of natural lecithin, 1906, A., i, 918.

fermentability of methylglyoxal, 1907, A., i, 183,

Mayer Paul, physiological behaviour of inosite, 1907, A., ii, 117; 1908, A., ii, 521.

blood-jecorin and the physico-chemical behaviour of sugar in the blood, 1907, A., ii, 631.

chemistry of lecithin, 1908, A., i,

the asymmetric conjugation of glycuronic acid, 1908, A., i, 393.

ureidoglucose [carbamidodextrose], 1909, A., ii, 508.

the destruction of dextrose by light, 1911, A., i, 423.

pyruvic acid glycosuria, and the behaviour of pyruvic acid in the animal body, 1912, A., ii, 666.

Mayer, Paul. See also Carl Neuberg. Mayer, Rudolf. See Julius Tafel.

Mayer, Willy, and Bernhard Tollens, fucosephenylosazone, 1905, A.,i,746. fucose, 1907, A., i, 588.

estimation of fucose and methylpentosan, 1907, A., ii, 586.

Mayer, Woldemar. See Edgar Wedekind.

Mayerhofer, Ernst, condensation of pdimethylaminobenzaldehyde with
dibenzyl ketone and phenylacetone,
1907, A., i, 780.

Esbach's protein estimation and a new creatinine compound, 1909, A., i, 771. the clinical importance of E. Goldschmiedt's glycuronic acid reaction in infants' urine, 1911, A., ii, 311.

Mayerhofer, Ernst, and Ernst Přibram, factors influencing the processes of diffusion through the fresh intestinal membrane of animals, 1910, A., ii, 428.

Mayerhofer, Ernst, and Ernst Stein, the influence of sugar on the permeability of the intestinal membrane, 1910, A., ii, 974.

Maynard, Leonard. See Arthur Wayland Dox.

Mayoral Oliver, Alberto, radium, 1907, A., ii, 62.

Mayr. See Schülke.

Mayr, Emil, influence of normal salts on the staining and fixation of nervous tissues, 1906, A., ii, 182.

Mayr, Ernst. See Josef Brandl. Mayrhofer, Adolf. See Josef Herzig.

Mayrhofer, Josef, estimation of magnesium oxide in magnesites, 1908, A., ii, 481.

Mayrhofer, Josef, and Karl Nemeth, condensation of benzaldehyde with hydroxy-acids, 1903, A., i, 344.

Mays, Karl, trypsin, 1903, A., ii, 559. action of trypsin. II. and III., 1907, A., ii, 38.

Mays, Karl, enzymes of the pancreas, 1907, A., ii, 281.

proteins of Liebig's extract of meat, 1912, A., i, 399.

Mazaraki, Wladimir. See Carl Adam Bischoff.

Mazé, Pierre, utilisation of ternary carbon by plants and microbes, 1903, A., ii, 36; 1904, A., ii, 581.

isolation of zymase from animal and vegetable tissues, 1904, A., i, 1072. methane fermentation and the ferment by which it is produced, 1904, A., ii,

138. zymase and alcoholic fermentation, 1904, A., ii, 634.

production of citric acid by Citromyces, 1910, A., ii, 60.

induced maturation of grains; antigerminative action of acetaldehyde, 1911, A, ii, 141.

excretion of mineral and organic substances by roots and stomata, 1911,

A., ii, 324.

influence on plant development of mineral substances accumulating in the organs as residues from assimilation; absorption of colloidal organic matter by the roots, 1911, A., ii, 424.

phenomena of fermentation are actions of digestion; study of denitrification in the vegetable kingdom, 1911, A., ii, 518, 642.

formation of nitrous acid in the living

cell, 1911, A., ii, 643.

formation of nitrous and in the vegetable and animal cell, 1911, A., ii, 918.

experimental chlorosis of maize, 1911, A., ii, 1126.

relation of the plants to the nutritive elements of the soil; law of the minimum and the law of physiological ratios, 1912, A., ii, 796.

presence of nitrous acid in the sap of the higher plants, 1912, A., ii,

1202.

Mazé, Pierre, P. Guérault, and Dinescu, determination of temperature of pasteurisation of milk in connexion with its industrial application; influence of heat on conservation of physiological properties of milk, 1909, A., ii, 697.

Mazé, Pierre, and A. Perrier, production of mannitol by the ferments of sour

wine, 1903, A., ii, 745.

the mechanism of respiratory combustion; production of citric acid by Citromycetes, 1904, A., ii, 676. Mazé, Pierre, and A. Perrier, the rôle of microbes in alcoholic fermentation attributed to zymase, 1904, A., ii, 833.

assimilation of certain ternary substances by vegetables, 1905, A., ii,

112.

Mazé, Pierre, Ruot, and Lemoigne, plant chlorosis provoked by calcium carbonate, 1912, A., ii, 1088. Mazijewski, L. F. See Efim Semen

London.

Mazoué, (Mlle.), B. See A. Chauchard. Mazurevitsch. See Matschurevitsch.

Mazzara, Girolamo, action of sulphuryl chloride and of bromine on pyrrole, 1903, A., i, 51, 274; 1904, A., i, 919.

bromotrichloromethylpyrrole chlorobromomaleic methylimide.

VI., 1904, A., i, 771.

Mazzara, Girolamo, and Alessandro Borgo, action of sulphuryl chloride on pyrrole. IV. and V., 1904, A., i, 614, 770.

action of bromine on trichloropyrrole; chlorobromomaleimide. VII., 1904,

A., i, 918.

dichloropyrrole and dichlorodibromopyrrole. IX., 1905, A., i, 659.

chloropyrrole and chlorotribromopyrrole. X., 1905, A., i, 817.

action of sulphuryl chloride on methyl pyrrole-2-carboxylate. XI., 1905, A., i, 817.

action of sulphuryl chloride 2-methylindole(methylketole), 1905,

A., i, 827.

action of bromine on chloroindole and of sulphuryl chloride on scatole, 1905, A., i, 925.

action of sulphuryl chloride on indole,

1905, A., i, 925.

action of sulphuryl chloride on indole; chloro- and dichloro-indoles, 1906, A., i, 304.

action of sulphuryl chloride on pyrazole, 1906, A., i, 702.

Mazzoli, Charles. See Louis Pelet-Jolivet.

Mazzotto, Domenico, correction of the ideal melting-point curves of binary alloys, 1908, A., ii, 660.

new method for determining the composition of mixed crystals deposited by alloys at different temperatures, 1909, A., ii, 1008.

heat of solidification of alloys of lead and tin, 1910, A., ii, 690.

the nature of the transformation of lead-tin alloys in the solid state, 1911, A., ii, 889.

Mazzucchelli, Arrigo, preparation of carbon compounds containing two consecutive double linkings, 1905, A., i, 633.

electrolytic potential of chromous salts (electrochemical equilibrium between various degrees of oxidation).

II., 1905, A., ii, 570.

new derivative of molybdenum peroxide, 1907, A., i, 748.

certain complex salts of titanium peroxide, 1907, A., i, 891.

conditions of quantitative precipitation of uranium peroxide, 1907, A., ii,

hydrates of aluminium fluoride, 1907. A., ii, 549.

complex acids of molybdenum, 1909, A., i, 877.

complex derivatives of molybdic acid, 1911, A., i, 10.

index of refraction of binary mixtures, 1911, A., ii, 781.

transport numbers and molecular complexity, 1911, A., ii, 962.

Mazzucchelli, Arrigo, and Cesare Barbero, electrolytic potential of certain peroxides, 1906, A., ii, 647.

Mazzucchelli, Arrigo, and Ferruccio Bimbi, complex salts of uranium

peroxide, 1907, A., i, 1004.

Mazzucchelli, Arrigo, and Mario Borghi, complexes of permolybdic and pertungstic acids with active organic acids, 1911, A., i, 11.

Mazzucchelli, Arrigo, and Giuseppe Inghilleri, complex ozo-salts of tung-

sten, 1908, A., i, 755.

Mazzucchelli, Arrigo, and Enrico Pantanelli, ozo-salts of titanium, Enrico 1909, A., i, 631; 1910, A., i, 651.

inorganic salts of titanium peroxide, 1909, A., ii, 741.

Mazzucchelli, Arrigo, and G. Zangrilli, ozo-salts of molybdenum, 1910, A., i,

Mazzucchelli, Arrigo. See also Emanuele Paternò.

Mdivani, B., reduction of vanadium pentoxide, 1907, A., ii, 782. estimation of tungsten, 1911, A., ii,

230.

Mdivani, B. See also T. Warynski. Meade, Harold A. See Treat Baldwin

Meakin, Harold, and Charles Edwin Wheeler, the opsonic index in phthisis, 1905, A., ii, 845.

Mears, Brainerd. See Harmon Northrop Morse.

Mebus, Artur, ethyl methylethyloxalacetate and some of its derivatives, 1905, A., i, 507.

Mech, H., products of condensation of o- and p-nitrobenzyl chlorides with acetylacetone, 1907, A., i, 63; 1908, A., i, 655.

Mecklenburg, Werner, the isomerism of the stannic acids, 1910, A., ii, 41;

II., 1912, A., ii, 355. the iodometric estimation of potassium ferro- and ferri-cyanide, 1910, A., ii,

Mecklenburg, Werner. See also Wilhelm Biltz.

Medicus, Ludwig, and Hermann Kober, detection of corn-cockle and ergot in flour, 1903, A., ii, 251.

Medigreceanu, Florentin, and Leo Kristeller, general metabolism with special reference to mineral metabolism in a patient with acromegaly complicated with glycosuria, 1911, A., ii,

417.

Medigreceanu, Florentin. See also Emil
Abderhalden, Gabriel Bertrand, and

Pheebus A. Levene.

Medinger, Paul, derivatives of catechol

methylene ether, 1906, A., i, 421.

Medinger, Robert, salts of aminophenols with dibasic acids, 1912, A., i, 848.

Medri, Luigi, estimation of certain oxidising substances by means of hydrazine sulphate, 1906, A., ii, 628. detection of free mineral acids in wine and vinegar, 1909, A., ii, 627.

Medvedeff, An. K., oxidation in animal tissues. III., 1904, A., ii, 627.

derivative of glycuronic acid and pnitrophenylhydrazine, 1905, A., i, 491, 612.

deamidation in the blood in normal animals, and in those deprived of the thyroid, 1911, A., ii, 789.

Medway, Herbert Edwin, the material and shape of the rotating cathode, 1904, A., ii, 770.

Medway, Herbert Edwin. See also Frank Austin Gooch.

Meek, Walter J., influence of osmotic pressure on the irritability of skeletal muscle, 1906, A., ii, 872.

relative resistance of cardiac muscle and nerve to drugs, 1908, A., ii,

the liver and regeneration of fibrinogen, 1912, A., ii, 273.

relation of the liver to the fibrinogen content of the blood, 1912, A., ii, 578.

Meer, Fritz ter. See Otto Diels.

Meerburg, Pieter Adriaan, observations on the system: zinc chloride, ammonium chloride, and water, 1904, A., ii, 112.

the system: potassium iodate, iodic acid, and water at 30°, 1905, A., ii, 17.

determinations in the system: cupric chloride, ammonium chloride, and water, 1905, A., ii, 17.

some determinations in the systems: $KIO_3 - HIO_3 - H_2O$, $NaIO_3 - HIO_3 - H_2O$, $-H_2O$, and $NH_4IO_3 - HIO_3 - H_2O$, 1905, A., ii, 508.

the hydrogel of Cr2O3, CrO3, 1907,

A., ii, 355.

the ternary system: mercuric chloride, ammonium chloride, and water at

30°, 1908, A., ii, 676.

transformation of 4:4':4"':-tetrachlorobenzopinacone into β-4:4':4":-4"''-tetrachlorobenzopinacolin and the velocity of the reaction, 1909, A., i, 722.

transformation of α-4:4':4"':-tetrachlorobenzopinacolin into β-4:4':4":-4"''-tetrachlorobenzopinacolin and the velocity of the reactions, 1909, A., i, 722.

the ternary system: potassium sulphate, copper sulphate, and water below 50°, 1911, A., ii, 380.

power of potable water to dissolve lead, 1912, A., ii, 762.

Meerburg, Pieter Adriaan, and Hendrik Filippo, microchemical reaction for copper in presence of lead and bismuth, 1906, A., ii, 52.

Meerson, S. See Alex. Orechoff.

Meerum Terwogt, Peter Catharinus Elize, the system: bromine and iodine, 1906, A., ii, 15.

Meerwein, Hans, condensation reactions of αβ-unsaturated aldehydes; formation of benzene rings, 1908, A., i, 89. condensation reactions of αβ-unsaturated aldehydes. II., 1908, A., i,

545.

Meerwein, Hans, and Georg Schroeter, nitrated phenylglutaric acids. III.

1907, A., i, 534.

Meerwein, Hans, and Walter Unkel, the pinacone transformation in the case of cyclic compounds, 1910, A., i, 856.

Meerwein, Hans. See also Georg Schroeter.

Mees, Charles Edward Kenneth. See Samuel Edward Sheppard.

Mehd, P. V. See John Reginald Blockey.

Mehler, Hans. See Alexander Gutbier.

Mehling, M. F. See Arthur Wesley Browne.

Hermann, [preparation Mehner, cvanogen compounds], 1904, A., i, 655.

Mehring, Heinrich, estimation of the loss by ignition in soil analysis, 1905, A., ii, 615.

Mehring, Heinrich. See also Richard Anschütz.

Mehrtens, Gustav. See Max Busch, and Carl Paal.

Meier, August. See Reginald Oliver Herzog.

Meier, Hugo, physiological action of arecoline, 1907, A., ii, 118.

Meier, Hugo. See also Johann Feigl. Meier, Willi, dispersion and absorption of metals for the visible and ultraviolet spectrum, 1910, A., ii, 369.

Meigen, Ernst Wilhelm Gustav, calcium carbonate. II. Precipitation, 1905, A., ii, 454.

5-bromo-6-aminoquinoline, 1906, A., i,

methylfurfurantialdoxime: correction.

1907, A., i, 949. Meigen, Wilhelm, Heinrich Garbs, W. Merkelbach, and G. Wichern, condensation products of chlorodinitrobenzene and aminoquinolines, 1908,

A., i, 580. Meigen, Wilhelm, and E. Nottebohm, action of sodium hypobromite on primary aromatic amines, 1906, A., i, 319.

Meigen, Wilhelm, and A. Spreng, carbohydrates of yeast, 1908, A., ii, 315. Meigen, Wilhelm. See also Konrad

Fromherz.

Meigs, Edward B., heat-coagulation in plain muscle, 1909, A., ii, 251.

heat coagulation in smooth muscle; between protein the connexion coagulation and heat rigor, 1909, A., ii, 417.

water rigor in frog's muscle, 1910, A., ii, 55.

the effects of distilled water and of various solutions on the weight and length of striated muscle, 1910, A., ii, 524.

Meigs, Edward B., and Leon A. Ryan, the ash of smooth muscle, 1912, A., ii,

Meigs, Edward B. See also Leon A.

Meillère, [Jean Pierre] Gedeon, electrolytic detection and estimation of lead, 1903, A., ii, 183.

the normal presence of lead in the organism, 1903, A., ii, 499.

Meillère, [Jean Pierre] Gedeon, two colour reactions of vohimbine, 1904, A., ii,

estimation of the fat in milk and also the physico-chemical constants of the latter, 1904, A., ii, 596.

inositol, 1906, A., ii, 811.

isolation of carbohydrates and glucosides by precipitation with metallic salts, 1907, A., i, 893.

isolation of traces of mineral substances from saline mixtures; application to medical chemistry, toxicology, and hydrology, 1908, A., ii, 62.

preparation of hypobromite from potassium bromide and "eau de

Javel," 1909, A., ii, 837.

presence of inositol as a characteristic of natural wines, 1909, A., ii, 945. detection of pilocarpine in presence of

quinine, 1912, A., ii, 1010.

Meillère, Gedeon, and P. Fleury, detection of inositol in organic products, 1910, A., ii, 553.

Meine, Wilhelm. See Julius Tröger. Meinertz, Joseph, the liver in phosphorus poisoning, 1905, A., ii, 470.

jecorin, 1906, A., i, 124. Meinertz, Joseph. See also Albert Neu-

Meingast, Fritz, condensation of lævulic acid with isobutaldehyde, 1905, A., i, 319.

Meininger, Ernst, some kinds of gums, 1910, A., i, 363. Meisels. E. See Isidor Klimont.

Meisenbach, Carl Friedrich Otto, the red portion of the calcium chloride arc spectrum, 1908, A., ii, 645.

Meisenburg, Kurt, estimation of uric acid by direct precipitation, 1907, A.,

ii, 313.

Meisenburg, Kurt. See also Arthur Hantzsch.

Meisenheimer, Jakob, methyl dinitroethyl ether, 1903, A., i, 223. experiments on yeast extract, 1903,

A., i, 591.

reduction of dinitrobenzenes, 1904, A., i, 150.

formation of salts of benzoin, 1905, A., i, 291.

behaviour of dextrose, lævulose, and galactose towards dilute sodium hydroxide, 1908, A., i, 319.

preparation of benzyl alcohol from benzaldehyde and potassium hydroxide, 1908, A., i, 417.

a new kind of asymmetry in the nitrogen atom, 1909, A., i, 20. methylglyoxal, 1912, A., i, 831.

767

Meisenheimer, Jakob, and Edmund Connerade, nitration of anthracene, 1904, A., i, 391.

Meisenheimer, Jakob, Jacob Dodonow. and Martha Hoffheinz, optically active amino-oxides, 1912, A., i, 25.

Meisenheimer, Jakob, and Friedrich Heim, action of alkalis on phenylnitroethylene, 1905, A., i. 269.

estimation of nitric and nitrous acids,

1906, A., ii, 49, 125.

Meisenheimer, Jakob, Friedrich Heim. and Leo Jochelson, reactions of unsaturated nitro-compounds, 1907, A., i, 858.

Meisenheimer, Jakob, and Leo Lichtenstadt, optically active compounds of phosphorus, 1911, A., i, 344.

Meisenheimer, Jakob, and Egbert Patzig, reduction of aromatic o- and pdinitro-compounds, 1906, A., i, 642. direct introduction of amino-groups

into the nucleus of aromatic nitro-

compounds, 1906, A., i, 652.

Meisenheimer, Jakob, and Moses Schwarz, aliphatic polynitro-compounds, 1906, A., i, 618.

Meisenheimer, Jakob, and Klaus Witte, action of methyl alcoholic potash on 2-nitronaphthalene, 1904, A., i, 175. reduction of 2-nitronaphthalene, 1904, A., i, 193.

Meisenheimer, Jakob. See also Eduard

Buchner.

Meiser, Wilhelm Ottmar. See Walter Dieckmann.

Meisling, Aage A., a polarisation colorimeter, 1904, A., ii, 440.

Meissner, Richard, the decomposition and formation of lactic acid by microorganisms, 1908, A., ii, 414.

Meister, Lucius, & Brüning. Farbwerke vorm. Meister, Lucius, & Brüning.

Meister, A., didymolite, a new mineral, 1912, A., ii, 950.

See Otto Wallach. Meister, Fritz.

Meister, Wilhelm, constitution of methazonic acid, 1907, A., i, 885.

Meitner, Lise, some simple methods of preparing radioactive disintegration products, 1912, A., ii, 10.

the disintegration scheme of the active deposit of thorium, 1912, A., ii, 723.

Meitner, Lise. See also Otto von Baeyer, J. Franck, and Otto Hahn.

Méker, Georges, new laboratory burners and their adaptation to the production of high temperatures, 1905, A., ii, 142.

Melacini, G. See Guido Bargellini. Melamed, M. See Eugen Khotinsky. Melander, K. See Hans von Euler.

Melcher, Arthur C., solubility of silver chloride, barium sulphate, and calcium sulphate at high temperatures, 1910, A., ii, 293.

Melcher, Arthur C. See also Arthur Amos Noyes, and Willis Rodney Whitney.

Melczer, Gusztáv. See Géza Doby.

Meldola, Raphael, presidential address, 1906, T., 745; P., 93; 1907, T., 626; P., 101.

the living organism as a chemical agency; a review of some of the problems of photosynthesis by growing plants, 1906, T., 749; P., 98.

notes on derivatives of a-N-alkylated naphthylamine, 1906, T., 1434; P.,

a new trinitroacetaminophenol and its use as a synthetical agent, 1906, T., 1935; P., 303.

the position and prospects of chemical research in Great Britain, 1907, T.,

626: P., 101.

complete methylation by methyl sulphate, 1910, P., 232.

the first synthesis of ethyl alcohol, 1910, A., i, 533.

the question of isomerism between naphthiminazoles, 1911, P., 98.

Meldola, Raphael, and Hugh Gordon Dale, note on 4-bromo-2-nitro-1(a)naphthylamide, 1906, P., 156.

Meldola, Raphael, and Lewis Eynon, a method for the direct production of aminoazo-compounds, 1904, certain P., 250; discussion, P., 250; 1905,

Meldola, Raphael, John Vargas Eyre, and Joseph Henry Lane, isomeric aminoamidines of the naphthalene series; (fourth communication on anhydro-bases), 1903, T., 1185; P.,

Meldola, Raphael, Arthur James Hale. and Hugh Vernon Thompson, isopicramic acid and its use as an indi-

cator, 1912, A., ii, 1090.

Meldola, Raphael, and James Gordon Hay, the diazotisation of dinitroanisidines and related compounds, 1907, T., 1474; P., 211.

syntheses with phenol derivatives containing a mobile nitro-group. Part I. The interaction of 2:3:5trinitro-4-acetylaminophenol amines, 1908, T., 1659; P., 197.

a molecular compound of trinitroacetylaminophenol and B-naphthol,

1908, P., 210.

Meldola, Raphael, and James Gordon Hay, syntheses with phenol derivatives containing a mobile nitro-group. Part II. The interaction of 2:3:5-trinitro-4-acetylaminophenol and amines (continued), 1909, T., 1033 ; P., 167.

2:3:5-trinitro-4-aminophenol and derivatives, 1909, T., 1378; P., 207.

Meldola, Raphael, and William Francis Hollely, quinone-ammonium derlva-Part I. The methylation products of picramic and isopicramic acids, 1912, T., 912; P., 128. Meldola, Raphael, and Harold Kuntzen,

salts and ethers of 2:3:5-trinitro-4acetylaminophenol, 1910, T., 444;

P., 58.

syntheses with phenol derivatives containing a mobile nitro-group. Part III. Complex iminazoles, azocompounds, and azides, 1910, P., 340; 1911, T., 36.

syntheses with phenol derivatives containing a mobile nitro-group. Parts IV. and V. Quinone-imides; asymmetric quaternary ammonium compounds and asymmetric carbinols, 1911, T., 1283, 2034; P., 157, 263.

Meldola, Raphael, and Joseph Henry Lane, the isomerism of the amidines of the naphthalene series (fifth communication on anhydro-bases), 1904, T., 1592; P., 214; discussion, P., 215.

note on B-NH-ethenyldiaminonaphtha-

lene, 1905, P., 24.

Meldola, Raphael, and Frédéric Reverdin, the products of diazotisation of the trinitro-p-anisidines, 1910, T., 1204; P., 132.

Meldola, Raphael, and Frank George Coad Stephens, dinitroanisidines and their products of diazotisation, 1905, T., 1199; P., 218; 1906, T., 923; P.,

Meldrum, Andrew Norman, a B-lactonic acid from acetone and malonic acid,

1908, T., 598; P., 31.

complex nitrites containing potassium and lead; preliminary note, 1908,

the composition and formula of Wells' potassium lead periodide, 1908, P.,

substances related to cochenillic and carminic acids. Part I. Synthesis of the methyl ether of β - and of γ coccinic acid, 1911, T., 1712; P., 216.

Meldrum, Andrew Norman, the development of the atomic theory. II. The various accounts of the origin of Dalton's theory. III. Newton's theory and its influence in the eighteenth century, 1911, A., ii, 267.

the development of the atomic theory. IV. Dalton's physical atomic theory. V. Dalton's chemical theory, VI. The reception accorded to the theory advocated by Dalton, 1911, A., ii,

708.

the development of the atomic theory. VII. The rival claims of William Higgins and John Dalton, 1912,

A., ii, 35.

Meldrum. Andrew Norman, William Henry Perkin, jun., the cis- and trans- modifications of 1methylcyclohexan-2-ol-4-carboxylic acid and their conversion into 1methyl-\(\Delta^1\)-cyclohexene 4-carboxylic acid, 1908, T., 1416; P., 187.

the reduction of 5-hydroxy-m-toluic acid, 1909, T., 1889; P., 249.

Norman. Meldrum, Andrew and William Ernest Stevhen Turner. the molecular weights of amides in various solvents; preliminary note, 1907, P., 165.

the molecular complexity of amides in various solvents, 1908, T., 876; P., 98; 1910, T., 1605; P., 211.

the molecular complexity of amides in various solvents. Part III. Amides in aqueous solution, 1910, T., 1805; P., 213.

Meldrum, William Buell, influence of alkyl substituents on the electrical conductivity of malonic acid, 1911, A., ii, 692.

Melikoff, Petr G., perborates, 1905, A., ii, 246.

separation of phosphomolybdates from silicomolybdates, 1912, A., ii, 202.

behaviour of hydrogen peroxide towards ammonium silicomolybdate and phosphomolybdate, 1912, A., ii,

sensitive reaction for molybdic acid, 1912, A., ii, 693.

Melikoff, Petr G., and M. Becaia, estimation of phosphoric acid in presence of colloidal silicic acid, 1912, A., ii,

Melikoff, Petr G., and Eugen Eltschaninoff, qualitative reactions for columbium and tantalum, 1905, A., ii, 358.

Melikoff, Petr G., and E. Jelhchaninoff, orthopervanadates, 1909, A., ii, 673.

Melikoff, Petr G., and Paul Kasanezky, perniobic acid, 1903, A., ii, 734. structure of fluorovanadium com-

pounds, 1904, A., ii, 346.

Mellanby, Edward, excretion of creatine and creatinine in hepatic disease, 1908, A., ii, 54.

creatine and creatinine, 1908, A., ii, 308. Mellanby, Edward, and Frederick William Twort, presence of B-iminazolylethylamine in the intestinal wall; with a method of isolating a bacillus from the alimentary canal which converts histidine into this substance, 1912, A., ii, 853.

Mellanby, Edward. See also Frederick

William Twort.

Mellanby, John, globulins, 1906, A., i,

physical properties of horse-serum,

1907, A., ii, 631. proteins of horse-serum, 1908, A., ii, 117.

muscle plasma, 1908, A., ii, 713.

coagulation of blood. I. and II., 1909, A., ii, 158, 680.

Mellanby, John, and V. J. Woolley, relations of secretin and enterokinase to pancreatic enzymes, 1909, A., ii, 683.

Mellecour, R., thermo-calorimetric measurements, 1911, A., ii, 851.

Mellet, Rudolf, a new indicator for alkalimetry and acidimetry; 6-sulpho-B-naphthol-1-azo-m-hydroxybenzoic acid, 1910, A., ii, 995.

estimation of nicotine in tobacco and plants of Nicotiana green tabacum, 1911, A., ii, 672.

Mellet, Rudolf. See also Heinrich Brun-

ner, and Ernest Chuard.

Mellor, Joseph William, the union of hydrogen and chlorine. VIII. The action of temperature on the period of induction, 1904, P., 53.

the union of hydrogen and chlorine. IX. Further experiments on the action of light on chlorine, 1904,

P., 53.

the union of hydrogen and chlorine. X. Action of the silent discharge on chlorine, 1904, P., 140.

the union of hydrogen and chlorine. XI. Rate of decay of the activity of gaseous chlorine, 1904, P., 196.

Mellor, Joseph William, and Lawrence Bradshaw, kinetics of sugar inversion,

1904, A., ii, 551.

Mellor, Joseph William, and A. D. Holdcroft, the chemical constitution of the kaolinite molecule, 1911, A., ii, 607.

Mellquist, Hjalmar. See Peter Klason. Melone, Nicola. See Ezio Comanducci. Melsbach, Heinrich. See Theodor Cur-

Meltzer, Samuel James, migration of solutions in bodies deprived of the cardiac circulation, 1911, A., ii, 220.

Meltzer, Samuel James, and John Auer, rate of absorption from intra-muscular tissue, 1905, A., ii, 181.

studies on magnesium salts. I. Anæsthesia by subcutaneous injections,

1905, A., ii, 743.

pharmacological studies of magnesium salts. II. The toxic action of intravenous injections on the medullary centres, 1906, A., ii, 244.

physiological action of magnesium III. Their narcotising effect salts. on nerve fibres, 1906, A., ii, 473.

action of ergot on the alimentary canal, 1906, A., ii, 878.

action of magnesium salts. IV., 1907,

A., ii, 42. antagonistic action of calcium and magnesium, 1908, A., ii, 312, 519.

the [physiological] action of strontium compared with that of calcium and magnesium, 1908, A., ii, 519.

anæsthesia and paralysis caused by magnesium salts, 1909, A., ii, 80.

Meltzer, Samuel James, and Clara Meltzer Auer, action of suprarenal extract, 1903, A., ii, 442.

effects of subcutaneous injection of suprarenal extract, 1903, A., ii, 564. pupil dilatation caused by adrenaline,

1904, A., ii, 360.

effect of suprarenal extract on the frog's pupil, 1904, A., ii, 632.

Meltzer, Samuel James, and William Salant, effect of intravenous injections of bile on blood-pressure, 1905, A., ii, 836.

toxicity of bile. II., 1906, A., ii, 297. Meltzer, Samuel James. See also John Auer, William John Gies, Don R. Joseph, Israel Simon Kleiner, and Alfred O. Shaklee.

Melville, Wm. See Alfred Holmes White.

Melvin, G. Spencer, glycolysis in blood, 1912, A., ii, 1185.

Melzer, G. See Adalbert Kolb.

Melzer, Wilhelm, silico-acids and their derivatives, 1908, A., i, 967.

Mendel, Arthur R., and Graham Lusk, respiration in phloridzin diabetes, 1903, A., ii, 674.

Mendel, Joh., decomposition of different sugars by bacteria, 1911, A., ii, 318.

Mendel, Joseph, the action of the zinc ion on media for microbes, 1908, A., ii, 722.

Mendel, Lafayette Benedict, taurine in molluscan muscle, 1904, A., ii, 751.

enzymes of the embryonic alimentary canal, 1906, A., ii, 181.

purine metabolism of the embryo, 1907, A., ii, 634.

parenteral utilisation of earbohydrates, 1908, A., ii, 306.

absorption of fats stained with Sudan

III., 1909, A., ii, 747.

Mendel, Lafayette Benedict, and Stanley Rossiter Benedict, excretion of magnesium and calcium, 1909, A., ii,

Mendel, Lafayette Benedict, and Alice Frances Blood, some peculiarities of the proteolytic activity of papain,

1910, A., i, 796.

Mendel, Lafayette Benedict, and Harold Cornelius Bradley, physiology of molluses, 1905, A., ii, 179; 1906, A., ii, 782.

physiology of molluses. II. Inorganic constituents of the liver of Sycotypus, 1905, A., ii, 737.

Mendel, Lafayette Benedict, and Oliver Closson, elimination of Eugene creatinine, 1905, A., ii, 186.

excretion of inorganic compounds. III. Rubidium, 1906, A., ii, 469.

Mendel, Lafayette Benedict, and Henry Drysdale Dakin, the optical inactivity of allantoin, 1910, A., i, 286.

Mendel, Lafayette Benedict, and Amy L. Daniels, the behaviour of fat-soluble dyes and stained fat in the animal organism, 1912, A., ii, 1197.

Mendel, Lafayette Benedict, and Morris Seide Fine, studies in nutrition. I. The utilisation of the proteins of

wheat, 1911, A., ii, 1109. studies in nutrition. II. The utilisation of the proteins of barley, 1911,

A., ii, 1109.

studies in nutrition. III. The utilisation of the proteins of corn, 1912, A., ii, 63.

studies in nutrition. IV. The utilisation of the proteins of the legumes,

1912, A., ii, 271.

V. The utilisastudies in nutrition. tion of the proteins of cotton seed, 1912, A., ii, 272.

studies in nutrition. VI. Utilisation of the proteins of extractive-free meat powder; the origin of fæcal nitrogen, 1912, A., ii, 272.

Mondel, Lafayette Benedict, and Robert Banks Gibson, nitrogenous metabolism after splenectomy, 1904, A.,

nitrogenous metabolism in man after removal of the spleen, 1907, A., ii,

Mendel, Lafayette Benedict, and Warren Witherell Hilditch, influence of alcohol on metabolism, 1910, A., ii.

Mendel, Lafayette Benedict, and Israel Simon Kleiner, the fate of sucrose after parenteral introduction in ani-

mals, 1910, A., ii, 974.

Mendel, Lafayette Benedict, and Charles Samuel Leavenworth, chemical studies on growth. III. Glycogen,

1907, A., ii, 895...

chemical studies on growth. V. Autolysis of embryonic tissues. VI. Purines, pentose, and cholesterol of eggs. VII. Catalase in embryonic tissues. VIII. Lipase in embryonic tissues. IX. Embryonic muscular and nervous tissues, 1908, A., ii, 207.

Mendel, Lafayette Benedict, and John Franklin Lyman, the metabolism of some purine compounds in the rabbit, dog, pig, and man, 1910, A., ii, 973.

Mendel, Lafayette Benedict, and Philip Henry Mitchell, utilisation of carbohydrates without intervention of alimentary digestion processes, 1905, A., ii, 733.

chemical studies on growth. I. Inverting enzymes, 1907, A., ii, 895.

chemical studies on growth. II. Purine metabolism, 1907, A., ii, 895.

Mendel, Lafayette Benedict, and Victor Caryl Myers, the metabolism of some pyrimidine derivatives, 1910, A., ii,

Mendel, Lafayette Benedict, and Elbert William Rockwood, utilisation of proteins without the intervention of

digestion, 1905, A., ii, 45.

Mendel, Lafayette Benedict, and William Cumming Rose, mucie acid and carbohydrate metabolism, 1911, A., ii, 410.

creatine and creatinine. I. The rôle of the carbohydrates in creatinecreatinine metabolism, 1911, A., ii, 1002.

creatine and creatinine. II. Inanition and the creatine content of muscle, 1911, A., ii, 1007.

Mendel, Lafayette Benedict, and Tadasu Saiki, chemical studies on growth. IV. Transformation of glycogen by enzyme action in embryonic tissues, 1908, A., ii, 207.

Mendel, Lafayette Benedict, and Dudley Frank Sicher, excretion of inorganic compounds. II. Barium, 1906, A.,

ii, 469.

Mendel. Lafauette Benedict, and Henry Treacher, secretin and Clarke lymph-flow, 1903, A., ii, 561.

excretion of strontium, 1904, A., ii,

357.

Mendel, Lafayette Benedict, and Frank Pell Underhill, physiological action of proteoses, 1903, A., ii, 315.

paths of absorption from the liver,

1905, A., ii, 737.

physiological action of phytin acid,

1906, A., ii, 789.

is the saliva of the dog amylolytically active? 1907, A., ii, 563.

physiological action of choline, 1910,

A., ii, 735.

Mendel, Lafayette Benedict, Frank Pell Underhill, and Benjamin White, nucleic acid, 1903, A., ii, 314.

Mendel, Lafayette Benedict, and Harry Gideon Wells, physiology of mollusca, IV. Purine substance of Sycotypus, 1909, A., ii, 419.

Mendel, Lafayette Benedict, and Benjamin White, intermediary purine metabolism; the production of allantoin, 1904, A., ii, 674.

Mendel, Lafayette Benedict. See also Thomas Burr Osborne, Harry Gideon Wells, and Henry Lord Wheeler.

Mendeléeff, Dmitri Ivanovitsch, congratulatory address to, 1904, P., 17. memorial lecture on (Tilden), 1909, T., 2077.

Mendelssohn-Bartholdy, Paul, derivatives of imides of dibasic acids, 1907,

A., i, 1043.

Mendelssohn-Bartholdy, Paul. See also

Otto Wallach.

Mendenhall, Charles Elwood, and L. R. Ingersoll, certain phenomena hibited by small particles on a Nernst glower, 1908, A., ii, 151.

Mendenhall, Charles Elwood, See also

Oliver P. Watts.

Mendthal, Erich. See Wilhelm Lossen. Meneghini, Domenico, catalytic oxidation of ammonia. I., 1912, A., ii,

oxidation of chromic salts by means of silver oxide. I., 1912, A., ii, 390.

Meneghini, Domenico. See also Giuseppe Bruni, and Giovanni Pellini.

Menge, George Albert, new compounds of the choline type, 1912, A., i, 74.

new compounds of the choline type. II. Acetyl derivatives of a-methylcholine, "B-homocholine," "γ-homocholine," 1912, A., i, 949.

Menge, George Albert. See also Harry Ward Foote, and Treat Baldwin

Johnson.

Menge, Otto, the binary systems of magnesium and calcium chlorides with the chlorides of potassium, sodium, silver, lead, copper, zinc, and cadmium, 1911, A., ii, 982.

Mengel, Alfred. See Wilhelm Koenigs. Ménière, P., new method of estimating mercury vapour in air, 1908, A., ii, 433.

Menke, J. B. See Frans Maurits

Jaeger.

Mennechet, L. A., attempt to estimate indoxyl in urine, 1910, A., ii, 83.

Menneke, F. A. See Nicholas Knight. Mennell, Frederic Philip, [minerals associated with diamond in Rhodesia, 1910, A., ii, 1078.

Menozzi, Angelo, identity of the cholesterol from milk with that from bile,

1903, A., ii, 385.

the cholesterol group. IV., 1908, A.,

i, 265.

Menozzi, Angelo, and A. Moreschi, presence of two paraffin hydrocarbons in the unsaponifiable portion of chrysalidene oil, 1908, A.,

the cholesterol group; bombicesterol a new member existing in the chrysalis of the silkworm, Bombyx

mori. V., 1908, A., i, 265. the cholesterol group. VI. Bombicesterol and the presence of cholesterol in the chrysalis of the silk-

worm, 1910, A., i, 254.

the cholesterol group. VII. phytosterol of the oil of the ordinary walnut (Juglans regia), 1910, A., i, 317.

Menschutkin, Boris N., etherates of haloid compounds of magnesium,

1904, A., i, 215. etherates of haloid compounds of II. Action of anmagnesium. hydrous alcohols on etherates of magnesium bromide; crystalline alcoholates of magnesium bromide, 1906, A., i, 131.

Menschutkin, Boris N., etherates of haloid compounds of magnesium. III. Action of anhydrous alcohols on etherates of magnesium iodide; crystalline alcoholates of magnesium iodide, 1906, A., i, 131.

etherates of haloid compounds of magnesium. IV. Action of water on the etherates; solubility of hydrates of magnesium bromide and iodide in water, 1906, A., i, 132.

etherates of haloid compounds of magnesium. V. Action of esters; compounds of magnesium iodide and bromide with esters, 1906, A., i. 132.

etherates of magnesium bromide and iodide. II. The monoetherate of magnesium bromide, 1906, A., i, 552.

combination of magnesium bromide with certain amines, 1906, A., i.

action of magnesium bromide and iodide on some derivatives of carbamide. VII., 1907, A., i, 19.

compounds of magnesium bromide with derivatives of the acids. 1907, A., i, 19.

certain molecular compounds of calcium chloride, 1907, A., i, 271.

molecular compounds of magnesium bromide and iodide with aldehydes. ketones, and acetals, 1907, A., i. 386.

compounds of magnesium bromide and iodide with derivatives of the acids,

1907, A., i, 395.

crystalline "acidates" (compounds of magnesium bromide and iodide with organic acids), 1907, A., i, 582.

solubility of the hydrates of magnesium bromide and iodide, 1907, A., ii, 169.

crystallisation and melting points of the molecular compounds of magnesium bromide and iodide, 1907, A., ii, 751.

reciprocal displacement of the constituents of molecular compounds and their relative stability, 1908,

A., ii, 170.

molecular compounds of magnesium bromide and iodide with derivatives of acetic and other organic acids,

1909, A., i, 82.

acetamide as a solvent, 1909, A., i, 89. the solubility of the molecular compounds of magnesium bromide and iodide in the organic compounds from which they are formed, 1909, A., i, 548.

Menschutkin, Boris N., systems formed by aluminium chloride and bromide with aromatic hydrocarbons, 1909, A., i, 897.

compounds of aluminium bromide with nitro-compounds of aromatic hydrocarbons and their derivatives,

1909, A., i, 900.

relation between the structure of the aliphatic alcohols and their rate of

esterification, 1909, A., ii, 988. compounds of aluminium chloride with nitro-compounds of benzene hydrocarbons and their derivatives, 1910, A., i, 234.

the systems aluminium bromide and ethylene dibromide, 1911, A., i, 1.

compounds of aluminium chloride and bromide with acid chlorides, 1911, A., i, 45.

compounds of aluminium chloride and bromide with acetophenone and benzophenone, 1911, A., i, 65. compounds of antimony trichloride

and antimony tribromide with benz-

ene, 1911, A., i, 273.

investigation of systems of substituted benzenes with antimony chloride and antimony bromide. I. Halogensubstituted benzene, 1911, A., i,

examination of systems of substituted benzenes with antimony trichloride. II. SbCl₃,SbBr₃ and nitrobenzene, 1911, A., i, 274.

the system propylbenzene-antimony trichloride, 1911, A., i, 532.

binary systems of which one component is an organic compound and the other an inorganic salt, 1911, A., i, 992.

systems formed by antimony chloride and bromide with monosubstituted benzene hydrocarbons, 1912, A., i, 98.

systems formed by antimony trichloride and tribromide with disubstituted benzene hydrocarbons, 1912, A., i, 99.

relations of trisubstituted benzene hydrocarbons to antimony trichloride and tribromide, 1912, A.,

i, 100.

compounds of antimony trichloride and tribromide with polynuclear benzene hydrocarbons, 1912, A., i,

behaviour of antimony trichloride and tribromide towards certain oxygenated organic compounds, 1912, A., i. 193.

Menschutkin, Boris N., bicententary anniversary of M. V. Lomonosoff's birthday, 1912, A., ii, 341.

systems formed by fluorobenzene with antimony trichloride and tribromide,

1912, A., ii, 920.

benzenesulphonic acid and antimony

trihaloids, 1912, A., ii, 920.
systems formed by antimout trichloride and tribromide with naphthalene and its derivatives, 1912,
A., ii, 920.

systems formed by cyclohexane and cyclohexene with antimony trichloride and tribromide, 1912, A.,

ii, 922.

antimony trichloride and tribromide in their relations to phenol and some of its ethers, 1912, A., ii, 922. the system: aniline-antimony tri-

chloride, 1912, A., ii, 923.

Menschutkin, Nicolai Alexandrovitsch, influence of catalysts on the formation of anilides and amides, 1903, A., i, 813.

influence of indifferent solvents on the alkylation of organic bases, 1905,

A., i, 663.

the velocity of chemical change in the polymethylene series, 1906, T., 1532; P., 203.

influence of catalysts on the formation of anilides. II., 1906, A., i, 494. obituary notice of, 1911, T., 1660.

Menschutkin, Nicolai Alexandrovitsch, J. Krieger, and M. Ditrich, change of the velocity of amidification of acids with reference to their structure, 1903, A., ii, 357.

Menschutkin, Nicolai Alexandrovitsch, and L. Simanowsky, transition of different substituted anilines into compounds of the ammonium type, 1903, A., i, 749.

Mensio, Carlo, estimation of sulphur dioxide in wines, 1908, A., ii, 63. fluorides in wine, 1909, A., ii, 614.

Mensio, Carlo, and Ulderigo Somma. distilled grape residues, 1904, A., ii, 767.

Menten, (Miss) M. L., the relation of potassium salts and other substances to local anesthesia of nerves, 1912, A., ii, 1194.

Menten, (Miss) M. L. See also Archibald Byron Macallum.

Menter, Franz. See Zdenko Hanns Skraup.

Mentrel, R. C., barium-ammonium and baramide, 1903, A., ii, 77.

Mentrel, R. U. See also Antoine Guntz.

Mentschikowsky, Felix. See Pavel Iw. Petrenko-Kritschenko.

Mentzel, Curt, compounds of aromatic aldehydes with cyclopentanone, 1903, A., i, 497.

estimation of sulphurous acid in flesh, 1906, A., ii, 305.

Mentzel, Curt. See also Carl Arnold.

Mentzel, Edgar. See August Michaelis.

Mentzel, Waldemar. See August
Michaelis.

Menz, W., alteration of gelatin solutions; determination of their gold numbers and ultra-microscopic observations, 1909, A., i, 343.

Menz, W. See also Walther Borsche.

Menzies, Alan Wilfrid Cranbrook, method for determining the molecular weights of dissolved substances by measurement of lowering of vapour pressure, 1911, A., ii, 94.

convenient form of apparatus for the measurement of the vapour densities of easily volatile substances, 1911,

A., ii, 94.

Menzies, Alan Wilfrid Cranbrook, and N. N. Dutt, the liquidus surface of the ternary system composed of the nitrates of potassium, sodium, and calcium, 1911, A., ii, 822.

Menzies, Alan Wilfrid Cranbrook, and Paul David Potter, two-component system: water-arsenic pentoxide, 1912,

A., ii, 1165.

Menzies, Alan Wilfrid Cranbrook. See also Alexander Smith.

Menzies, J. A., secretion and composition of human bile, 1912, A., ii, 786.

Mepissoff, L. J. See Efim Semen London.

Mercer, R. See George Edward Bairsto. Merck, [Carl] Emanuel, preparation of

ψ-tropine, 1903, A., i, 358.

methyl and ethyl bromides of alkaloids of the tropeine and scopoleine groups, 1904, A., i, 187.

alkyl derivatives of barbituric acid, 1904, A., i, 380.

cyanodialkylacetylcarbamides, 1905 A., i, 178.

imino-CC-dialkylbarbituric acids (5:5-dialkylmalonylguanidines), 1905, A., i, 179, 751.

preparation of barbituric acid and its homologues, 1905, A., i, 179.

preparation of a non-poisonous saponin, 1905, A., i, 365.

cyano-derivatives of pyrimidine, 1905, A., i, 670.

endo-iminotriazoles, 1905, A., i, 949,

Merck, [Carl] Emanuel, preparation of 4:5-diamino-2:6-dihvdroxypyrimidine and its derivatives, 1906, A., i,

preparation of guanine, 1906, A., i, 456. 5:5-diethylbarbituric acid, 1906, A., i,

4:5-diamino-2:6-dihydroxy-3-methylpyrimidine, 1906, A., i, 536.

preparation of cyclic carbamide derivatives (pyrimidines), 1906, A., i, 537,

preparation of derivatives of barbituric acid, 1906, A., i, 537.

preparation of p-dialkylaminobenzhydrylamines, 1906, A., i, 661.

preparation of pyrimidine derivatives, 1906, A., i, 705; 1907, A., i, 450,

preparation of substituted di-iminobarbiturie acids, 1906, A., i, 715. preparation of the amides of coumarin-

carboxylic acid, 1906, A., i, 853. preparation of imino-5:5-dialkylbarbit-

uric acids, 1906, A., i, 987. preparation of magnesium and zinc

peroxides, 1906, A., ii, 853. preparation of 5:5-dialkylbarbituric

acids, 1907, A., i, 253, 350, 972. preparation of cyano-derivatives of pyrimidine, 1907, A., i, 356.

preparation of berberine derivatives,

1907, A., i, 435. preparation of 4:6-dioxy-2-thio-5:5dialkylpyrimidines, 1907, A., i, 972. [preparation of amino-ethers], 1907, A., i, 1071.

preparation of 2-alkyliminopyrimidines, 1907, A., i, 1088.

barium percarbonate, 1907, A., ii, 349. preparation of hydrogen peroxide, 1907, A., ii, 859.

preparation of alkylaminoalkyl-paminobenzoates, 1908, A., i, 266.

preparation of halogen derivatives of alkyl carboxylates, 1908, A., i, 419. preparation of sodium hydrogen percarbonates, 1908, A., ii, 180.

preparation of compounds containing active oxygen, 1909, A., ii, 1005.

preparation of 4-imino-5-oximino-2:6diketopyrimidine and its 3-alkyl derivative, 1911, A., i, 166.

preparation of 5:5-dialkyliminobarbituric acids (2-imino-4:6-diketo-5:5dialkylpyrimidines), 1911, A., i,572, 1035.

preparation of 5:5-dialkylthiobarbituric acids, 1911, A., i, 683, 1032.

of arylpolymethylenepreparation chloro-compounds, 1912, A., i, 110. Merck, [Carl] Emanuel, preparation of ychloropropylbenzene and its homologues, 1912, A., i, 175.

preparation of cyanoaminoformyl esters, 1912, A., i, 877.

preparation of allophanic acid esters, 1912, A., i, 877.

preparation of compounds from quinine and dialkylbarbituric acids, 1912, A., i, 1013.

Merck, Emanuel, and W. Eichholz, preparation of a therapeutically valuable derivative of hexamethylenetetramine, 1912, A., i, 948.

Merck, Emanuel, and Wilhelm Flimm, preparation of leuco-derivatives of indigotins, 1910, A., i, 438.

Merck Guano und Phosphat Werken: Aktien-Ges., assay of [burnt] magnesite, 1909, A., ii, 619.

Merckle, A. See Adalbert Kolb. Merckle, Elsa. See Otto Dimroth.

Mercklin, Ernst. See Emil Knoevenagel.

Merczyng, Henryk, very short electromagnetic waves; anomalous reflexion and dispersion of liquids, 1910, A., ii, 15.

electric dispersion of water and ethyl alcohol for very short waves, 1911, A., ii, 574.

Mereshkowsky, S. S., action of aniline dyes on invertin, 1904, A., i, 130. Mering, Josef von. See Emil Fischer.

Merk, Bernhard, reaction between potasstum persulphide and iodide and bromide in aqueous solutions, and its application in medicine, 1906, A., ii, 436.

detection of iodides in the dry way, 1906, A., ii, 489.

Merk, Franz Hubert. See Conrad Willgerodt.

See Arthur Kötz. Merkel, B.

Merkel, Eduard, new reflux condenser for extraction apparatus, 1908, A., ii, 478. See Alexander Merkel. Heinrich. Eibner.

Merkelbach, W. See Wilhelm Meigen. Merkens, W. See Albert Hilger.

Merkwitz, Conrad. See Walther Borsche. Merkin, A., action of hydrazine hydrate on 1-methylcyclohexan-3-one, 1911, A., i, 64.

Merl, Theodor, detection of formic acid in honey, 1908, A., ii, 991.

Merl, Theodor. See also Otto Fischer. Merling, Georg, preparation of △4-cyclogeranic acid (1:3:3-trimethylcyclo-A4hexene-2-carboxylic acid, 1907, A., i, 315.

Merling, Georg, conversion of carboxylic acids into their aldehydes, 1908, A., i, 653.

Merling, Georg, Robert Welde, Heinrich Eichwede, and Aladar Skita, synthesis of violet perfumes. I., 1909, A., i, 479.

Merling, Georg, Robert Welde, and Aladar Skita, constitution of the cyclohexenonecarboxylic esters, 1905, A., i, 349.

Mermod, Eric, and Hugo Simonis, alkylmeconines, 1906, A., i. 303, phthalides and meconines, 1908, A., i,

Mermod, Eric. See also Hugo Simonis. Merres, Ernst, estimation of total nitrogen by Mitscherlich's method, 1909, A., ii, 436.

Merres, Ernst. See also Eilhard Alfred Mitscherlich, and Albert Stutzer.

Merriam, Edmund S. See Walther Nernst.

Merriam, Henry Franklin. See Horace Lemuel Wells, and Henry Lord Wheeler.

Merrill. Alden. See Miles Standish Sherrill.

Merrill, George Perkins, and Wirt Tassin, new stony meteorite from Modoc, Kansas, 1906, A., ii, 371.

composition and structure of the Hendersonville (North Carolina) meteorite, 1907, A., ii, 278.

meteorite from Rich Mountain, North Carolina, 1907, A., ii. 484. meteorites of Cañon Diablo, 1909, A.,

ii, 591. Merriman, Henry John. See Oswald Silberrad.

Merriman, Richard William, coumaranone derivatives. Part I., 1911, T., 911; P., 101.

Merriman, Richard William. See also Siegfried Ruhemann, and John Wade.

Merry, Ernest Wyndham. See Wilhelm Manchot, and William Ernest Stephen

Mertelsmann, Martin. Robert See Behrend.

Merton, Thomas Ralph, the viscosity and density of caesium nitrate solutions, 1910, T., 2454; P., 252.

the absorption spectra of permanganates in certain solvents, 1911, T., 237; P., 66.

the photography of absorption spectra, 1912, P., 325.

changes in certain absorption spectra in different solvents, 1912, A., ii, 875,

Merunowicz, J., and Jean Zaleski, reduction of derivatives of the colouring matter of blood by means of zine and hydrochloric acid, 1907. A., i, 455.

hæmins, 1908, A., i, 231.

Merve, Ch. van der. See Daniel Vorländer.

Mervini, Luigi. See Maurizio Padoa. Merwin, Herbert Eugene, coloration in peroxidised titanium solutions; colorimetric methods of estimating titanium and fluorine, 1909, A., ii,

determination of the density of minerals by means of Rohrbach's solution of standard refractive index, 1912, A., ii, 55.

quartz and fluorite as standards of density and refractive index, 1912,

A., ii, 55.

crystalline forms and genetic conditions of the sulphides of zinc, cadmium, and mercury; microscopic study, 1912, A., ii, 1055.

Herbert Eugene. Merwin, See also Charles Palache.

Merz, Ludwig. See Friedrich Krafft. Merzbacher, Siegfried. See Otto Dimroth, and Oscar Piloty.

Meschorer, Joseph, conversion of halogens into the alkali-metal halogen salts, 1910, A., ii, 410.

Mesernitzky, P., the destruction of gelatin by Micrococcus prodigiosus, 1910, A., ii, 1097.

decomposition of uric acid by the action of radium emanation, 1912, A., ii, 417.

decomposition of the purines by the action of radium emanation, 1912, A., ii, 521.

Meserve, Philip W. See Marshall Perley Cram.

Mesham, Paul. See Charles A. Sadler. Meshtscherjakoff, M. I. See Jakov I. Michailenko.

Meslin, Georges, magnetic and electric dichroism of liquids, 1903, A., ii, 408. spontaneous dichroism of mixed liquids, 1903, A., ii, 521.

classification of liquids and crystals from a magnetic point of view, 1903,

A., ii, 529.

influence of temperature on the dichroism of mixed liquids, and verification of the law of indices, 1903, A., ii. 585.

coefficient of magnetisation of bismuth; some points of reference in the diamagnetic scale, 1905, A., ii, 228,

Meslin, Georges, ionisation and the coefficient of magnetisation of aqueous solutions, 1905, A., ii, 433.

coexistence of paramagnetism and diamagnetism in the same crystal, 1906,

A., ii, 69.

magnetic dichroism of calcite and dolomite admixed with liquids, 1909, A., ii, 116.

magnetic dichroism of different minerals, 1909, A., ii, 529.

polarisation by lateral diffusion, 1909, A., ii, 532.

magnetic dichroism of the rare earths, 1909, A., ii, 641.

magnetic dichroism of siderite in liquids, 1910, A., ii, 99.

circular double refraction of sodium chlorate, 1911, A., ii, 679.

Mesnil, Felix. See M. Nicolle.

Messerschmitt, Josef, emission spectra of selenium, 1907, A., ii, 918.

Messner, Emil. See Emil Abderhalden. Messner, Josef, indicators for the titration of einchona alkaloids, 1903, A., ii, 519. Mestre, P. C., variations in the respective

Mestre, P. C., variations in the respective proportions of dextrose and levulose in grape musts, 1909, A., ii, 606.

Mestreet W estimation of malic soid

Mestrezat, W., estimation of malic acid and some fixed acids in the juices of fruits, both fermented and unfermented, 1906, A., ii, 635.

volumetric estimation of tartaric and malic acids by means of permangan-

ate, 1907, A., ii, 588.

malic acid in musts and wines; its consumption in fermentation, 1907, A., ii, 903.

origin of the saccharifying power of human saliva, 1908, A., ii, 605.

malic acid in the production of wine; malo-lactic fermentations, 1908, A., ii, 723.

danger of employing salts of arsenic in agriculture, 1908, A., ii, 1069.

estimation of tartaric acid in wines by evaporation, 1908, A., ii, 1078.

relation between the cryoscopic points of wines and their alcoholic strength, 1909, A., ii, 189.

cerebro-spinal fluid; nature of the reducing substance; analysis of fluid from a hydrocephalous case, 1909, A., ii, 595.

consumption of malic acid and formation of lactic acid during fermentation; independence of the two phenomena, 1911, A., ii, 421.

chemical composition of normal cerebrospinal fluid; true nature of this liquid, 1911, A., ii, 811. Mestrezat, W. See also L. Roos, and Jules Ville.

Meszlényi, Emil, molybdenum compound

of nicotine, 1905, A., i, 371.

Metalnikoff, S., the neutralisation of spermotoxins and alkaloids by extract of the testis and epididymis, 1911, A., ii, 217.

Metcalf, C. R. See George Howard Parker.

Metcalf, Wilmot Vernon, solid peptone membranes on a water-surface, and the cause of their formation, 1905, A., ii, 512.

Metcalfe, E. Parr, ionisation in various gases, 1910, A., ii, 11.

Metcalfe, E. Parr. See also Clive Cuthbertson.

Meth, detection of formaldehyde, 1906, A., ii, 588.

Meth, Richard, preparation of optically active butyl alcohol, 1907, A., i, 272.

Meth, Richard. See also Willy

Marckwald.

Mette, Fr. See Karl Elbs.

Mette, Heinrich, manuring sugar beet with sodium chloride, 1909, A., ii, 697.

Mettler, Arthur J. See Henry Clapp Sherman.

Mettler, Carl, electrolytic reduction of aromatic esters, 1904, A., i, 1012.

electrolytic reduction of aromatic carboxylic acids to the corresponding alcohols, 1905, A., i, 436.

m-halogen-benzaldehydes, 1905, A., i, 790.

preparation of aromatic alcohols and their ethers by the electrolytic reduction of aromatic esters, 1906, A., i, 497.

electrolytic reduction of aromatic carboxylic acids, 1906, A., i, 851.

preparation of aromatic alcohols by the electrolytic reduction of aromatic acids, 1907, A., i, 315.

electrolytic reduction of benzoic and salicylic acids to the corresponding aldehydes, 1909, A., i, 99.

diehlorodihydroxybenzoylbenzoic acid: its conversion into tetrachlorofluorescein and into anthraquinone derivatives, 1912, A., i, 359.

Mettler, Carl. See also Alfred Einhorn. Mettler, Eric. See Emil Briner.

Metz, Gustav. See Hans Rupe.

Metzener, Walther. See Karl Andreas Hofmann.

Metzger, Franz. See Hermann Apitzsch. Metzger, Floyd Jay, separation of thorium from cerium, lanthanum, and didymium, and its application to the analysis of monazite, 1903, A., ii, 109.

Metzger, Floud Jay, volumetric method for the estimation of cerium in the presence of other rare earths, 1909, A., ii, 620.

Metzger, Floyd Jay, and Hal Truman Beans, electrolytic estimation of bismuth, 1908, A., ii, 541.

Metager, Floyd Jay, and Michael Heidelberger, nature of certain sodium uranium compounds, 1909, A., ii, 893.

volumetric estimation of cerium in cerite and monazite, 1910, A., ii,

Metzger, Floyd Jay, and Robert F. McCrackan, volumetric method for the estimation of manganese, 1910, A., ii, 1000.

Metzger, Floyd Jay, and L. E. Marrs, a new rapid and accurate volumetric method for the estimation of manganese and its application to the analysis of iron and steel, 1912, A., ii, 94.

Metzger, Floyd Jay, and Charles E. Taylor, a new rapid volumetric method for the estimation of columbium in presence of tantalum, and its application to the analysis of columbium minerals, 1909, A., ii, 702.

Metzger, Floyd Jay. See also Otto

Kress.

Metzger, Josef. See Wilhelm Muth-

Metzl, A. See Georg Vortmann.

Metzl, Siegmund, antimony sulphate and its double salts with alkali sulphates, 1906, A., ii, 174.

a modified method for standardising iodine solutions, 1906,

194. preparation of antimony oxide from antimony sulphide, 1906, A., ii,

Metzler, August. See Karl Andreas Hofmann.

Metzner, Georg. See Alexander Gutbier. Metzner, René, action of atropine in the

organism, 1912, A., ii, 585. Metzner, René, and E. Hedinger, action and relationships of atropine in the organism. II. The relation of the thyroid to the atropine-destroying power of the blood, 1912, A., ii, 966.

Meulen, Henri ter, the nature of the sugars of certain glucosides, 1905,

A., i, 803.

preparation of indican, 1910, A., i,

the sugar in sophorin, 1911, A., i, 391.

Meunier, G. See Henri Pellet.

Meunier, Jean [Alexis], history of the acetals of the polyhydric alcohols corresponding with the sugars; the conditions of combination of mannitol with paraldehyde, 1903, A., i. 727.

apparatus for regulating the action of vacuum pumps, 1904, A., ii.

determination of the limits of inflammability of explosive mixtures of ethyl ether vapour and air, 1907, A., i, 460.

explosive mixtures of air and ethyl

ether, 1907, A., i, 579.

analysis of mixtures of air and inflammable gases or vapours, 1907, A., ii. 989.

combustion without flame and the inflammation of gases at the end of a metallic rod, 1908, A., ii, 276. combustion of gases by incandescence

in the presence of oxidisable and of non-combustible substances, 1908, A., ii, 376.

combustion without flame, and its application to lighting with incandescent mantles, 1908, A., ii,

combustion of gases without flame and the conditions in incandescent

lighting, 1909, A., ii, 311.

conditions necessary for maintaining platinum in a state of incandescence in the interior of a bunsen burner, 1910, A., ii, 15.

laws of convergent combustion, 1910,

A., ii, 407.

a new property of copper and the rapid combustion of gases without flame, or convergent combustion, 1911, A.,

modification of the mechanism of flame by convergent combustion, 1911,

A., ii, 384.

spectra of combustion of hydrocarbous and of different metals, 1911, A., ii, 679.

action of benzaldehyde on polyhydrie alcohols derived from sugars, 1912, A., i, 268.

mechanical phenomena of gaseous combustion; spiral flame, 1912, A., ii. 432.

Meunier, Jean. See also H. Couriot.

Meunier, Léon. See François Couturier. Meunier, Louis, action of mixed organo-magnesium compounds on substances containing nitrogen, 1903, A., i, 544.

Meunier, Louis, use of magnesium amalgam in organic chemistry, 1904, A.,

action of carbon dioxide on aqueous solutions of aniline in the presence of nitrites, 1904, A., i, 208.

diazoamino-compounds, 1904, A., i,

action of carbon dioxide on solutions of sodium nitrite, 1904, A., ii, 252.

Meunier, Louis, and E. Desparmet. some reactions of sodamide, 1907, A.,

Meunier, Louis, and Alphonse Seyewetz, a new method of tanning, 1908, A., i. 586.

tannage by means of halogens, 1912,

A., i, 400.

Meunier, [Etienne] Stanislas, remarkable case of spontaneous crystallisation of gypsum, 1904, A., ii, 33.

chemical and petrological examination of the El Nakhla meteorite, 1911, A., ii, 1106.

two French meteorites, 1912, A., ii,

Meussdörffer, Eduard. See Max Busch. Meusser, Adolf, solubility of potassium chloride, bromide, and iodide in water, 1905, A., ii, 317.

Meusser, Adolf. See also Franz Mylius. Meuthen, A. See Paul Oberhoffer.

Mewes, Rudolf. See Edward Jüngst. Mey, Paul, peptic digestion, 1906, A., ii, 462.

Meyer, Alexander von. See Alfred Benrath.

Meyer, André, condensation of phenylisooxazolone with ethyl mesoxalate, 1910, A., i, 593.

azo-derivatives of 3-phenylisooxazolone, 1911, A., i, 341.

preparation of mesoxalic esters, 1911, A., i, 420.

azomethines derived from phenylisooxazolone, 1911, A., i, 687.

action of hydroxycarbamide on some β-ketonic esters, 1912, A., 423.

dibromophenylisooxazolone and derivatives, 1912, A., i, 582.

new derivatives of phenylisooxazolone, 1912, A., i, 1019.

Meyer, André. See also André Wahl. Meyer, Arthur, apparatus for the cultivation of anaerobic bacteria and for the estimation of the oxygen-minima for germination, growth, and sporeproduction of bacteria, 1905, A., ii, 848.

Meyer, Arthur, apparatus for the cultivation of bacteria with high oxygen concentration and for the determination of the oxygen maxima of the · bacteria and the periods at which they are killed at higher oxygen concentrations, 1906, A., ii, 475.

Meyer, Alfred R. See Marcello von

Pirani.

Meyer. Carl, a new form of pipette. 1904, A., ii, 555.

Meyer, Carl. See also August Michaelis.

Meyer, Diedrich, [manurial] action of different forms of calcium and magnesium, 1905, A., ii, 197.

Meyer, Diedrich. See also Wilhelm Schneidewind.

Meyer, Eberhard. See Robert Behrend. Meyer, Edgar, absorption of ultra-violet

rays in ozone, 1904, A., ii, 2. absorption of the a-rays of radiotellurium (radium-F) in metals, 1907, A., ii, 521.

absorption of a-rays in metals, 1907,

A., ii, 596. luminescence phenomena of blue fluor-

spar, 1909, A., ii, 5. the structure of y-rays, 1910, A., ii, 673; 1912, A., ii, 409.

Meyer, Edgar, and Ernst Müller, cause of the ionisation of air in contact with

phosphorus, 1905, A., ii, 141. Meyer, Erich, behaviour of nitrobenzene and other aromatic nitro-compounds in the organism, 1906, A., ii, 244.

Meyer, Ernst. See Ernst von Meyer. Meyer, Ernst [Sigismund Christian] von, condensation of dinitriles with phenols,

1903, A., i, 482. bimolecular nitriles, 1905, A., i, 155.

constitution and method of formation of termolecular nitriles or cyan-

alkines, 1906, A., i, 411. dinitriles and amyl nitrite, 1907, A., i, 214.

so-called formaldehyde-sodium hyposulphite, 1908, A., i, 132.

reactions and decomposition of tetraalkylammonium compounds, 1910, A., i, 316.

preparation of diphenylmethane and its homologues, 1911, A., i, 120. congress of chemists at Karlsruhe in

1860, 1911, A., ii, 199. Meyer, Ernst von, P. Fischer, (Fräulein) Näbe, and A. Nicolaus, triphenylmethyl chloride, diphenylcarbamyl chloride, and cyanuric bromide acting as acid halogenides, 1911, A., i, 120.

*

Meyer, Ernst von, Alfred Heiduschka. and Ernst Meyer, p-toluenesulphonic

acid. II., 1903, A., i, 808.

Meyer, Ernst von, Willy Schumacher. Hermann Lehmann, Martin Kleinstück, Wilhelm Henning, and Camillo Irmscher, bimolecular nitriles, 1908, A., i, 909.

Meyer, Erwin. See Otto Wallach.

Meyer, Felix, and Karl Dahlem, esters of azo- and azoxy-benzoic acids, 1903, A., i, 448.

Meyer, Fernand, preparation of aurous iodide by the action of iodine on gold, 1905, A., ii, 42.

combination of ammonia with aurous chloride, bromide, and iodide, 1906,

A., ii, 664.

action of sodium and barium peroxides on gold; aurates, 1908, A., ii, 47. compounds of gold with bromine, 1909,

A., ii, 321.

Meyer, Friedrich, reductions and reactions in reversed flames. I. Reduction of chlorides in the chlorinehydrogen flame, 1912, A., ii, 1051

Meyer, Friedrich. See also Arthur

Stähler.

Meyer, Georg, electrocapillarity, 1910, A., ii, 259.

Meyer, Georg. See also Franz Himstedt. and Ludwig Knorr.

Meyer, Gustav, production of nitric acid during electric discharge in air, 1908, A., ii, 487.

Meyer, Gustav. See also Fritz Ullmann. Meyer, Georg C., phosphotungstic acid as a test for potassium, 1907, A., ii, 197.

Meyer, Gustav M., fate of radium after its introduction into the animal organism, 1907, A., ii, 282.

toxicity of some aniline dyes, 1907,

A., ii, 712.

elimination of barium, 1909, A., ii,

the preparation and properties of iodo-mucoids, 1910, A., i, 209.

Meyer, Gustave M., and William John Gies, pigments of the purple pitcher plant, 1905, A., ii, 193.

Meyer, Gustave M. See also Alexis Carrel, Phæbus A. Levene, William Salant, and Donald D. van Slyke.

Meyer, Hans (Marburg), constitution and synthesis of adrenaline, 1904, A., i, 1069.

Meyer, Hans (Marburg). See also Hermann Hohlweg, Otto Loewi, and Friedrich Stolz.

Meyer, Hans (Prag), nitriles of the pyridine series, 1903, A., i, 197.

Meyer, Hans (Prag), aminopyridinecarboxylic acids, 1903, A., i, 277.

method of preparation of betaines,

1903, A., i, 364. esterification by means of sulphuric acid, 1904, A., i, 216; 1905, A., i,

acidimetry of the hydroxy-aldehydes, 1904, A., i. 251.

diethylanthranilic acid, 1904, A., i. 744.

isomeric esters of o-aldehydo-acids, 1904, A., i, 746.

o-benzoylbenzoic acid, 1904, A., i, 747. glyoxylic acid, 1904, A., i, 970.

esterification of carboxylic acids by means of methyl sulphate, 1904, A., i, 1014.

isomeric esters of aromatic keto acids,

1905, A., i, 133.

pyridinecarboxylic 2:6-substituted acids, 1905, A., i, 155.

quinoline-2-carboxylic chloride, 1905, A., i, 666.

action of diazomethane on aldehydoacids and aldehydes, 1906, A., i, 87. reciprocal stereochemical influences,

1906, A., i, 107.

action of diazomethane on pyridones hydroxypyridinecarboxylic and acids, 1906, A., i, 108.

dialkylmalonic acids, 1906, A., i, 137. formation of amides and hydrolysis of esters by amides, 1906, A., i, 358.

linking up of amino-acids, 1906, A., i, 432.

kynurine ethers, 1906, A., i, 604. disubstituted ethyl acetoacetates and malonates, 1907, A., i, 179.

alkylation of pyridones, 1907, A., i,

new method of preparing amides of substituted malonic and acetoacetic acids, 1907, A., i, 297.

formation of chains from aromatic amino-acids, 1907, A., i, 317. preparation of ketones from aldehydes

by means of diazomethane, 1907, A., i, 323.

steric hindrance of alkyl substituted cinchonic acids, 1907, A., i, 342.

wandering of alkyl groups in the pyridine series, 1907, A., i, 343. phenolphthalein, 1907, A., i, 625.

acid-anilides, anilo-acids, anilides, 1908, A., i, 25.

determination of the constitution of isomeric derivatives of o-keto-acids, 1908, A., i, 26.

the supposed phenylhydrazone of salicylic acid, 1908, A., i, 176,

Meyer, Hans (Prag), arecaidine and arecoline, 1908, A., i, 202.

new reduction product of anthra-quinone, 1909, A., i, 168. Meyer, Hans, and Robert Beer, oil from Datura stramonium, 1912, A., ii,

Meyer, Hans, and Alfred Eckert, the oil and wax of coffee beans, 1911, A.,

Meyer, Hans, and Otto Hönigschmid, caryophyllin, 1905, A., i, 456.

Meyer, Hans, and Alfred Hub, aromatic fluorine derivatives and estimation of fluorine in the same, 1910, A., i, 735; ii, 996.

Meyer, Hans, and Josef Mally, hydrazine derivatives of pyridinecarboxylic acids,

1912, A., i, 514.

Meyer, Hans, and Richard Turnau. action of thionyl chloride on quinaldinic (quinoline-2-carboxylic) acid, 1907, A., i, 344.

formation of acid chlorides, 1909, A.,

i, 419.

anilides and anisidides of aromatic ketonic and aldehydic acids, 1909, A., i, 710.

Meyer, Hermann. See Hans von Euler,

and Karl Polstorff.

Meyer, Heinrich L. See Gustav Heller. Meyer, J. de, glycolytic process with reference to the work of Stoklasa, Oppenheimer, and Rosenberg, 1910, A., ii, 631.

Meyer, Jacob, preparation of 2:4:6trinitrobenzene from halogenated trinitrobenzenes, 1911, A., i, 848. preparation of anthracene derivatives,

1912, A., i, 874.

Meyer, Jean, electrolysis of copper solutions, 1908, A., ii, 803; 1909, A., ii,

Meyer, Julien, action of sources of nrays on pure water, 1904, A., ii, 532.

Meyer, Julius, formation of dithionic acid, 1903, A., ii, 18.

oxidation of ammoniacal cuprous oxide, 1903, A., ii, 78.

transition of polymorphous substances, 1903, A., ii, 137.

hyposulphurous acid, 1903, A., ii, 285. citric acid, 1904, A., i, 13.

atomic weight of fluorine, 1904, A., ii,

calculation of atomic weights, 1905, A., ii, 238.

theory of auto-oxidation, 1905, A., ii, 697.

atomic weight of silicon. II., 1905, A., ii, 815.

Meyer, Julius, a modification of mercurous chloride, 1906, A., ii, 29.

volatility of indium oxide, 1906, A., ii. 30.

hydrolysis of esters of poly-acid alcohols, 1907, A., i, 462.

saponification of the acetates of glycerol, 1907, A., i, 819.

molecular weight determinations in solid solutions, 1907, A., ii, 15.

reversible reactions of the first order,

1907, A., ii, 753. theory of the inversion of sucrose, 1908, A., ii, 265; 1910, A., ii, 403.

decomposition of formic acid by concentrated sulphuric acid, 1909, A.,

i. 626.

saponification in stages of the esters of dibasic acids. I. and II., 1909, A., ii, 391, 803.

rate of evolution and absorption of carbon dioxide by water, 1909, A.,

ii, 471.

solubility of ammonium metavanadate, 1909, A., ii, 488.

measurement of the heats of liquefaction of acetic acid, benzene, and nitrobenzene, 1910, A., ii, 182.

relationship of some thermal quanti-

ties, 1910, A., ii, 388.

the ferments of milk, 1910, A., ii, 527. isomerism of the three allocinnamic acids, 1911, A., i, 975.

the polymorphism of allocinnamic

acid, 1912, A., i, 32. realisation of the Thomson-van der Waals surface, 1912, A., ii, 896.

thermal expansion of liquids between boiling point and critical point, 1912, A., ii, 1133.

Meyer, Julius, and H. Eggeling, thiosulphates, 1907, A., ii, 347.

Meyer, Julius, and Emil Trutzer, ammonium nitrite, 1908, A., ii, 181.

Meyer, Julius. See also Walther Becker, Hans Eggeling, P. Engler, and Otto Wallach.

Meyer, Karl (Braunschweig). See Richard Meyer.

Meyer, Karl (Copenhagen), estimation of tin in tin-plate, 1909, A., ii, 187.

Meyer, Kirstine, (née Bjerrum), corresponding states, 1910, A., ii, 186.

Meyer, Kurt, diffusion in jellies, 1906, A., ii, 105.

behaviour of acetylglucosamine in the animal body, 1907, A., ii, 118.

influence of certain proteins and other colloids on hæmolysis, 1908, A., ii, 513.

Meyer, Kurt, the mechanism of hæmolysis by saponin, 1908, A., ii, 709.

trypsin and antitrypsin, 1910, A., i, 211. bacterial proteases, 1911, A., i, 511. bacterial anti-proteases, 1911, A., i,

512.

the diminution of the antitryptic power of the blood in diabetes, 1912, A., ii. 583.

Meyer, Kurt. See also Ernst Deussen. Meyer, Kurt Heinrich, halochromism of quinones, 1908, A., i, 731.

additive compounds of phenols and quinones, 1909, A., i, 395.

additive compounds of ketones and quinones with acids and phenols, 1910, A., i, 179.

anthracene. I. Anthranol and anthraquinol, 1911, A., i, 193.

anthracene. II. Oxidation of anthracene, 1911, A., i, 196.

keto-enolic tautomerism, 1911, A., i,

keto-enolic tautomerism. IV. Ferric chloride reaction of enols, 1911, A., i, 833.

keto-enolic tautomerism. V. Desmotropy of methyl benzoylacetate,

1911, A., i, 865.

keto-enolic tautomerism. VI. Relation between the constitution and equilibrium of keto-enolic desmotropic compounds, 1912, A., i,

keto-enolic tautomerism. VII. Desmotropy of malonic and methanetricarboxylic esters, 1912, A., i, 941.

Meyer, Kurt Heinrich, and Arthur Hantzsch, halochromism of phenolphthalein and its esters, 1907, A.,i, 932.

Meyer, Kurt Heinrich, and Paul Kappelmeier, keto-enolic tautomerism. III. Tautomerism of ethyl acetoacetate,

1911, A., i, 832. Meyer, Kurt Heinrich, and Heinrich Wieland, absorption spectra of triphenylmethyl and of salts of triphenylcarbinol, 1911, A., ii, 952.

Meyer, Kurt Heinrich. See also Arthur

Hantzsch, and Theodor Zincke.

Meyer, Ludwig F., relations between the molecular weight and the physiological action of the higher fatty acids. I. Myristic and lauric acids, 1904, A., ii, 275.

phosphorus metabolism, 1904, A., ii,

827.

Meyer, Ludwig F., and Hans Rietschel, katabolism of glycine in badly nourished conditions of the infant, 1907, A., ii, 185.

Meyer, M. See Stanislaw Tolloczko. Meyer, Otto. See Emil Abderhalden.

Meyer, Oskar Bertold, the properties of the muscular tissue of the walls of blood-vessels, with special reference to the action of adrenaline, 1906, A., ii, 777.

the action of cocaine, adrenaline, and andoline on surviving blood-vessels.

1907, A., ii, 800.

Meyer, Paul (Berlin), experiments on the carbohydrate acids, 1903, A., ii,

the preparation of glucosone, 1912, A... i. 538.

Meyer, Paul (München). See Hans Fischer.

Meyer, Renatus. See Leopold Rosenthaler.

Meyer, Richard [Emil], a characteristic property of gallein, 1903, A., i, 562. [tetramethyl-p-phenylenediamine], 1903, A., i, 861.

fluorescence and chemical constitution.

1903, A., ii, 706,

9-phenylxanthen, 1905, A., i, 226. pyrogenic acetylene condensations, 1912, A., i, 525.

Meyer, Richard, and Paul Bock, iso-succinic acid, 1906, A., i, 726.

Meyer, Richard [Emil], and Kurt Desamari, tribromoresoquinone[m-benzoquinone], 1908, A., i, 658; 1909. A., i, 657.

determination of molecular weights by the ebullioscopic method, 1909, A.,

ii, 721.

Meyer, Richard, and Otto Fischer, spectrographic studies in the phthalein group, 1911, A., i, 723.

Meyer, Richard, and J. Glikin, reduction product of phenolphthaleinoxime,

1907, A., i, 422.

Meyer, Richard, and Ernst Hartmann, 1:3:6-trihydroxynaphthalene, 1906, A., i, 19.

direct estimation of acetyl and benzoyl groups, 1906, A., ii, 58.

Meyer, Richard, and Paul Jaeger, Landsberger's method for determining molecular weights, 1903, A., ii, 467.

Meyer, Richard, Paul Jaeger, G. von Lutzau, and Johann Maier, formation. II., 1906, A., i, 765.

Meyer, Richard, and Schmul-Juda Kissin, phthaleinoximes, 1909, A., i, 651.

Meyer, Richard, and Kurt Lange, behaviour of phthaleinanilides to reducing agents, 1907, A., i, 423.

Meyer, Richard, and Johann Maier, formation of rings, 1903, A., i, 442.

Meyer, Richard, and Johann Maier, alkylated azo-compounds and the theory of dyeing, 1903, A., i, 870.

Meyer, Richard, and Karl Marx, condensation of resorcinol, 1907, A., i, 413. constitution of phthalein salts, 1907,

A., i, 421, 932; 1908, A., i, 652. tautomerism of succinyl chloride,

1908, A., i, 602.

Meyer, Richard, and Karl Meyer, phthaleins of 3:5:3':5'-diresoreinol (3:5:3':5'-tetrahydroxydiphenyl),1911, A., i, 872.

Meyer, Richard, and Hermann Pfotenhauer, mutual exchange of aromatic complexes, 1906, A., i, 23; 1907,

A., i, 422.

catecholphthalein, 1907, A., i, 422.

Meyer, Richard, and Ferd. Posner, composition of phthalein salts, 1911, A.,

i, 645.

Meyer, Richard, and Siegfried Schuster, pyrogenic reactions of carbon dioxide with carbon disulphide and hydrogen sulphide, 1911, A., ii, 721.

Meyer, Richard, and Oskar Sprengler, constitution of phthalein saits, 1903, A., i, 833; 1905, A., i, 440.

action of alcoholic potassium hydroxide on phenanthraquinone, 1905, A., i, 219, 362.

Meyer, Richard, and Karl Tögel, Grignard's reaction, 1906, A., i, 757.

Meyer, Richard, and Karl Witte, condensation products of quinol, 1908, A., i, 670.

Meyer, Richard, and Kurt Wolfsleben, naphtharesoccinol [1:3-dihydroxynaphthalene] and 4-amino-β-naphthol, 1911, A., i, 631.

Meyer, Richard. See also Johannes

Stark

Meyer, Robert. See Conrad Willgerodt. Meyer, Richard Josef, microscopical examination of [succinates of] the rare earths, 1903, A., i, 66, 147.

preparation of cerium dioxide and its reduction in a current of hydrogen,

1904, A., ii, 125.

preparation of the cerium earths by aid of their alkali double carbonates, 1904, A, ii, 734.

bibliography of the rare earths, 1905,

A., ii, 249.

thorium, 1909, A., ii, 53, 320.

scandium. I., 1909, A., ii, 45.
a scandium-rich orthite from Finland
and its alteration, 1911, A., ii, 406.

by means of iodic acid, 1911, A., ii, 825.

Meyer, Richard Josef, and Arnold Anschütz, observations on mixtures of thorium and cerium, 1907, A., ii, 557.

Meyer, Richard Josef, and Arthur Aufrecht, sulphates of quadrivalent

cerium, 1904, A., ii, 175.

Meyer, Richard Josef, and Alfred Bertheim, alkyl derivatives of thallium, 1904, A., i, 656.

Meyer, Richard Josef, and H. Goldenburg, scandium, 1912, A., ii, 768.

Meyer, Richard Josef, and E. Goldschmidt, salts and double salts of tervalent thallium, 1903, A., ii, 211.

Meyer, Richard Josef, and Alfred Gumperz, uniform nature of thorium, 1905,

A., ii, 257.

Meyer, Richard Josef, and Morduch Koss, estimation of cerium dioxide and of didynium oxide by iodine,

1903, A., ii, 45.

Meyer, Richard Josef, and Kurt Rötgers, dissociation temperatures of manganese dioxide (MnO₂) and dimanganese trioxide (Mn₂O₃) in air and oxygen, 1908, A., ii, 191.

Meyer, Richard Josef, and Alfred Schweitzer, volumetric estimation and separation of cerium by means of potassium permanganate, 1907, A., ii,

581.

Meyer, Richard Josef, and M. Speter, estimation of thorium in monazite sand, 1910, A., ii, 459.

Meyer, Richard Josef, and Fritz Wendel, uranyl double nitrates, 1904, A., ii,

130. Leyer,

Meyer, Richard Josef, Herbert Winter, and M. Speter, scandium. II., 1910, A., ii, 853.

Meyer, Stefan, magnetic [susceptibilities] of the rare earths, 1909, A., ii, 16.

behaviour of kunzite under the influence of Becquerel radiation, 1909, A., ii, 716.

Meyer, Stefan, and Viktor F. Hess, the definition of the Vienna radium standard preparations, 1912, A., ii, 716.

Meyer, Stefan, and Egon (Ritter) von Schweidler, influence of changes of temperature on radioactive substances, 1904, A., ii, 602.

radium- E_1 and radium- E_2 , 1907, A., ii, 664.

Meyer, Stefan. See also Heinrich Mache. Meyer, V. I. See Gabriel Bertrand.

Meyer, Victor J., cotton-seed oil, 1907, A., i, 821. Meyer, Victor J. See also Arthur Rosenheim.

Meyer, W. See Max Scholtz.

Meyer, Wilhelm. See Ferdinand Henrich, and Eduard Jordis.

Meyer-Betz, Friedrich. See Hans Fischer.

Meyère, André, influence of radium X-rays and cathode rays on various precious stones, 1910, A., ii, 9.

Meyerfeld, Julius, pyrogallol dimethyl ether, a delicate reagent for chromic acid, ferric salts, and nitrites, 1910, A., ii, 901.

a new compound occurring in wood vinegar (methylcyclopentenolone), 1912, A., i, 628.

Meyerheim, Georg. See Otto Diels, David

Holde, and Franz Sachs.

Meyerhof, Otto, the respiration of the eggs of the sea-urchin (Strongylocentrotus lividus) in pure sodium chloride solutions, 1911, A., ii, 738.

the heat production in the vital oxidative processes of eggs. I.-II.,

1911, A., ii, 1004.

the heat production of chemical processes in living cells (blood corpuscles), 1912, A., ii, 777.

Meyerhoffer, Wilhelm, discoverer of discontinuities in solubility curves,

1903, A., ii, 280.

tetragenic double salts, with particular reference to kainite, 1903, A., ii, 292.

stereochemical notes [Pasteur's method of resolving by means of active compounds; solubility of a tartrate compared with that of a racemate], 1904, A., i, 649.

preparation of salts by double decom-

position, 1904, A., ii, 170. "frost curves" ["reifkurven"], 1904,

A., ii, 242.

reciprocal pairs of salts, 1904, A., ii, 324.

congruent and incongruent liquid products in the case of double salts, 1904, A., ii, 537.

breaks in the solubility curves, 1905, A., ii, 13.

reciprocal salt pairs. IV. A problem of affinity, 1906, A., ii, 12.

Meyerhoffer, Wilhelm, and Jacobus Henricus van't Hoff, crystalline calcium borates, 1907, A., ii, 260.

Meyerhoffer, Wilhelm. See also Jacobus

Henricus van't Hoff.

Meyering, Heinrich. See Josef König. Meyeringh, D. J. See Frans Antoon Hubert Schreinemakers. Meyeringh, Willem, influence of the alkalinity of the wash-water on the percentage of water in butter, 1911, A., ii, 78.

Meyersberg, Paul, reduction of dimethyltrimethylene glycol (ββ-dimethylpropane-αγ-diol), by means of fuming hydriodic acid, 1905, A., i, 166.

Meyerstein, Wilhelm, the influence of cholesterol on hamolysis by soaps, 1909, A., ii, 681.

the inhibition of soap hæmolysis, 1910,

A., ii, 223.

the relationship of lipoids to hæmolysis, 1910, A., ii, 514.

Meyerstein, Wilhelm. See also Julius Baer.

Meyer-Wedell, (Mme.). See Otto Schumm.

Meyer-Wedell, L. See John Beresford Leathes.

Meynier, J., catalysis by moisture, 1909, A., ii, 560.

Meystowicz, Simon von. See Carl Adam Bischoff.

Mezernitzky, P. G., radioactivity of certain Russian mineral springs, 1911, A., ii, 960.

Mezger, Otto, detection of boric acid, 1905, A., ii, 764.

Mezger, Otto. See also William Küster. Mezger, Robert. See Julius Schmidt.

Micewicz, St. See Friedrich Kehrmann. Michael, Arthur, abnormal course of the Michael condensation, 1903, A., i, 348.

isocinnamic acid, 1903, A., i, 698. condensation of ethyl oxalate with

ethylene and trimethylene dicyanides, 1903, A., i, 736.

hypotheses of valency and the course of chemical reactions, 1904, A., ii, 164.

phenylcarbimide as a reagent for determining the constitution of tautomeric compounds, 1905, A., i, 195.

history of the theory of the formation and constitution of ethyl sodioacetoacetate, 1905, A., i, 506.

ethyl formylacetate and ethyl a-formylpropionate, 1905, A., i, 563.

syntheses with ethyl sodioacetoacetate,

1905, A., i, 564. Claisen's cinnamic acid synthesis, 1905,

A., i, 646; 1906, A., i, 85. syntheses with ethyl sodiomalonate

and similar compounds, 1905, A., i, 855.

preparation of pure ethyl alkylmalonates, 1906, A., i, 63.

constitution of tribenzoylenebenzene, 1906, A., i, 518.

Michael, Arthur, principle of partition ("vertheilungsprincip"), 1906, A., i, 550.

application of the principle of partition.

1. Course of the addition of water to \$\beta\$-hexinene, 1906, A., i, 559.

application of the principle of partition. VI. Action of hydrogen chloride on propylene oxide and propenyl alcohol, 1906, A., i, 781.

constitution of carbon suboxide, 1906,

A., ii, 442.

the van't Hoff-Wislicenus configuration theory, 1907, A., i, 279.

refractometric evidence for the constitution of carbon suboxide, 1908, A., i, 316.

desmotropy and merotropy, 1908, A.,

i, 943.

stereoisomerism and the law of en-

tropy, 1908, A., ii, 137.

benzoquinone from the standpoint of the law of entropy and the partial valency hypothesis, 1909, A., i, 494.

steric hindrance. I. Theory of esterification of organic carboxylic acids,

1909, A., ii, 219.

addition theory, 1910, A., i, 285. application of physico-chemical methods to determine the mechanism of organic reactions, 1910, A., i, 341.

mechanism of quinone reactions; reply

to Posner, 1910, A., i, 748.

relationship between the structure of the aliphatic alcohols and their rate of esterification, 1910, A., ii, 196.

number of isomerides of merotropic and desmotropic compounds, 1912,

A., i, 631.

isomeric ketonic modifications of dibenzoylacetylmethane, 1912, A.,

i, 631.

number of isomerides of merotropic and desmotropic compounds. IV. Isomeric modifications of ethyl formylphenylacetate, 1912, A., i, 861.

application of the "scale of combined influence" to explain the ionisation constants of organic acids, and a reply to the criticism of C. G. Derick, 1912, A., ii, 826.

Michael, Arthur, and Roger Frederick Brunel, the relative ease of addition in the alkylene group, 1909, A., i,

197.

action of aqueous solutions of acids on olefines, 1912, A., i, 821.

Michael, Arthur, and John Emery Bucher, constitution of phenylnaphthalenedicarboxylic acid; a reply to Stobbe, 1908, A., i, 89.

Michael, Arthur, and O. D. E. Bunge, stereochemical nature of the addition of chlorine to crotonic acid, 1908, A.,

i, 848.

Michael, Arthur, and Philip Howard Cobb, phenylcarbimide as reagent for determining the constitution of merotropic compounds, 1908, A., i, 947.

reaction between p-benzoquinone and hydrogen chloride, 1910, A., i,

748.

Michael, Arthur, and Oskar Eckstein, formation of C-acyl derivatives from ethyl cyanoacetate by means of pyridine and quinoline, 1905, A., i, 176.

Michael, Arthur, and George Prescott Fuller, number of isomerides of merotropic and desmotropic compounds. V. Isomeric enolic modifications of ethyl formylphenylacetate, 1912, A., i, 861.

Michael, Arthur, and Wightman Wells Garner, isocinnamic acid, 1903, A.,

i, 418.

cinnamylideneacetic acid [styrylacrylic acid] and some of its transformation products, 1906, A., i, 274.

magnesium permanganate as an oxidis-

ing agent, 1906, A., ii, 229.

Michael, Arthur, and Robert Nelson Hartman, application of the principle of partition. II. Constitution of the hexyl alcohol prepared from mannitol hexylene, 1906, A., i, 551.

application of the principle of partition. VIII. Constitution of the hexyl iodide obtained from manni-

tol, 1907, A., i, 170.

Michael, Arthur, and Harold Hibbert, the ammonia reaction for distinguishing between enolic and ketonic derivatives, 1907, A., i, 1010; 1908, A., i, 78.

supposed connexion between dielectric constant and isomerising power of organic solvents in keto-enol desmo-

tropy, 1908, A., ii, 455.

desmotropy and merotropy. V. Constitution of hydrogen cyanide, 1909, A., i, 91.

desmotropy and merotropy. VI. Constitution of cyanic acid, 1909, A., i, 214.

Michael, Arthur, and Harold Hibbert, isomeric ketonic modifications of dibenzoylpropionylmethane, 1912, A., i, 632.

Michael, Arthur, and Arthur Becket Lamb, isomerism of ethylcoumaric and ethyl coumarinic acids, 1907, A., i,

134

Michael, Arthur, and Virgil L. Leighton, constitution of phenylcinnamenylacrylic acid dibromide, 1904, A. i. 242.

application of the principle of partition. IV. Addition of hypochlorous acid to isobutylene, 1906, A., i,

551.

application of the principle of partition. VII. Action of hydrogen chloride on isobutylene oxide, 1906,

A., i, 781.

Michael, Arthur, and Hans Leupold, course of the intramolecular transformations of alkyl bromides and the question of the cause of equilibrium in reversible reactions, 1911, A., i, 250.

Michael, Arthur, and Arthur Murphy, jun., isomerism and tautomerism,

1906, A., i, 179.

acetyl chloride and acetic anhydride as reagents for distinguishing between enolic and ketonic modifications, 1908, A., i, 949.

action of chlorine in carbon tetrachloride solution and of carbon tetrachloride on metallic oxides,

1910, A., ii, 1068.

Michael, Arthur, and K. J. Oechslin, steric hindrance. II. Influence of substituents in aromatic carboxylic acids on their esterification, 1909, A., ii. 220.

Michael, Arthur, and Howard D. Smith, addition of halogens to cinnamic acid and some of its derivatives,

1908, A., i, 168.

tertiary amines as reagents for distinguishing between stable enolic and ketonic derivatives, 1908, A., i, 943.

Michael, Arthur, and Harold John Turner, application of the principle of partition. III. Action of chlorine on hexane, 1906, A., i, 550.

Michael, Arthur, and Francis Daniel
Wilson, course of the decomposition
of mixed aliphatic ethers by hydrogen

iodide, 1906, A., i, 620.

Michael, Arthur, and Kurl Wolgast, preparation of pure ketones by means of acetoacetic ester, 1909, A., i, 766.

Michael, Arthur, and Karl Wolgast, steric hindrance. III. Relation between the structure of the aliphatic alcohols and their rate of esterification, 1909, A., ii, 873.

Michael, Arthur, and Fritz Zeidler, chemistry of amyl compounds, 1912,

A., i, 2

course of the intramolecular transformations of alkyl bromides. II., 1912, A., i, 8.

Michaelis, [Carl Arnold] August, nitroso- and azo-derivatives of 3-pyrazolones, 1905, A., i, 244.

p-dimethylaminophenylarsinic acid (dimethylatoxyl), 1908, A., i,

590.

Michaelis, August, Felix Abraham, Fritz Isert, Felix Risse, Wilhelm Thomas, and Friedrich Walter, 5-aminopyrazoles and iminopyrines. II., 1911, A., i, 1037.

Michaelis, August, and Kurt von Arend, hydrazinodimethylnicotinic acids and indazole derivatives from luti-

dine, 1903, A., i, 292.

phosphorus suboxide and the supposed solubility of red phosphorus in aqueous alcoholic alkalis, 1903,

A., ii, 207.

Michaelis, August, Kurt von Arend, Leo Aschner, Sigismund Danziger, Max Gmeiner, Walter Heinrici, Johann Höfker, Robert Hülsberg, Wilhelm Herbst, Emil Kahnemann, Edgar Mentzel, Louis Mottek, Friedrich Müller, Sigismund Nathanson, Johann Ottens, Max Pape, Ernst Ratzlaff, Adolf Schall, Theodor Schalhorn, Josef Schrömbgens, Wenzel Schütte, Rudolf Securius, Ernst Silberstein, Otto Steinkopf, Otto Strebel, and Hermann Wennekes, organic compounds of phosphorus with nitrogen, 1903, A., i, 379.

Michaelis, August, Johann Behrens, Wilhelm Hahn, and Carl Meyer, 3-pyrazolones, 1905, A., i, 377.

Michaelis, August, Johann Behrens, Richard Leonhardt, Heinrich Simon, and Karl Wahle, azo-compounds of phenylpyrazoles and their halogen and thio-derivatives, 1905, A., i, 392.

Michaelis, August, and Fritz Bender, 5-chloro-4-benzoyl-1-phenyl-3-methylpyrazole and a bipyrazole, 1903, A., i, 288.

Michaelis, August, Albert Besson, Willy Moeller, and Max Kober, thiopyrine series, 1904, A., i, 780.

Michaelis, August, Richard Blume, Eduard Brust, Wilhelm Danzfuss, Albert Hepner, and Wilhelm Preuner, 5-aminopyrazole and iminopyrines,

1905, A., i, 476.

Michaelis, August, Heinrich Boie, Richard Gesing, and Walter Graff, 1-nitro- and 1-amino-derivatives of antipyrine, thiopyrine, and anilopyrine, 1911, A., i, 232.

Michaelis, August, Felix Doepmann, Fritz Isert, Waldemar Mentzel, Wilhelm Thomas, Friedrich Walter, and Erich Wurl, substituted iminopyrines,

1911, A., i, 1039.

Michaelis, August, Hugo Dorn, Thomas von der Hagen, Wilhelm Rossmann, and Hans Wrede, 3-phenyl-1-methyl-5-pyrazolone, 1907, A., i, 246.

Michaelis, August, Alexander Drews, and Paul Kotelmann, 3-pyrazolones.

II., 1907, A., i, 154.

Michaelis, August, Erich Dulk, Erich Lehmann, and Robert Pander, thio-

pyrazolones, 1908, A., i, 688.

Michaelis, August, and Curt Eisenschmidt, 5-chloro-1-o-tolyl-3-methyl-pyrazole and 1-phenyl-3-methyl-5-pyrazolone-2'-carboxylic acid, 1904, A., i, 624.

Michaelis, August, and Felix Engelhardt, 4-keto-compounds of pyrines,

1908, A., i, 918.

Michaelis, August, Benno von Ghiel,
Wilhelm Heyden, Ludwig Krietemeyer, Thilo Mühlberg, and Dietrich
Reinighaus, some derivatives of ethyl
4-chlorolutidine-3-carboxylate [ethyl
4-chloro-2:6-dimethylnicotinate], 1909,
A., i, 527.

Michaelis, August, and Arwed Günther, diphenylstibine compounds, 1911, A.,

i, 1056.

Michaelis, August, and Erich Hadanck, constitution of the acid derivatives of methylhydrazine, 1908, A., i, 1020.

Michaelis, August, and Albert Hepner, anilopyrine and 5-anilino-1-phenyl-3methylpyrazole, 1904, A., i, 112.

Michaelis, August, and Otto Hillmann, methylanilinolutidine, 1907, A., i,

Michaelis, August, and August Hoelken, thio- and seleno-derivatives of N-alkylpyridones and -lutidones, 1904, A., i, 774.

Michaelis, August, and Hans Horn, 1-phenyl-3-methyl-5-pyrazolone-3'and -4'-carboxylic acids, 1910, A., i, 517. Michaelis, August, Christoph Käding, Carl Krug, Julius Friedrich Ieo, and Max Ziesel, anhydrides of 1-phenyl-5and 0-3-pyrazolonecarboxylic acids, 1910, A., i, 512.

Michaelis, August, and Hans Klopstock, 5-alkylamino-1-phenyl-3-methylpyr-azole-4-azobenzene and 4:5-diamino-1-phenyl-3-methylpyrazole, 1907, A., i,

735.

Michaelis, August, and Karl Kobert, phenylhydrazinopyrine and 5-benzene-azo-1-phenyl-3-methylpyrazole, 1909, A., i, 680.

Michaelis, August, and August Lachwitz, pyrines of 1:3-dimethylpyrazo-

lone, 1910, A., i, 641.

Michaelis, August, and Richard Leonhardt, 1-phenyl-3-methylpyrazole-4-azobenzene, 1904, A., i, 124.

Michaelis, August, and G. Linus Linke, thiophenol-5-chlorophosphines and their derivatives, 1907, A., i, 1102.

Michaelis, August, Georg Mielecke, and Lutze, nitroso-compounds of ψ-pyrines, and 2-alkylanilopyrines, 1908, A., i, 61.

Michaelis, August, and Robert Pander, 1-phenyl-3-methylthiopyrazolone,

1904, A., i, 780.

Michaelis, August, Otto Rademacher, and Enoch Schmiedekampf, pyrines from bis-1-phenyl-3-methyl-5-pyrazolone, 1907, A., i, 731.

Michaelis, August, and E. Remy, preparation of 1-phenyl-3-pyrazolone,

1907, A., i, 445.

Michaelis, August, and Konrad Schenk, new process for the preparation of aromatic 3-hydroxy-5-pyrazolones or pyrazolidones, 1907, A., i, 966.

1-phenyl-4-alkyl-3:5-pyrazolidones and antipyrines of the malonic acid

series, 1909, A., i, 58.

Michaelis, August, and H. Schlecht, benzeneazo-derivatives of antipyrine and thiopyrine, 1906, A., i, 614.

Michaelis, August, and Omar Schmidt, carboxylic derivatives of 3-methyl- and 5-chloro-3-phenylpyrazole, 1910, A., i, 640

Michaelis, August, Alfred Stiegler, and Walter Willert, 3-pyrazolones. III.,

1908, A., i, 209.

Michaelis, August, and Walter Willert, 1:3-diphenyl-5-pyrazolone and its 1nitro-derivative, 1908, A., i, 215.

Michaelis, August, and Adalbert Zilg, action of phosphorus oxychloride on bispyrazolone derivatives of aldehydes and ketones, 1906, A., i, 216. Michaelis, Franz. See Franz Sachs.

Michaelis, Kurt, preparation of triazans, 1908, A., i, 471.

Michaelis, Leonor, inhibition of precipitin reactions, 1903, A., ii, 497.

Nile-blue base, 1904, A., i, 333. certain properties of dye-bases and dye-acids, 1906, A., i, 444.

ultra-microscope and its application to chemistry, 1906, A., ii, 431.

adsorption affinity of invertase from yeast, 1908, A., i, 235.

adsorption of ferments, 1908, A., i,

binary electrodes and electrochemical adsorption, 1908, A., ii, 655.

electrical transportation of ferments, 1909, A., i, 277.

electrical migration of enzymes, 1909, A., i, 345.

electrical migration of enzymes. II. Trypsin and pepsin, 1909, A., i, 345.

the electric charge of serum albumin and of ferments, 1909, A., i, 618.

electrical migration of enzymes. III. Malt diastase. IV. Pepsin, 1909, A., i, 621.

mechanism of agglutination, 1909, A., ii, 304.

viscosity of albumin solutions, 1910, A., ii, 1040.

the dissociation of amphoteric electrolytes, 1911, A., ii, 577.

the isoelectric point of electroamphoteric colloids, 1912, A., ii, 1150.

Michaelis, Leonor, and W. Davidoff, the electrometric method for estimation of the alkalinity of the blood, 1912, A., ii, 1184.

Michaelis, Leonor, and Heinrich Davidsohn, isoelectric constant of pepsin,

1910, A., i, 795.

trypsin and pancreas nucleo-protein, 1911, A., i, 343.

the isoelectric point of genuine and denaturated serum-albumin, 1911, A., i, 697.

the influence of hydrogen ion concentration on trypsin action, 1911, A., i, 1051.

the action of hydrogen ions on invertin [invertase], 1911, A., i, 1052. theory of the isoelectric point, 1911,

A., ii, 192. the significance and measurement of the acidity of the gastric juice, 1911, A., ii, 505.

electrical transport of colloids, 1912,

A., i, 326.

Michaelis, Leonor, and Heinrich Davidsohn, the cataphoresis of oxyhæmoglobin, 1912, A., i, 591.

the agglutination optimum in mixtures of colloids, 1912, A., ii, 440.

Michaelis, Leonor, and Moses Ehrenreich, adsorption of ferments, 1908, A., i, 587.

Michaelis, Leonor, and W. Grineff, the isoelectric point of gelatin, 1912, A., ii, 729.

Michaelis, Leonor, and B. Mostynski, the isoelectric constants and the relative acidity constants of serumalbumin, 1910, A., i, 287.

the internal friction of albumin solu-

tions, 1910, A., ii, 592.

Michaelis Leonor, and Ludwig Pincussohn, theory of colloidal envelopes ("Umhüllung"): ultramicroscopic

observations, 1907, A., ii, 78.

Michaelis, Leonor, Ludwig Pincussohn, and Peter Rona, the behaviour of electrolytes in mastic precipitation,

1907, A., i, 1095.

Michaelis, Leonor, and Peter Rona, the solubility of albumoses and ferments with reference to their relationships to lecithin and mastic, 1907, A., i.

method for the removal of colloids from solutions, especially for removing proteins from blood-serum, 1907, A., ii, 204.

parenteral nitrogenous metabolism.

I., 1908, A., ii, 206.

the sugar in blood, 1908, A., ii, 329. estimation of the concentration of hydrogen ions by indicators, 1908, A., ii, 571.

[effect of adsorbents on yeast juice],

1909, A., i, 196.

the sugar in blood. IV. The method of osmotic compensation, 1909, A., ii, 68.

adsorption, 1909, A., ii, 125.

adsorption by means of clay, 1909,

A., ii, 552.

the electrochemical measurement of alkalinity in blood and serum, 1909, A., ii, 680.

VI. The the sugar of the blood. distribution of sugar in the blood in hyperglycæmia, 1909, A., ii, 680.

general protein chemistry. I. The coagulation of denatured albumin, considered as a function of the hydrogen ion concentration and of the salts, 1910, A., i, 646.

glycolysis. I. The susceptibility to alkali of dextrose, 1910, A., ii, 139. Michaelis, Leonor, and Peter Rona, the influence of neutral salts on indicators, 1910, A., ii, 153.

the influence of the reaction of the medium on adsorption, 1910, A., ii, 591.

estimation of blood-sugar, 1910, A., ii. 660.

general protein chemistry. III. The denaturation of serum albumin. 1911, A., i, 90.

a simple method for the estimation of sugar in blood, 1911, A., ii, 73.

the distribution of reducing substances in mammalian blood, 1912, A., ii, 58.

Michaelis, Leonor, and Dengo Takahashi, the isoelectric constants of the constituents of blood-corpuscles, and their relationship to hæmolysis by acids, 1911, A., ii, 48. Michaelis, Leonor. See also Emil Ab-

derhalden, Paul Fleischmann, Hilary

Lachs, and Peter Rona.

Jacob I., physico-me-Michailenko, chanical conception of solutious, 1912,

A., ii, 438.

Michailenko, Jacob I., and M. I. Meshtscherjakoff, influence of oxidising agents on the rate of solution of gold in potassium cyanide, 1912, A., i. 613.

Michailenko, Jacob I., and P. G. Mushinsky, action of magnesium on the water of crystallisation of crystallohydrates; activation of the magnesium by salts, 1912, A., ii, 350.

Michalski, Lad., action of alkaloids on cockroaches, 1906, A., ii, 695.

Michaud, Félix, causes producing at constant temperature variation in the vapour pressure of a liquid, 1911, A.,

Michaud, Gustave, alkaloids and ultraviolet light, 1912, A., ii, 712.

Michaud, Louis, the physiological protein minimum, 1909, A., ii, 498.

Michaud, Louis. See also Gustav Embden, and Oswald Loeb.

Micheels, Henri, influence of the valency of metals on toxicity, 1907, A., ii, 124. action of aqueous solutions of electrolytes on germination, 1910, A., ii, 232.

action of anodic and cathodic liquids on germination, 1910, A., ii, 883. Caulerpa prolifera, 1911, A., ii, 526.

Micheels, Henri, and P. de Heen, influence of radium on the respiratory energy of germinating grains, 1905, A., ii, 431, 474.

influence of electrodes on germinating seeds, 1906, A., ii, 115.

Micheels. Henri, and P. de Heen, comparison of the actions of aluminium, zinc, and carbon electrodes on germination, 1906, A., ii, 115.

action of colloidal solutions of tin on germinating seeds, 1906, A., ii, 115.

action of aluminium salts on germination, 1906, A., ii, 191.

action of ozone on germinating seeds, 1906, A., ii, 791.

stimulating action of manganese on germination, 1906, A., ii, 791.

stimulating action exercised by mixtures of colloidal solutions on germination, 1907, A., i, 643.

See Karl Lesch. Michel, Anton.

Michel, Ch. See Gustave Patein. Michel, Edmond. See Alfred Guyot. Michel, Franz, hæmochromogen and the

spectroscopic differentiation of carboxyhæmoglobin and oxyhæmoglobin, 1911, A., i, 822.

washbottle with divided liquid layer,

1911, A., ii, 35.

nitrometer appendage flask, 1911, A., ii, 68.

a closing contrivance for gas-washing bottles, washbottles, etc., 1911, A., ii, 199.

a new gas-generating apparatus, 1911, A., ii, 200.

an improved form of Heller's test for the detection of albumin, especially in urine, 1911, A., ii, 347.

action of metals in the presence of hydrogen peroxide on the reagents for blood, 1911, A., ii, 556.

detection of blood by means of lencomalachite green, 1911, A., ii, 675.

preparation of indigotin as a laboratory exercise and as a lecture experiment, 1911, A., ii, 715.

adjustable electric signal thermometer, 1911, A., ii, 963.

universal apparatus, 1912, A., ii, 246. an automatic pipette for the determination of iodine- and saponificationnumbers, 1912, A., ii, 396.

detection of blood by means of pyridine, 1912, A., ii, 400.

removal of chlorine in the titration of

iron, 1912, A., ii, 495. an automatic universal burette, 1912,

A., ii, 804. detection of blood in urine and other physiological liquids, 1912, A., ii, 1112.

Michel, Franz. See also Fritz Ephraim. Michel, Friedrich, preparation of s-tetrachloroethane and hexachloroethane, 1906, A., i, 550.

Michel, Friedrich. See also Gustav Heller.

Michel, Léopold [Jean], composition of colloidal ferric hydroxy-chlorides,

1909, A., ii, 48.

variation of the composition of colloids formed in a solution of ferric chloride according to the conditions of hydrolysis, 1909, A., ii, 146.

crystalline form of conichalcite, 1909,

A., ii, 491.

Michel, Léopold. See also Giovanni Malfitano.

Michel, Rud., estimation of organic matters in spent sulphuric acids, 1910, A., ii, 1108.

Micheler, Hans. See Alexander Gutbier. Michelet, E., and John Sebelien, analyses of natural humus, 1906, A., ii,

388.

Micheli, Jules. See Edóuard Sarasin.

Michels, Albert. See Arthur Kötz.

Michelson, Karl. See Roland Scholl. Michie, Arthur C. See Francis Robert

Japp, and Robert Luther.

Michiels, Louis, trinethylene [cyclopropane] derivatives, 1911, A., ii, 62, 459.

trimethylene [cyclopropane] deriva-

tives of the type H_2C CHX.,

1912, A., i, 259.

Michnovitsch, Paul, β-phenyl-β-ethyllactic acid [β-hydroxy-β-phenylbutyric acid], 1904, A., i, 417.

β-phenyl-β-ethylethylenelactic [β-hydroxy-β-phenylvaleric] acid, 1905,

A., i, 526.

Michonneau, R., assay of creosote by means of glycerol and water, 1903,

A., ii, 338.

Micklethwait, (Miss) Frances Mary Gore. See John Cannell Cain, Martin Onslow Forster, and Gilbert Thomas Morgan.

Micko, Karl, xanthine bases contained in meat, yeast, and other extracts; the xanthine bases of meat extract, 1904, A., ii, 101, 458.

the xanthine bases in meat, yeast, and other extracts. II. In yeast extracts, 1904, A., ii, 793.

hydrolysis of meat extract, 1906, A.,

i. 778.

hydrolysis of the albumoses occurring in meat extract, 1907, A., i, 994. composition of meat extract, 1908, A.,

ii, 644.

monoamino-acids in meat extract, 1908, A., ii, 713.

Micko, Karl, separation of creatinine from meat extracts, 1910, A., ii, 557.

Miculicich, Miroslav, influence of electrolytes and non-electrolytes on the permeability of red-blood corpuscles, 1911, A., ii, 49.

inhibition of glycosuria, I. The influence of hirudin on glycosuria produced by adrenaline and by diuretin, 1912, A., ii, 855.

inhibition of glycosuria. II. The influence of ergotoxin on glycosuria produced by adrenaline and diuretin,

1912, A., ii, 856.

Middelberg, W., equilibria in the system: succinonitrile-silver nitrate-

water, 1903, A., ii, 414.
Middlemiss, Charles Stewart, sapphirinebearing rock from India, 1904, A., ii, 668.

Midhat, D. See Paul Wenger.

Mie, Gustav, hydration and molecular heat of ions in very dilute aqueous solutions, 1910, A., ii, 822.

Mieg, Walter. See Richard Willstätter. Mielck, Johannes. See Erwin Rupp.

Mielck, Johannes. See Erwin Rupp.
Miele, A., and V. Willem, the supposed lactic diastase which decomposes salol, 1903, A., ii, 604.

Mielecke, Georg. 'See August Michaelis.
Mieli, Aldo, chemical kinetics. 1.
Hydrolysis of ethyl citrate, 1906,
A., ii, 602.

velocities of reaction and their derivatives with respect to time, 1907, A., ii, 754.

curves of instantaneous heat power determined from chemical reactions, 1908, A., ii, 153.

new conception of the element, 1908, A., ii, 478.

Mieli, Aldo. See also Guido Bargellini, Nicola Parravano, and Emanuele Paternò.

Miers, (Sir) Henry Alexander, variation of angles observed in crystals; especially of potassium alum, and ammonium alum, 1903, A., ii, 472; 1904, A., ii, 114.

crystallisation of potassium dichromate, 1908, A., ii, 388.

Miers, (Sir) Henry Alexander, and (Miss)
Florence Isaac, the refractive indices
of crystallising solutions, with
especial reference to the passage
from the metastable to the labile
condition, 1906, T., 413; P., 9;
discussion, P., 10.

the spontaneous crystallisation of binary mixtures; experiments on salol and betol, 1907, A., ii, 670. Miers, (Sir) Henry Alexander, and (Miss) Florence Isaac, the spontaneous crystallisation of substances which form a continuous series of mixed crystals; mixtures of naphthalene and β-naphthol, 1908, T., 927; P.,

spontaneous crystallisation of chloroacetic acid and its mixtures with naphthalene, 1909, A., i, 356.

Mies, Wilhelm, absorption spectrum of p-xylene in the ultraviolet, 1909, A., ii, 776.

spectrum of the three absorption xylenes in the ultraviolet, 1910, A.,

ii, 563.

Mieth, Hans, suitability of the calcium of calcium silicate for the nutrition of plants, 1910, A., ii, 1105.

Miethe, Adolf, spectrum of the ruby, 1908, A., ii, 139.

Miethe, Adolf, and Gilbert Book, constitution of the cyanine dyes, 1904,

A., ii, 622, 776.

Miethe, Adolf, and B. Seegert, wavelength measurements for some of the platinum metals in the short-waved ultra-violet spectrum, 1912, A., ii, 2.

Miethe, Adolf. See also Louis Lewin. Migault, Wilhelm, moist combustions with Caro's acid, 1910, A., 460.

Migay, Th. J., and W. W. Sawitsch, the proportionality of proteolytic and rennetic action of the gastric juice of man and dog in normal and pathological cases, 1910, A., ii, 140.

Migliorini, Enrico. See Mario Giacomo

Levi.

See Constantin I. Mihailescu, M.Istrati, and Adriano Ostrogovich. Mihara, Shinji, the enzymes of bull's

testes, 1912, A., ii, 70. Mihr, F. See Rudolf Schenck.

Miklauz, Rudolf, humus substances, 1909, A., i, 285.

Miklauz, Rudolf. See also Franz Wilhelm Dafert.

Mikusch, Hans, the system : zinc oxidecarbon dioxide-water, 1908, A., ii,

Milanowski, W. See M. Tschilikin. Milarch, Ernst. See Paul Rabe.

Milazzo, A. See Antonio Tamburello. Milbauer, Jaroslav, estimation separation of cyanates, cyanides, thiocyanates, and sulphides, 1903, A., ii, 392.

estimation of the nitrogen in hydrazones and osazones by Kjeldahl's method, 1904, A., ii, 207.

Milbauer, Jaroslav, action of potassium thiocyanate on metallic oxides at high temperatures, 1905, A., i.

uranyl selenide and potassium chromic selenide, 1905, A., ii, 94.

action of certain.gases on potassium thiocyanate at high temperatures, 1906, A., i, 405.

Kjeldahl's method; rapidity of oxidation of sucrose by means of sulphuric acid, 1907, A., i, 388.

tetramethylammonium platinocvan-

ide, 1907, A., i, 392.

synthesis of hydrogen sulphide, 1907, A., ii, 163.

oxidation of hydrogen by sulphuric acid, 1907, A., ii, 252.

borax bead test for praseo- and neodymium salts, 1908, A., ii, 70.

colorimetric comparison of copper and nickel solutions, 1908, A., ii, 71.

titration of sulphites with permanganate, 1909, A., ii, 264.

red lead, 1909, A., ii, 574, 889; 1910, A., ii, 294; 1911, A., ii, 113.

simple arrangement for reading ordinary burettes, 1911, A., ii, 432. cutting tubes by etching, 1911, A.,

ii, 715.

theory of platinum catalysis with reference to the oxidation of hydrogen by sulphuric acid, 1911, A., ii, 872.

the action of oxygen on heated iron under pressure, 1912, A., ii, 1059.

Milbauer, Jaroslav, and Rudolf Hac, estimation of cyanogen iodide in presence of iodide, 1905, A., ii, 489.

Milbauer, Jaroslav, and Otto Quadrat, ferric sulphate as a standard for titrating potassium permanganate, 1911, A., ii, 936.

Milbauer, Jaroslav, and Vladimir Staněk, quantitative separation of the pyridine bases from ammonia and the aliphatic amines, 1904, A., ii, 457.

colorimetric estimation of copper, 1908, A., ii, 69.

Milbauer, Jaroslav. See also Vladimir Staněk.

Milch, Ludwig [felspar from Minor], 1903, A., ii, 223.

alteration of augite to carbonates, 1904, A., ii, 48.

Milchner, Richard. See Carl Neuberg. Milewski, Jan. See Carl Adam Bischoff.

Milikan, J. See Frans Antoon Hubert Schreinemakers.

Millar. Edmund Theodore. See Adrian John Brown.

Millar, W. S., and William White Taylor, electrolysis through precipitation films, 1907, A., ii, 223.

Millar, W. S. See also Georg Bredig. Miller, C. W. See Alvin Sawyer

Wheeler. Miller, D., electrolytic precipitation of cuprous oxide, 1909, A., ii, 373.

Miller, Edmund Howd, and John Louis Danziger, composition of the ferrocyanides of zinc, 1903, A., i, 18.
Miller, Edmund Howd, and Frederick

van Dyke-Cruser, estimation of bismuth by precipitation as molybdate.

1905, A., ii, 358.

Miller, Edmund Howd, and Milton J. Falk, changes in the composition of some ferrocyanides of cadmium and zinc after precipitation, 1904, A., i,

Miller, Edmund Howd, and Henry Frank, reduction of molybdic acid by zine; ratio of bismuth to molybdenum in bismuth ammonium molybdate, 1903, A., ii, 761.

Miller, Edmund Howd. See also Frederick van Dyke-Cruser, and John F.

Thompson.

Miller, Edward Holl, gravimetric estimation of phosphorus in milk, 1912, A., ii, 202.

detection and estimation of small quantities of nitrous acid, 1912, A., ii, 992.

Miller, Edward Holl. See also Henry Droop Richmond.

Miller, E. M. See Joseph L. Miller. Miller, Emerson Romeo, ephedrine, 1903, A., i, 110.

cornin, the bitter principle of Cornus florida, 1910, A., i, 577.

Miller, Ivy. See Richard B. Moore.

Miller, James. See Julius Berend Cohen. Miller, Joseph L., Dean D. Lewis, and Samuel A. Matthews, effects of extracts of different parts of the pitiutary body, 1911, A., ii, 217.

Miller, Joseph L., and E. M. Miller, the effect of organ extracts on blood-

pressure, 1912, A., ii, 58.

Walter Miller, James Raglan, and Jones, the ferments of nuclein metabolism in gout, 1909, A., ii, 821.

Miller. K. See Michael I. Konowaloff. Miller, Moriz. See Edgar Wedekind.

Miller, Norman Harry John, amounts of nitrogen and organic carbon in some clays and marls, 1904, A., ii, 201.

Miller, Norman Harry John, amounts of nitrogen as ammonia and as nitric acid, and of chlorine in the rain-water collected at Rothamsted, 1906, A., ii, 486.

Miller, Norman Harry John. See also Alfred Daniel Hall. and Henry

Brougham Hutchinson.

Miller, Oswald, behaviour of cellulose with sodium hydroxide, 1908, A.,

constitution of sodium cellulose, 1909, A., i, 13.

mercerised cellulose, 1911, A., i, 17,

isomerism of naphthaquinone derivatives, 1911, A., i, 308, 465.

Miller, Oswald, and J. Smirnoff, reaction of indigotin with potassium manganate, 1908, A., i, 468.

aminoanilide and certain new dianilides of a-naphthaquinone, 1910. A., i. 121.

Miller, P. T. See James R. Bailey.

Miller, Sarah P., estimation and separation of gold in the electrolytic way, 1905, A., ii, 67.

Miller, William, Zeeman effect with magnesium, calcium, strontium, zinc, cadmium, manganese and chromium, 1907, A., ii, 837.

Miller, William Lash, mechanism of induced reactions, 1907, A., ii,

247.

indirect analysis by means of the dilatometer; lower hydrate of sodium acetate, 1909, A., i, 81.

theory of the direct method of determining transport numbers, 1909.

A., ii, 966.

Miller, William Lash, and Frank Boteler Kenrick, identification of basic salts, 1903, A., ii, 473.

Miller, William Lash, and R. McPherson, behaviour of colloidal suspensions with immiscible solvents, 1909, A., ii, 132.

Miller, William Lash. See also T. R. Rosebrugh.

Millian, Ernest, Tunisian olive oil, 1904,

A., ii, 456. detection of cotton-seed oil in olive

oil, 1905, A., ii, 126. test for the purity of cocoa-nut oil, 1905, A., ii, 775.

detection of carbon disulphide in oils,

1912, A., ii, 92. Millikan, Robert Andrews, the isolation of an ion and the exact measurement of its charge; correction to the law of Stokes, 1911, A., ii, 175.

Millikan, Robert Andrews, and Harvey Fletcher, the question of valency in gaseous ionisation, 1911, A., ii, 573.

Milliken, Carl Spencer, and Percy Goldthwait Stiles, supposed equivalence of sodium and lithium ions in skeletal muscle, 1905, A., ii, 737.

Millington, John Price. See Humphrey

Owen Jones.

Millosevich, Federico, alunogen from the neighbourhood of Rome, 1903,

A., ii, 435.

crystalline form of optically active substances, particularly of a partially racemic active compound, 1904, A., i, 320.

minerals from Val d'Aosta, 1906, A.,

ii, 368.

mineralogy of Sardinia; bournonite from Sarrabus, 1906, A., ii, 456. minerals from Sardinia; hæmatite

from Padria, 1907, A., ii, 628.

conditions of formation of natural copper carbonates, 1908, A., ii, 282.

mineralogy of Sardinia; andesine [plagioclase] from Monte Palmas (between Sassari and Alghero), 1909, A., ii, 248.

variety of cobaltiferous calcite from Capo Calamita, Elba, 1910, A., ii,

221.

an iron-poor epidote (clinozoisiteepidote) from S. Barthélemy, Aosta Valley, Piedmont, 1912, A., ii, 569.

Mills, Edmund James, numerics of the elements. III., 1903, A., ii, 472. Mills, Edmund James, and Archibald

Grav. testing colloids, 1904, A., ii,

Mills, James Edward, molecular attraction, 1904, A., ii, 642; 1905, A., ii, 152; 1909, A., ii, 862; 1912, A., ii, 1041.

molecular attraction. IV. Biot's formula for vapour pressure and some relations at the critical temperature, 1905, A., ii. 443.

molecular attraction. V. An application of the theory to ten additional

substances, 1906, A., ii, 216. molecular attraction. VI. The mutual neutralisation of the attraction by the attracted particles and the nature of attractive forces, 1907, A., ii, 226.

molecular attraction. VII. Examination of seven esters, 1908, A., ii,

internal heat of vaporisation, 1909, A., ii, 861.

Mills. James Edward, relation of temperature and molecular attraction, 1911, A., ii, 710.

molecular attraction. IX. Molecular attraction and the law of gravitation,

1911, A., ii, 711.

Mills, James Edward, and Duncan Mac-Rae, surface energy and surface tension, 1910, A., ii, 932.

specific heat of carbon tetrachloride and of its saturated vapour, 1911,

A., ii, 186.

the specific heat of liquid benzene and of its saturated vapour, 1911, A., ii, 187.

Mills, (Mrs.) Mildred. See William

Hobson Mills.

Mills, William Hobson, the preparation of durylic and pyromellitic acids, 1912, T., 2191; P., 243.

s, William Hobson, and (Miss) Alice Mary Bain, optically active Mills. 4-oximinocyclohexanecarboxylicacid and the configuration of the oximinogroup; preliminary note, 1909, P.,

optically active salts of 4-oximinocyclohexanecarboxylic acid and the configuration of the oximino-group,

1910, T., 1866; P., 214.

ills, William Hobson, and (Mrs.) Mildred Mills, the synthetical pro-Mills, duction of derivatives of dinaphthanthracene, 1912, T., 2194; P., 242.

Mills, William Hobson, and Walter Henry Watson, 3-aminoquinoline and the colour of its salts, 1910,

T., 741; P., 56.

note on the formation of tetrachlorophthalyl chloride by chlorination of tetrachlorophthalide, 1912, P., 262.

Mills, William Hobson, and (Miss) Sibyl Taite Widdows, benzeneazo-2pyridone, 1908, T., 1372; P., 174.

Mills, William Hobson. See also Hans von Pechmann.

Mills, William Sloan. See Carl Diet-

rich Harries. Milner, R. D. See A. P. Bryant, and

Charles Ford Langworthy. Milner, Samuel Roslington,

spectrum of mercury, 1910, A., ii, 914. Milo. See Jacob Böeseken.

Milo, C. J., storage of calcium cyanamide in the tropics, 1912, A., i, 16.

Milobendzki, Tadeusz, iodometric estimation of potassium permanganate, 1907, A., ii, 199.

oxygen derivatives of camphone, 1908, A., i, 92,

Milobendzki, Tadeusz, titration of sodium thiosulphate, 1908, A., ii, 130. systematic detection of the more im-

portant acids, 1910, A., ii, 154.

tautomerism of the dialkyl phosphites, 1912, A., i, 155.

Milobendzki, Tadeusz, Stanislaus von Kostanecki, and Victor Lampe, curcumin, 1910, A., i, 628.

Miloszewski, P. See Waldemar M.

Fischer.

Milrath, Hugo, conditions of formation of phenylsemicarbazide and acetylphenylhydrazine, 1908, A., i,

action of as-phenylbenzylhydrazine on carbamide, 1908, A., i, 581.

action of secondary as-hydrazines on carbamides, 1908, A., i, 1014.

urinary constituents precipitable by phenylhydrazine, 1908, A., ii, 716.

the Beilstein reaction [for halogens], 1910, A., ii, 67.

Milroy, Ina A., influence of inactive substances on the optical rotation of

dextrose, 1905, A., i, 174. Milroy, J. A., products of distillation of hæmatin with zinc dust, 1904, A., i, 791.

reduced acid hæmatin, 1905, A., i,

a stable derivative of hæmochromogen, the carbon monoxide capacity of reduced acid hæmatin, 1909, A., i,

Milroy, Thomas Hugh, formation of uric acid in birds, 1903, A., ii, 672.

response of the developing retina to light and radium, 1905, A., ii, 728.

chemical composition of the herring during the reproductive period, 1908, A., ii, 768.

Minajeff, Wassily. See Fritz Ullmann. Minami, D., the resorption of gelatin in the small intestine, 1911, A., ii,

the action of the enzymes of the stomach, pancreas, and mucous membrane of the small intestine on gelatin, 1911, A., ii, 810.

the influence of lecithin and lipoids on diastase, 1912, A., i, 402.

the influence of bile on diastase (amy-

lase), 1912, A., i, 402. the reaction between ferments and

anti-ferments, 1912, A., ii, 362. the influence of serum and the expressed juices of organs on the fatsplitting ferments, 1912, A., ii, 460.

the relationship between the pancreas and suprarenals, 1912, A., ii, 461.

Minami, D., the biological action of mesothorium; the action of thorium emanation on digestive ferments and

autolysis, 1912, A., ii, 965. Minerva, Salvatore. See Gino Abati. Mines, George Ralph, Munchi arrow poison and strophanthin, 1908, A.,

spontaneous movements of amphibian muscle in saline solutions, 1909,

A., ii, 75. survival of an excised muscle under aseptic conditions, 1910, A., ii,

523. action of glucinum, lanthanum, yttrium, and cerium on the frog's

heart, 1910, A., ii, 525. relative velocities of diffusion in aqueous solution of rubidium and cæsium chlorides, 1910, A.,

694. action of praseodymium, didymium, and erbium on the frog's heart, 1910, A., ii, 794.

action of tervalent ions on the heart and on certain colloidal systems,

1911, A., ii, 130. ·

replacement of calcium in certain neuro-muscular mechanisma allied substances, 1911, A., ii, 413.

action of tervalent ions on living cells and on colloidal systems. Simple and complex cations, 1911, A., ii, 633.

interpretation of the "protective action" of gelatin on colloidal gold,

1912, A., ii, 169.

the relations to electrolytes of the hearts of different species of animals. I. Elasmobranchs and pecten, 1912, A., ii, 367.

influence of certain ions on the electrical charge of surfaces and its relationship to problems in colloidal chemistry and biology, 1912, A., ii,

Mines, George Ralph. See also Joseph Barcroft, and Dorothy Dale.

Minet, Adolphe, atomic weights a function of the order which they occupy in the series of their increasing magnitude, 1907, A., ii, 250.

Minet, Adolphe. See also Léonce Barthe. Mingaye, John Charles Henderson [montanite from New South Wales], 1903, A., ii, 489.

monazite in sands from New South

Wales, 1904, A., ii, 418. occurrence of vanadium in New South Wales rocks, coals, clays, etc., 1904, A., ii, 420,

John Charles Henderson, Mingave. Dyrring, Barraba, Mount Cowra meteorites, 1905, A., ii.

estimation of thorium in monazite; colorimetric estimation of small amounts of platinum, 1910, A., ii,

78.

Minguin, Jules, methylbromocamphor. bromomethylcamphor, and methylenecamphor, 1903, A., i, 428.

stereoisomerism in the esters of substituted camphorcarboxylic acids methylhomocamphoric acid; ethylcamphorcarboxylic acid, 1904, A., i, 138.

ethylidenecamphor; ethylhomocamphorie acid, 1904, A., i, 330.

influence of the ethylenic linkage in an [optically] active molecule, 1905,

A., i, 321.

dissociation of strychnine salts determined by their rotatory power; rotatory power in homologous series; influence of the double linking, 1905, A., ii, 130.

state in solution of the camphorcarboxylates of aliphatic and aromatic amines as revealed by the rotatory

power, 1908, A., ii, 137.

dissociation of tartrates, malates, and camphorates of amines as revealed by their rotatory power, 1912, A., i, 237.

Minguin, Jules, and E. Grégoire de Bollemont, rotatory power of the homologous esters of borneol, isoborneol, and camphocarboxylic acid, 1903,

A., i, 352.

Minguin, Jules, and Henri Wohlgemuth, state in solution of the tartrates of aliphatic and aromatic amines as revealed by their rotatory power, 1909, A., i, 11.

Minquin, Jules. See also Antoine

Guntz, and Albin Haller. .

Miniot, H., constant level water-bath, 1911, A., ii, 714.

Minkman, D. C. J. See Martinus Willem Beyerinck.

Minkowski, Oskar, pancreatic diabetes, 1906, A., ii, 186.

Minovici, Stefan, cholesterol, 1908, A., i, 531.

Stefan, and Bella Haus-Minovici, knecht, some chlorine derivatives of cholesterol, 1912, A., i, 110.

Minovici, Stefan, and Eugène Vlahutza, the action of perhydrol on cholesterol in the presence of sulphuric acid, 1912, A., i, 697.

Minovici, Stefan, and (Mlle.) Théodosie Zenovici, the condensation of phenylglycollonitrile with aromatic aldehydes in the presence of thionyl chloride, 1912, A., i, 699.

Minozzi, Arnaldo, platinum selenides,

1909, A., ii, 899.

Minssen, Hermann, occurrence of unusually large amounts of injurious sulphur compounds in peat, 1904, A., ii, 586.

diffusion in acid and neutral media. especially in humus soils, 1905, A.,

ii, 758.

Mintz, Saul. See Charles Eugène Guve. Minunni, Gaetano, action of amyl nitrite on phenyl-m-nitrobenzylidenehydrazine, 1905, A., i, 91.

Minunni, Gaetano, and Riccardo Ciusa, action of chlorine on brucine in glacial acetic acid solution, 1905, A., i, 230.

reduction of a-dibenzylideneacetonehydroxylamineoxime, 1905, A., i,

245.

hydroxylamine derivatives of ketones of the type CO(CH:CHR)2, 1906, A., i, 95.

oxidation of aromatic aldoximes with amyl nitrite, 1906, A., i, 187.

Minunni, Gactano, and Felice Ferrulli, chloro derivatives of strychnine, 1905, A., i, 229.

Minunni, Gaetano, and Guido Lazzarini, pyrazole derivatives, 1906, A., i,385.

1-phenyl-3-hydroxyphenyl-5-methylpyrazole-4-carboxylic acid and its

lactone, 1906, A., i, 388. Minunni, Gaetano, G. Vassallo, Riccardo Ciusa, and Guido Lazzarini, new general method of synthesising pyrazole derivatives, 1906, A., i, 114.

Minz, Abraham, toxolecithides, 1903, A., ii, 413.

Miolati, Arturo, yellow phosphomolybdic acid, 1904, A., ii, 263.

two new complex acids, 1910, A., ii,

Miolati, Arturo, and Cesare Gialdini, iridium and its compounds, 1903, A.,

Miolati, Arturo, and R. Pizzighelli, complex acids. I., 1908, A., ii, 595. Miorandi, Mario, the Gasparini electro-

lytic process for the removal of organic matter in the detection of poisons 1909, A., ii, 342.

Mirande, Marcel, an instance of the formation of anthocyanin under the influence of the bite of an insect (Eurrhipara urticata), 1906, A., ii, 884. Mirande, Marcel, rhinanthin, 1907, A., i. 865.

influence of certain vapours on vegetal cyanogenesis; rapid method for detecting plants containing hydrogen cyanide, 1909, A., ii, 824.

action of vapours on green plants,

1910, A., ii, 884.

effect of road tarring on vegetation,

1911, A., ii, 64.

action on green plants of some substances extracted from coal-tar and employed in agriculture, 1911, A., ii, 223.

presence of hydrogen cyanide in Trifolium repens, 1912, A., ii, 1085.

existence of cyanogenetic principles in a new Centaurea (Centaurea crocodylium) and in a Commelinacea (Tinantia fugax), 1912, A., ii, 1203. a new natural group of plants pro-

a new natural group of plants producing hydrogen cyanide, the Calycanthaceæ, 1912, A., ii, 1203.

Mironenko, Wladimir. See Carl Adam Bischoff.

Miškovský, Oldřich, sarcinæ causing disease in beer, 1908, A., ii, 526.

Miškovský, Oldřich. Šee also Vladimir Staněk.

Misner, R. R. See Amé Pictet.

Misson, G., colorimetric estimation of phosphorus in steel, 1908, A., ii, 732.

Misteli, Wilhelm, incomplete combustion of gases; cause of the luminosity of flame, 1905, A., i, 849.

Mita, Sadanori, hæmochromogen test,

1910, A., ii, 665.

Mitchell, Alec Duncan, and Clarence Smith, constitution of hydroxyazocompounds. Part II. Action of mercuric acetate on henzeneazonaphthols, 1909, T., 1430; P., 209. volumetric estimation of sulphates.

1909, T., 2198; P., 291.

Mitchell, Alec Duncan, and Jocelyn Field Thorpe, the formation and reactions of imino-compounds. Part XII. The formation of imino-derivatives of cyclopentane from openchain mononitriles, 1910, T., 997; P., 114.

the formation and reactions of iminocompounds. Part XIV. The formation of a-hydrindone and its derivatives, 1910, T., 2261; P., 248.

Mitchell, Alec Duncan. See also Clar-

ence Smith.

Mitchell, Hugh, the ratios which the amounts of substances in radioactive equilibrium bear to one another, 1911, A., ii, 87.

Mitchell, H. H. See Henry Lewis Rietz.

Mitchell, Herbert Victor, preparation of benzeneazocoumarin; its bearing on the constitution of p-hydroxyazocompounds, 1905, T., 1229; P., 220.

Mitchell, Herbert Victor. See also

John Theodore Hewitt.

Mitchell, John Pearce. See Stewart Woodford Young.

Mitchell, Philip Henry, influence of autolysis on the pentose of the pancreas, 1906, A., ii, 559.

behaviour of uric acid towards animal extracts and alkalis, 1907, A., ii,

565.

purine enzymes of guinea pig and rabbit, 1910, A., ii, 731.

Mitchell, Philip Henry, and George Smith, the physiological effects of alkaloids of Zygadenus intermedius, 1911, A., ii, 911.

Mitchell, Philip Henry. See also J. F. McClendon, and Lafayette Benedict

Mendel.

Mitchell, W. A. See German Sims Woodhead.

Mitrofanoff, B. See Gerhard Just.

Mitscherlich, Eilhard Alfred, a method of soil analysis for investigations in plant physiology, 1908, A., ii, 428.

estimation of nitrogen, 1909, A., ii, 935.

manuring with carbon dioxide, 1910, A., ii, 236.

[method of estimating very small amounts of nitrogen], 1910, A., ii, 448.

the law of the minimum and the conclusions to be drawn from it, 1911, A., ii, 760.

Mitscherlich, Eilhard Alfred, K. Celichowski, and Hermann Fischer, estimation of small amounts of potassium, 1912, A., ii, 204.

Mitscherlich, Eilhard Alfred, and Hermann Fischer, estimation of potassium; potassium sodium cobalt nitrite method, 1912, A., ii, 996.

Mitscherlich, Eilhard Alfred, Paul Hers, and Ernst Merres, quantitative nitrogen analysis for very small amounts,

1909, A., ii, 614.

Mitscherlich, Eilhard Alfred, and Ernst Merres, error in estimating nitrogen in soil, 1911, A., ii, 68.

Mitscherlich, Sigurd. See Eduard Buchner.

Mitsuda, R., the carbohydrates of shōyu, 1909, A., ii, 928.

Mitsuda, R., availability of phosphoric acid in various forms in herring guano, 1909, A., ii, 931.

Mitsugi, R., Heinrich Beyschlag, and Richard Möhlau, thiazines, 1910, A.,

i. 337.

Mittasch, [Paul] Alwin, a possible method of preparing organic sulphur compounds, 1903, A., i, 675.

the accuracy of the acetate method for the separation of iron and man-

ganese, 1903, A., ii, 760. solvent power and electrical conductivity of liquid nickel carbonyl, 1904, A., ii, 263.

See also H. Nissen-Mittasch, Alwin.

Mitter. Profulla. See Carl Liebermann. Mittler, Siegfried Toeche. See Leopold Rügheimer.

Miura, Soichiro, the behaviour of ethylene glycol, propylene glycol, and glycerol in the animal body 1911, A., ii. 1014.

Miura, Soichiro. See also Carl Neuberg. Mixter, William Gilbert, heat of combustion of hydrogen, 1903, A., ii,

711. new allotropic form of carbon and its heat of combustion, 1905, A., ii, 519.

thermal constants of acetylene, 1906, A., ii, 598.

heat of combustion of silicon and silicon

carbide, 1907, A., ii, 738. heat of combination of acidic oxides with sodium oxide and heat of oxidation of chromium, 1908, A., ii,

heat of oxidation of tin; heat of combination of acidic oxides with sodium

oxides, 1909, A., ii, 380.

heat of formation of titanium dioxide and heat of combination of acidic oxides with sodium oxide, 1909, A., ii, 644.

heat of combination of acidic oxides with sodium oxide. IV. Heat of formation of trisodium orthophosphate, trisodium orthoarsenate, the oxides of antimony and bismuth trioxide, 1909, A., ii, 865.

heat of formation of the oxides of molybdenum, selenium, and tellurium; heat of combination of acidic oxides with sodium oxide, 1910, A.,

ii, 585.

heat of formation of the oxides of cobalt and nickel and the heat of combination of acidic oxides with sodium oxide, 1910, A., ii, 828.

Mixter. William Gilbert, auric hydroxide formed on a gold anode; deportment of auric hydroxide when heated, 1911, A., ii, 613.

heat of combination of acidic oxides with sodium oxide. VII., 1911, A.,

ii. 966.

heat of formation of titanium dioxide. 1912, A., ii, 133.

heat of combination of acidic oxides with sodium oxide. VII. Heat of formation of the oxides of vanadium and uranium, 1912, A., ii, 899.

Miyake, Kiichi, starch in evergreen leaves and its relation to carbon assimilation during winter, 1903, A., ii, 96.

the non-protein nitrogenous stituents of the shoots of Sasa paniculata, 1912, A., ii, 380.

behaviour of pentosans and methylpentosans in seeds of Glycine hispida and Phaseolus vulgaris during germination, 1912, A., ii, 1085.

estimation of galactan, 1912, A., ii,

1105.

Miyake, Kiichi, and T. Tadokoro, composition of the egg-shells of Pollachius brandti, 1912, A., ii, 368. carbohydrates of the shoots of Sasa

paniculata, 1912, A., ii, 380. Miyama, Kisaburō, Japanese lacquer,

1908, A., i, 437.

Mizzenmacher, Golda. See Filippo Traetta-Mosca.

Mochizuki, Junichi, and R. Arima, formation of dextrorotatory lactic acid by the autolysis of animal organs, 1906, A., ii, 873.

Mochizuki, Junichi, and Yashiro Kotake, autolysis of ox testis, 1904, A., ii,

Modebadzé, Konstantin. See Friedrich Kehrmann.

Model, Samuel. See Fritz Ephraim. Modelski, J. von. See Paul Pfeiffer.

Modrakowski, Georg, estimation of sulphur in urine by means of sodium peroxide, 1903, A., ii, 611.

physiological action of choline, 1908, A., ii, 974.

Modrakowski, Georg. See also Otto Cohnheim.

Modrzejewski, Josef. See Hermann Staudinger.

Möbis, Ernesto. See Hermann Louchs. Moeckel, Kurt, distribution of fat, and the total fat in a fat dog, 1905, A., ii, 467.

Moeckel, Kurt, and Erich Frank, simple method of estimating sugar in blood, 1910, A., ii, 554.

Moeckel, Kurt, and Erich Frank, a simple method for the estimation of sugar in the blood. II. The sugar in the blood, 1910, A., ii, 1116.

Moeckel, Kurt, and Franz Rost, origin and importance of the amylolytic blood

ferment, 1910, A., ii, 876.

Möhlau, [Bernhard Julius] Richard, constitution of purpuric acid and murexide, 1904, A., i, 654.

compounds of palladic chloride with [tertiary] cyclic [bases], 1906, A., i,

304.

constitution of the acetylated condensation products of benzeneazo-αnaphthol and tetramethyldiaminobenzhydrol, 1908, A., i, 374.

Möhlau, Richard, and Richard Adam, influence of the carbon double-linking on the colour of azomethine compounds, 1907, A., i, 40.

Möhlau, Richard, Heinrich Beyschlag, and H. Köhres, thiazines, 1912, A., i, 212.

Möhlau, Richard, and Otto Haase, naphthacridinedisulphonic acids, 1903, A., i, 118.

naphthacrihydridine, 1903, A., i, 126.
Möhlau, Richard, and Hans Litter, constitution of murexide and of purpuric

acid, 1906, A., i, 611. action of primary amines on alloxantin.

1906, A., i, 612.

Möhlau, Richard, and Alfred Redlich, condensation of para-quinones with indoles and pyrroles containing hydrogen in the 3-position, 1912, A., i, 129.

Möhlau, Richard, Arthur Viertel, and Alfred Redlich, a new synthesis of anthraquinonylhydrazines, 1912, A., i, 705.

Möhlau, Richard, Arthur Viertel, and Friedrich Reiner, anthraquinonylmonohydrazines, 1912, A., i, 704. Möhlau, Richard, and Max Richard

Möhlau, Richard, and Max Richard Zimmermann, colloidal indigotin, 1903, A., i, 419.

Möhlau, Richard. See also R. Mitsugi. Möhrke, Hans. See Franz Sachs.

Möller, Elof, resolution of pentane-ββδtricarboxylic acid and of a s-dimethylglutaric acid into optically active components, 1911, A., i, 12.

Möller, Hans Geory, electrolytic processes at the surface of electrodes, 1909,

A., ii, 114.

theory of concentrated solutions, 1909,

A., ii, 981.

Möller, Johann, electrochemical reduction of nitro-compounds of the naphthalene, anthracene, and phenanthrene series, 1904, A., i, 345. Möeller, M. See Friedrich Krüger. Möller, P. See Gottlob Eduard Linek. Möller, Wilhelm (Marburg). See Theodor

Zincke.

Möller, Withelm (Vienenburg), estimation of free phosphoric acid in superphosphates, 1907, A., ii, 813.

Möller, Wilhelm (Vienenburg). See also

Ludwig Schucht.
Möller, Wilhelm (Zurich). See Paul

Pfeiffer.
Moeller, Willy. See August Michaelis.
Möllhausen, G., diffusion of albumin

into gelatin jellies, 1908, A., ii, 670.

Mönkemeyer, K., alloys of zinc and antimony, 1905, A., ii, 171.

bismuth telluride, 1905, A., ii, 828.

formation of mixed crystals from fused mixtures of lead, silver, thallium, and copper haloids, 1906, A., ii,

Möring, Walter. See Robert Stollé. Mörner, (Graf) Carl Thore, the wine-red

bodies in holothurians, 1903, A., ii, 165.

ichthylepidin, 1903, A., ii, 165. colour reaction of tyrosine, 1903, A.,

11, 252.

percaglobulin, a characteristic protein of the ovary of the perch, 1904, A., i, 356.

the organic substance in the skeletal tissues of Anthozoa, 1907, A., ii, 283; 1908, A., ii, 310.

skeletal substances in Anthozoa. III. Cornicrystallin, 1908, A., ii, 517.

the roe of the perch; percaglobulin, 1909, A., ii, 329.

dicalcium phosphate as a urinary sediment, 1909, A., ii, 331.

chemistry of alcapton-urine (homogentisic acid and certain of its derivatives), 1911, A., i. 55.

rivatives), 1911, A., i, 55.
homogentisic acid, 1912, A., i, 459.
ovomucoid and sugar in the white of
the bird's egg, 1912, A., ii, 1070.

Mörner, (Graf) Karl Axel Hampus, βhæmin, 1904, A., i, 791.

pyruvic acid as a decomposition product of proteins, 1904, A., i, 796.

is α-thiolactic acid a direct decomposition product of proteins? 1904, A., i, 836.

decomposition products of cystine, 1904, A., i, 836.

urinary protein, 1904, A., ii, 754.

Moeser, Ludwiy, and Hermann Borck, compounds containing iron peroxide, FeO₂, 1910, A., ii, 36.

Moeser, Ludwig. See also Wilhelm Eidmann, and Alexander Naumann.

Moest, Martin, electrolytic preparation of alcohols, aldehydes, and ketones, 1903, A., i, 546.

Moest, Martin. See also F. Escherich,

and Hans Hofer.

Moffatt, Miles R., and H. S. Spiro, colorimetric estimation of lead in drinking water, 1907, A., ii, 653. Mohn, Arnold. See Richard Lorenz.

Mohr, Ernst, [Wilhelm Max], the asym-

metric carbon atom, 1904, A., i, 1. evidence for the possibility of resolving an optically active compound without actually resolving it and without the aid of optically active substances, 1904, A., i, 653; ii, 689; 1905, A., i, 428.

s-dibenzoylhydrazide and azodibenzoyl.

1904, A., i, 1058.

crystallographic properties of s-dibenzoylhydrazide and of benzamide, 1904, A., i, 1059.

Lossen's reaction, 1905, A., i, 274. a condensation product of phenylmethylpyrazolone, 1905. A.,

676. Hofmann's reaction, 1905, A., i, 890;

1906, A., i, 252, 357. benzoylphenylcarbamide, 1906, A., i,

which substances contain a readily resolvable, single carbon-nitrogen linking? 1907, A., i, 721.

isatoic anhydride (anthranilearboxylic

acid), 1909, A., i, 190.

Hofmann's reaction. IV. Behaviour of isatoic anhydride with alkalis and with barium hydroxide, 1909, A., i, 420.

the Fittig reaction and the dark blue sodium bromide resulting from sodium and bromobenzene, 1909, A., ii, 885.

benzene problem, 1911, A., i, 959.

gas analysis by Toepler's pressure balance, 1911, A., ii, 149.

reversible transformation of many carboxylic acids into keten-hydrates, 1912, A., i, 362.

Mohr, Ernst, and Theodor Geis, benzoylaminoisobutyrolactimone, 1908, A.,

i, 339.

lactonoid anhydrides of acylated aminoacids. II. Lactone of a-benzoylaminoisobutyric acid, 1910, A., i,

Mohr, Ernst, and Fritz Köhler, linking of amino-acids, 1906, A., i, 359.

acetylation of anthranoylanthranilic [o-aminobenzoylanthranilic] 1907, A., i, 414.

Mohr, Ernst, and Fritz Köhler, lactonoid anhydrides of acylated amines. I. The lactones of acetylanthranoylanthranilic acid and of acetylanthranilic acid, 1910, A., i, 116.

Mohr, Ernst, Fritz Köhler, and Harry Ulrich, Hoffmann's reaction. V. Action of sodium hypochlorite and a little alkali on phthalimide, 1909, A., i,

Mohr, Ernst, and Ludwig Schmidt, 5amino-1-phenyl-3-methylpyrazole, 1909, A., i, 190.

Mohr, Ernst, and Wilhelm Schneider. 2:6-lutidine-3:5-dicarboxylic

1904, A., i, 523.

Mohr, Ernst, and Fritz Stroschein. lactimones of benzoylalanine and of benzoylphenylalanine, 1909, A., i, 581.

lactonoid anhydrides of acvlated III. The lactone of amino-acids. r-benzoylalanine and its application for the synthesis of benzoylated dipeptides, 1910, A., i, 483.

lactonoid anhydrides of acylated IV. Behaviour of amino-acids. hippuric acid, hippuramide, and racetylalanine towards dehydrating agents, 1910, A., i, 557.

anhydrides of acylated lactonoid V. Lactone of ramino-acids. benzoylphenylalanine, 1910, A., i,

Mohr, Leo, the relation between the fat and carbohydrates of the body in phosphorus poisoning, 1906, A., ii,

the amount of amino-acids in normal human urine, 1906, A.,

Mohr, Leo. See also Robert Baumstark,

and Max Bönninger.

Mohr, Otto [August], lipase from animal organs and the reversibility of its power of decomposing fats, 1903, A., i, 219.

influence of carbon dioxide on diastasic

action, 1903, A., i, 377.

trustworthiness of the calculation of heating values of fuels from analyses, 1906, A., ii, 334.

Mohs, Karl. See Carl Tubandt.

Moir, James, the solubility of zinc hydroxide in alkalis, 1905, P.,

thiocarbamide as a solvent for gold, 1906, T., 1345; P., 105, 164.

the constitution of cœrulignone (cedriret); preliminary note, 1906, P.,

Moir, James, the so-called "benzidine hromate" and allied substances, 1906, P., 258.

some derivatives of diphenol (4:4'-dihydroxydiphenyl), 1906, P., 259;

1907, T., 1305.

the determination of halogen, 1906, P., 261.

estimation of halogen in organic substances, 1907, P., 233.

the so-called "tetrabromodiphenoquinone" and the constitution of cœrulignone, 1907, P., 308.

a method of harmonising the atomic weights, 1909, T., 1752; P., 213. new atomic theory, 1909, A., ii,

562.

new sensitive test for hydrocyanic acid, 1910, P., 115.

genetic connexions between the chemical elements, 1910, A., ii, 491.

new derivatives of diphenoquinone and a new variety of stereoisomerism, 1911, P., 226.

ism, 1911, P., 226.

Moir, James, and James Gray, the destruction of cyanide, 1910, A., i, 615.

Moir, Margaret R., the influence of temperature on the magnetic properties of a graded series of carbon steels, 1911, A., ii, 791.

Moissan, [Ferdinand Frédéric] Henri, action of acetylene on cæsium-ammonium and on rubidium-ammonium; preparation and properties of the acetylene acetylene, C₂Cs₂, C₂H₂ and C₂Rb₂, C₂H₂, and of the carbides of cæsium and rubidium, 1903, A., i, 545.

preparation of carbides and acetylene acetylides by the action of acetylene on the alkali and alkaline-earth

hydrides, 1903, A., i, 595.

influence of traces of water on the decomposition of alkali hydrides by acetylene, 1903, A., i, 785.

iodine pentafluoride, 1903, A., ii, 17.

synthesis of anhydrous hyposulphites of the alkalis and alkaline-earths, 1903, A., ii, 75.

temperature of inflammation, and the combustion, of three varieties of carbon in oxygen, 1903, A., ii, 141.

presence of argon, carbon monoxide, and hydrocarbons in the gases of the fumerolles of Mount Pelée in Martinique, 1903, A., ii, 155.

new preparation of silicon hydride,

Si₂H₆, 1903, A., ii, 208.

Moissan, [Ferdinand Frédéric] Henri, presence of argon in the gas of the Bordeu Spring at Luchon, and the presence of free sulphur in the sulphur-waters of the Grotto and in the vapours used for inhalation, 1903, A., ii, 209.

colouring matter of the figure in the Grotto at La Mouthe, 1903, A., ii, 215. non-conductivity of electricity by

metallic hydrides, 1903, A., ii, 349. study of the interaction of carbon dioxide and potassium hydride, 1903, A., ii, 365.

preparation and properties of rubidium and cæsium hydrides, 1903, A., ii,

367.

preparation and properties of casiumammonium and rubidium-ammonium, 1903, A., ii, 477.

apparatus for the purification of gases,

1903, A., ii, 642.

temperature of ignition and slow combustion of sulphur in oxygen and in air, 1904, A., ii, 25.

argon in the atmosphere, 1904, A., ii,

28

action of carbon on quicklime at the temperature of fusion of platinum, 1904, A., ii, 256.

density of fluorine, 1904, A., ii, 328. some physical constants of phosphorus fluorides, 1904, A., ii, 331.

a new mode of formation of calcium carbide, 1904, A., ii, 333.

presence of argon in the gases of the fumaroles of Guadeloupe, 1904, A., ii, 415.

electrolysis of calcium chloride, 1904, A., ii, 483.

new synthesis of oxalic acid, 1905, A., i, 507.

the preparation of pure boron trifluoride and silicon tetrafluoride and some physical constants of these compounds, 1905, A., ii, 26.

investigation of the meteorite of Canon Diablo, 1905, A., ii, 43.

new experiments on the preparation of diamonds, 1905, A., ii, 160, 450.

the increase in volume of molten cast iron saturated with carbon in the electric furnace at the moment of solidifying, 1905, A., ii, 166.

the carbon silicide of the Canon Diablo

meteorite, 1905, A., ii, 247.
some reactions of the alkali and alkaline-earth hydrides; influence of
traces of moisture on the decomposition of the alkali hydrides by carbon
dioxide or acetylene, 1905, A., ii, 818.

Moissan, [Ferdinand Frédéric] Henri, distillation of copper, 1906, A., ii,

distillation of gold; gold-copper and gold-tin alloys; a new preparation of the purple of Cassius, 1906, A., ii. 92.

boiling of osmium, ruthenium, platinum, palladium, iridium, and rhod-

ium, 1906, A., ii, 175.

boiling and distillation of nickel, iron, manganese, chromium, molybdenum, tungsten, and uranium, 1906, A., ii, 232.

distillation of titanium, and the temperature of the sun, 1906, A., ii,

preparation of pure gases, 1906, A.,

ii, 531.

melting points and boiling points of the fluorides of phosphorus, silicon, and boron, 1906, A., ii, 535.

distillation of nickel and cobalt, 1907,

A., ii, 267.

the gases contained in sulphur, 1907, A., ii, 341.

a property of platinum amalgam, 1907, A., ii, 360.

ammonium, 1907, A., ii, 459.

memorial lecture on (Ramsay), 1912, T., 477.

Moissan, Henri, and Armand Binet du Jassonneix, density of chlorine, 1904, A., ii, 114.

Moissan, Henri, and Georges Chavanne, some constants of pure methane; the action of solid methane on liquid fluorine, 1905, A., i, 253.

some physical constants of calcium and calcium amalgam, 1905, A., ii, 163.

Moissan, Henri, and (Sir) James Dewar, solidification of fluorine and the combination of solid fluorine and liquid hydrogen at -252.5°, 1903, A., ii, 360.

affinity at low temperatures; reactions of liquid fluorine at -187°, 1903, A.,

ii, 419.

Moissan, Henri, and Otto Hönigschmid, preparation of thorium, 1906, A., ii,

Moissan, Henri, and Karl Hoffmann, a new molybdenum carbide, 1904, A., ii, 620.

Moissan, Henri, and Alfred Holt, jun., preparation and properties of a new vanadium silicide, 1903, A., ii, 23. silicides of vanadium, 1903, A., ii, 81.

Moissan, Henri, and A. N. Kusnetzoff, double carbide of chromium and tungsten, 1903, A., ii, 651.

Moissan, Henri, and Paul Lebeau, action. of fluorine on oxygenated compounds of nitrogen, 1905, A., ii, 517.

preparation and properties of nitroxyl fluoride (nitryl fluoride), 1905, A.,

ii. 518.

Moissan, Henri, and Wilhelm Manchot. preparation and properties of ruthen-... ium silicide, 1903, A., ii, 604; 1904, A., ii, 665.

Moissan, Henri, and Martinsen, preparation and properties of thorium chloride and bromide, 1905, A., ii, 531.

Moissan, Henri, and Alphons J. P. O'Farrelly, distillation of mixtures of two metals, 1904, A., ii, 617.

Moissan, Henri, and Albert Rigaut, new preparation of argon, 1904, A., ii, 29.

Moissan, Henri, and F. Siemens, solubility of silicon in zinc and lead, 1904, A., ii, 332.

action of silicon on water at a temperature of about 100°, 1904, A., ii, 398.

solubility of silicon in silver; crystalline variety of silicon in hydrofluoric acid, 1904, A., ii, 560. Moissan, Henri, and Tosio Watanabe,

distillation of the alloys of silver with copper, with tin, and with lead, 1907, A., ii, 84.

Moitessier, Joseph, action of sodium fluoride on methæmoglobins obtained. from globins and hæmatin, 1906, A., i. 779.

Moitessier, Joseph. See also Jules Ville. Mojoïu, Pierre. See Paul Dutoit.

Mol, Dirk, ester anhydrides of dibasic acids, 1906, A., i, 4.

simple ester anhydrides of saturated dibasic organic acids, 1908, A., i, 76.

Moldenhauer, Fernando, melanite from Cortejana, prov. Huelva, Spain, 1903, A., ii, 303.

Moldenhauer, Fr., estimation of silica in iron ores, 1912, A., ii, 92.

Moldenhauer, Max, preparation of metallic aluminium from aluminium silicate, 1909, A., ii, 239.

Moldenhauer, Wilhelm, connexion between electrolytic changes and the temperature of the electrodes, 1905,. A., ii, 500.

action of oxygen and water vapour on magnesium chloride, 1907, A., ii, 85.

Moldovan, J. See R. Doerr.

Moles, Enrique, new method of determining the solubility of gases, 1911, A., ii, 473.

critical solution temperatures of liquids, 1911, A., ii, 793.

801

Moles, Enrique, ebullioscopic constant of carbon tetrachloride, 1912, A., ii, 431.

ethylene dibromide in cryoscopy, 1912, A., ii, 533.

Moles, Enrique, and L. Gómez, chromyl chloride. I., 1912, A., ii, 560.

Moles, Enrique. See also Karl Drucker.
Molina, Olimpia. See Guido Bargellini.
Molinari, Ettore, general reaction for
differentiating between multiple
linkings in unsaturated compounds
of the aromatic and aliphatic series,

1907, A., i, 1039. action of ozone on compounds containing double and treble linkings,

1908, A., i, 244, 849.

Molinari, Ettore, and C. Barosi, products of the decomposition of oleic ozonide, 1908, A., i, 849.

Molinari, Ettore, and Pictro Fenaroli, triolein ozonide and its decomposition products, 1908, A., i, 849.

double linkings in phytosterol and cholesterol, 1908, A., i, 882.

a new reaction of petroleum, 1908, A., i, 933.

Molinari, Ettore, and Emilio Soncini, constitution of oleic acid and the action of ozone on fats, 1906, A., i, 792.

Molinari, M. de, volumetric estimation of phosphoric acid, 1903, A., ii, 101.

Molinari, M. de, and O. Ligot, action of manganese sulphate on various crops, 1909, A., ii, 697.

Molisch, Hans, heliotropism indirectly caused by radium, 1905, A., ii, 412. brown pigment of Pheophyceæ and diatoms, 1906, A., ii, 118.

Molitoris, Hans, behaviour of strychnine in birds, 1906, A., ii, 111.

Molkereitechn. Inst. Sichler & Richter, sinacid-butyrometry, 1905, A., ii, 361.

Moll, Leopold, artificial change of albumin into globulin, 1904, A., i, 356; 1906, A., i, 53.

changes in the blood by injection of protein, 1904, A., ii, 184.

Moll, Rudolf. See Felix Löhnis.

Moll, Willem Jan Henri, some infra-red spectra, 1908, A., ii, 241.

Moll van Charante, Jacob, sulphoisobutyric acid, 1905, A., i, 16.

formation of salicylic acid from sodium phenoxide, 1906, A., i, 665.

substances which play a part in the synthesis of salicylic acid, 1908, A., i, 175.

Moll van Charante, Jacob, and Pieter J.
Montagne, action of acetone on sodium
phenyl carbonate, 1910, A., i, 311.

Mollard, J. See Léo Vignon.

Molle, Bruno, See Hermann Thoms.

Molliard, Marin, pure culture of green plants, in a confined atmosphere, in presence of organic matters, 1905, A., ii, 750.

structure of plants developed in presence of light, without carbon dioxide and with organic substances, 1906,

A., ii, 117.

are the amines assimilable by the higher plants? 1909, A., ii, 1046.

action of certain diureides and of hippuric acid on the development and tuberisation of radishes, 1912, A., ii, 82.

comparison of oxidation phenomena in galls and the normal homologous organs, 1912, A., ii, 285.

is humus a direct source of carbon for the higher green plants? 1912, A.,

ii, 287.

Mollow, G. See Franz Mawrow.

Momtschilow, Iw. N. See Pau Nikolaivitsch Raikow.

Monaco, Ernesto, the application of lencite as manure, 1908, A., ii, 424.

Monath, J. See Paul Pfeiffer.

Monckman, James, a natural system of arranging the chemical elements, in which they fall into the periodic groups, based solely on the atomic volumes and the combining weights, 1907, A., ii, 79.

Mond, Ludwig, Heinrich Hirtz, and Matthewman Dalton Cowap, some new metallic carbonyls, 1910, T., 798; P., 67.

Mond, Robert Ludwig, and Meyer Wilderman, a new and improved chronograph,

1906, A., ii, 154.

Mondschein, Julius, the estimation of lactic acid in the presence of β-hydroxybutyric acid, 1912, A., ii, 813.

the estimation of lactic acid in the presence of proteins, 1912, A., ii,814. Mondschein, Julius. See also Emil Lenk.

Moneta, Giovanni. See Giuseppe Oddo. Monferrino, A., distinctive reactions for nevralteine, pyramidone, and antipyrine, 1909, A., ii, 838.

Monfet, L., phenols, free and united with sulphur, in the urine, 1903,

A., ii, 671.

absence of neutral sulphur in normal urine, 1904, A., ii, 62.

urinary indican, 1904, A., ii, 63. Ehrlich's diazo-reaction in urine, 1904, A., ii, 63.

estimation of indican in urine, 1904, A., ii, 102. Monfet, L., neutral sulphur and Ehrlich's diazo-reaction, 1904, A., ii, 194.

Monhaupt, M., action of carbon dioxide on magnesium hydroxide, 1904, A., ii, 731.

detection and estimation of boric acid in butter, 1905, A., ii, 354.

Monier-Williams, Gordon Wickham, a synthesis of aldehydes by Grignard's reaction, 1906, T., 273; P., 22.

chemical changes produced in flour by bleaching, 1911, A., ii, 1001.

Monikowski, L. See Alexander Tschirch. Monimart, R., estimation of acetone in urine, 1907, A., ii, 993.

estimation of sulphurous acid in white

wines, 1912, A., ii, 682.

Monnartz, Philipp, iron-chromium alloys and their resistance to acids, 1911, A., ii, 610.

Monnier, Alf. See Louis Duparc.

Monnier, L., presence of oxalic acid in certain wines, 1911, A., ii, 648.

Monnier, R., assay of calcium cyanamide ["kalkstickstoff"], 1911, A.,

Montagne, Pieter J., the action of anhydrous nitric acid on di-substituted amides, 1903, A., i, 169.

intramolecular atomic rearrangements in benzopinacones, 1905, A., i, 58,

445, 524.

intramolecular atomic transpositions. IV. Aromatic oximes, 1907, A., i,

intramolecular atomic transpositions. V. Conversion of 4:4':4":4"tetrachlorobenzopinacolin s-4:4':4"'-tetraphenylethane, 1907, A., i, 141.

intramolecular atomic transpositions. VI. Conversion of a-4:4':4":4"tetrachlorobenzopinacolin into the β- variety, 1907, A., i, 141.

intramolecular atomic transpositions. VII. Influence of substituents of the phenyl group on the transformation of benzopinacones into benzopinacolins, 1907, A., i, 854.

intramolecular atomic transpositions. VIII. Preparation of 2:4:6-trichlorobenzophenone and of phenyl a- and B- naphthyl ketones, 1907, A., i, 855.

intramolecular atomic migrations. IX. Conversion of a-glycols into aldehydes, 1909, A., i, 722.

2:4:6-tribromobenzophenone, 1910, A.,

the Beckmann rearrangement, 1910, A., i, 623.

Montagne, Pieter J., shaking machine for boiling with a reflux condenser.

1910, A., ii, 485. the "cause" of the Beckmann rearrangement, 1912, A., i, 73.

action of phosphorus tribromide and phosphorus on B-benzopinacolin, 1912, A., i, 630.

Montagne, Pieter J., and Frans Maurits Jaeger, action of alcoholic potas-

sium hydroxide solution on ketones, 1908, A., i, 988.

intramolecular atomic transpositions. XI. Influence of the substituents of the phenyl group in the transformation of benzopinacones into benzopinacolins, 1910, A., i, 324.

Montagne, Pieter J., and S. A. Koopal, intramolecular atomic transpositions. X. Influence of the substituents of the phenyl group in the transformation of a-benzopinacolins into B-pinacolins, 1910, A., i, 323.

Montagne, Pieter J. See also Jacob

Moll van Charante.

Montanari, Carlo, technical estimation of mercury in poor cinnabar ores by Personne's method, 1903, A., ii, 759.

detection and chlorimetric estimation of salicylic acid, 1904, A., ii, 522.

red colouring matter of tomatoes, 1905, A., i, 293.

acidity of plant roots, 1905, A., ii,

estimation of calcium and magnesium

carbonates, 1905, A., ii, 204. absorptive power of soils for bone and mineral superphosphates, 1905, A., ii, 759.

behaviour of bone and mineral phosphates in soil, 1908, A., ii, 128.

Montanari, O. See Ciro Ravenna.

Montemartini, Clemente, compounds of bismuth salts with organic bases. II., 1903, A., i, 111.

Montemartini, Clemente, and Ettore Colonna, action of nitric acid on certain alloys, 1907, A., ii, 619.

Montemartini, Climente, and Umberto Egidi, acids of phosphorus; reaction between phosphorous acid and mercuric chloride. III., 1903, A., ii,

Montemartini, Clemente, and G. Mattucci, estimation of rubidium and

cæsium, 1904, A., ii, 148.

Monteverde, N. A., and V. N. Lubimenko, formation of chlorophyll in plants, 1911, A., ii, 424; 1912, A., ii, 800.

Montgomerie. Harvey Hugh. See Thomas Stewart Patterson.

Montgomery, Jack P., relation of heat of vaporisation to other constants at the boiling temperature of some liquids at atmospheric pressure, 1911, A., ii, 965.

Monthulé, C., estimation of phosphorus or arsenic in organic compounds,

1904, A., ii, 680.

estimation of theobromine in caffeine, 1911, A., ii, 673.

estimation of halogens in some organic compounds, 1912, A., ii, 485.

Monti, Nestore, new reaction of aconitine, 1906, A., ii, 908.

Monti. Nestore. See also Attilio Purgotti.

Montmollin, Guillaume de. See Otto Dimroth.

Montuori, Adolfo, formation of oxalic acid in the animal organism, 1904, A., ii, 137.

Monvoisin, A., objections to the use of potassium dichromate as a preservative of milk destined analysis, 1909, A., ii, 192.

chemical composition of milk from tuberculous cows, 1909, A., ii, 1040.

Moodie, (Miss) Agnes Marion. James Colguboun Irvine.

Moodie. William. See David Fraser

Harris Moody, Gerald Tattersall, the rusting of iron, 1903, P., 157, 239; discussion, P., 158, 241; 1906, T., 720; P., 101; discussion, P., 102; 1907, P., 84; discussion, P., 84; 1909, P., 34.

the atmospheric corrosion of zinc,

1903, P., 273.

causes of variegation in Keuper marls,

1905, A., ii, 725.

Moody, Gerald Tattersall, and Lewis Thomas Leyson, the solubility of lime in water, 1908, T., 1767; P., 202. Moody. Herbert Raymond. See Samuel

Auchmuty Tucker.

Moody, H. W., determination of the ratio of the specific heats, and of the specific heat at constant pressure of air and carbon dioxide, 1912, A., ii,

Moody, Seth E., iodometric determination of aluminium in aluminium chloride and aluminium sulphate, 1905, A., ii, 765.

hydrolysis of salts of iron, chromium, tin, cobalt, nickel, and zinc in the presence of iodides and iodates, 1906, A., ii, 706.

Moody, Seth E., the hydrolysis of ammonium salts in presence of iodides and iodates, 1906, A., ii, 851.

iodometric estimation of basic alumina and of free acid in aluminium sulphate and alums, 1907, A., ii, 131.

the hydrolysis of ammonium molybdate in the presence of iodides and iodates, 1908, A., ii, 197.

Mooers, C. A., and H. H. Hampton, separation of clay in the estimation of humus, 1908, A., ii, 744.

Moog, Robert. See Alexandre Desgrez.

and H. Guillemard.

Moor, Wm. Ovid, the amount of urea in normal human urine and its estimation, 1903, A., ii, 343,

urea of human urine, 1904, A., ii, 192. urea and urein, 1904, A., ii, 274.

the amount of urea in normal human urine, 1906, A., ii, 693.

acidity of normal urine, 1907, A., ii,

Moore, Arthur R., the temperature-coefficient of cytolysis in the unfertilised egg of the sea-urchin, 1910, A., ii, 975.

is cedema determined by the acid content of the tissues? 1912, A.,

Moore, Benjamin, synthesis of fats during absorption, 1903, A., ii, 667.

hydrochloric acid in the gastric juice in cancer, 1905, A., ii, 741; 1909, A., ii, 80.

Moore, Benjamin, William Alexander, Robert Ernest Kelly, and Herbert Eldon Roaf, acidity of the gastric contents [in cancer], 1906, A., ii, 565.

Moore, Benjamin, and A. Douglas Bigland, the equilibrium between varying concentrations of acids and alkalis and the proteins of the serum and other colloids: the nature of colloidal reaction or adsorption, 1910, A., ii, 318.

Moore, Benjamin, Edward S. Edie, and John Hill Abram, treatment of diabetes by extract of duodenum, 1906,

A., ii, 186, 787.

Moore, Benjamin, Edward S. Edie, Edward Whitley, and William John Dakin, the nutrition and metabolism of marine animals in relation to (a) dissolved, (b) particulate organic matter of sea-water, 1912, A., ii, 1068.

Moore, Benjamin, and James Leonard Hawkes, action of heavy metals on Bacillus typhosus, 1908, A., ii, 772.

Moore, Benjamin, Maximilian Nierenstein, and John Lancelot Todd, treat. ment of trypanosmiasis, 1907, A., ii, 495.

Moore, Benjamin, and Herbert Eldon Roaf, properties of solutions of chloroform in water, saline, serum, and hæmoglobin, 1904, A., ii, 501.

physical chemistry of anæsthesia,

1905, A., ii, 272.

physical and chemical properties of solutions of chloroform and other anæsthetics; chemistry of anæsthesia. II., 1906, A., ii, 187. direct measurements of the osmotic

pressure of solutions of certain

colloids, 1907, A., ii, 73.

equilibrium between the cell and its environment, with special reference to red blood corpuscles, 1908, A., ii, 204.

Moore, Benjamin, Herbert Eldon Roaf, and Robert Edward Knowles, effects of variations in inorganic salts and reaction on plants and animals, 1908,

A, ii, 768.

Moore, Benjamin, Herbert Eldon Roaf, and T. Arthur Webster, direct measurements of the osmotic pressure of casein in alkaline solution; experimental proof that apparent impermeability of a membrane to ions is not due to the properties of the membrane but to the colloid contained within the membrane, 1911, A., ii, 1072.

Moore, Benjamin, Herbert Eldon Roaf, and Edward Whitley, effect of alkalis and acids and of alkaline and acid salts on growth and cell division in the fertilised eggs of Echinus esculentus,

1906, A., ii, 180.

Moore, Benjamin, (Miss) S. C. M. Sowton, F. W. Baker-Young, and T. Arthur Webster, the chemistry and bio-chemical and physiological properties of a sapo-glucoside obtained from the seeds of Bassia longifolia (Mowrah seeds), 1910, A., ii, 228.

Moore, Benjamin, and Edward Whitley, the properties and classification of the oxidising enzymes, and analogies between enzymic activity and the effects of immune substances and comple-

ments, 1909, A., i, 623.

Moore, Benjamin, and Robert Stenhouse Williams, the growth of Bacillus tuberculosis and other micro-organisms in varying percentages of oxygen, 1909, A., ii, 601.

the growth of various species of bacteria and other micro-organisms in atmospheres enriched with oxygen,

1910, A., ii, 737.

Moore, Benjamin, and Frederick Perera Wilson, hæmalkalimetry, 1906, A., ii, 565,

Moore, Benjamin, Frederick Perera Wilson, and Lancelot Hutchinson. action of salts of unsaturated fatty acids in hæmolysis, 1909, A., ii,

bio-chemistry of hæmolysis, 1909, A.,

ii, 815.

Moore, Benjamin. See also Edward S. Edie, and William Wright Mackarell.

Moore, Burton Evans, spectroscopic researches on copper and cobalt solutions, 1906, A., ii, 510.

resolution of the spectral lines of barium, yttrium, zirconium, and osmium in a magnetic field, 1908, A., i, 138.

the separation of the spectral lines of calcium and strontium in the magnetic field, 1911, A., ii, 559.

Moore, Charles James, purification of mercury, 1910, A., ii, 712.

Moore, Charles James. See also Gregory Paul Baxter.

Moore, Charles Watson, the formation of phloroglucinol by the interaction of ethyl malonate with its sodium derivative, 1903, P., 276; 1904, T., 165.

the constituents of the rhizome of Apocynum androsaemifolium, 1909,

T., 734; P., 85.

note on the constitution of a-elaterin, 1910, T., 1797; P., 215.

the constituents of gelsemium, 1910, T., 2223; P., 247.

quercitrin, 1910, P., 182.

a-p-hydroxy-m-methoxyphenylethylamine and the resolution of a-phydroxyphenylethylamine, T., 416, P., 42.

the constitution of scopoletin, 1911,

T., 1043; P., 119.

some derivatives of gelsemine, 1911,

T., 1231; P., 157.

Moore, Charles Walson, and Jocelyn Field Thorpe, the formation and reactions of imino-compounds. Part VI. The formation of derivatives of hydrindene from o-phenyl-enediacetonitrile, 1908, T., 165; P., 12.

Moore, Charles Watson, and Frank Tutin, note on gynocardin and gynocardase, 1910, T., 1285; P., 182.

Moore, Charles Watson. See also Frederick Belding Power, and Richard Willstätter.

Moore, Ernest P., and James Watson Bain, loss of carbon during solution of steel in potassium cupric chloride, 1908, A., ii, 899.

Moore, Ernest W., and Cecil Revis, the neutral-red reaction for Bacillus coli communis, 1904, A., ii, 848.

Moore, Forris Jewitt, some derivatives of p-sulphocinnamic acid, 1903, A., i,

698.

piperonal and hydrogen chloride: a two-component three-phase system,

1906, A., i, 855.

coloured salts of Schiff's bases. Salts of bases formed by condensing m-aminodimethylaniline and maminodiethylaniline with aromatic aldehydes, 1910, A., i, 280. preparation of benzophenoneimine

derivatives, 1910, A., i, 281.

Moore, Forris Jewitt, and Anna M. Cederholm, benzoyl-p-bromophenylcarbamide: a by-product in the preparation of benzoylbromoamide, 1906, A., i, 831.

Moore, Forris Jewitt, and R. D. Gale, coloured salts of Schiff's bases: colour as related to chemical constitution,

1908, A., i, 368.

Moore, Forris Jewitt, and R. G. Woodbridge, jun., coloured salts of Schiff's bases. II. Hydrochlorides of bases formed by condensing phenyl-pphenylenediamine with aromatic aldehydes, 1908, A., i, 686.

Moore, Gertrude. See Martin Henry

Fischer.

Moore, George Thomas, new method for the purification of water supplies, 1905, A., ii, 107.

Moore, Harold, the Ac2 point in chromium steel, 1910, A., ii, 1071.

Moore, J. H. See Robert Williams Wood.

Moore, Richard B., reaction between carbon dioxide and soluble nitrites, 1904, A., ii, 653.

the densities of krypton and xenon, 1908, T., 2181; P., 272. decay of radium emanation when

dissolved in water, 1908, A., ii, 651. heavy constituents of the atmosphere, 1908, A., ii, 840.

Moore, Richard B., and Ivy Miller, a separation of iron from manganese,

1908, A., ii, 434.

Richard B., and Herman Schlundt, new methods of separating uranium-X from uranium, 1906, A., ii, 721.

the radioactivity of the thermal waters of the Yellowstone National Park, 1911, A., ii, 360.

Moore, Richard B. See also Herman

Schlundt.

Moore, Raymond L. See John William Turrentine.

Moore, Roy W. See Walther Löb.

Moore, Tom Sidney, a method for the determination of the equilibrium in aqueous solutions of amines, pseudoacids and -bases, and lactones, 1907,

T., 1373; P., 154. the "true" ionisation constants and the hydration constants of piperidine, ammonia, and triethylamine,

1907, T., 1379; P., 154.

Moore, Tom Sidney, Donald Bradley Somervell, and John Newton Derry, the velocity of reaction between potassium chloroacetate and some aliphatic amines, 1912, T., 2459; P.,

Moore, Tom Sidney, and Thomas Field Winmill, the state of amines in aqueous solution, 1912, T., 1635; P., 109, 126.

Moore, Tom Sidney, See also Nevil Vincent Sidgwick.

Moore, T. W. See William White Taylor.

Moore, William C., aqua regia, 1911, A., ii, 719.

qualitative detection of mercury by Klein's method, 1911, A., ii, 771. Moore, William C. See also Herbert

Newby McCoy. Walter Roman. See Gilbert Moore,

Thomas Morgan.

Moorhouse, V. H. K., effect of increased temperature of the carotid blood, 1911, A., ii, 739.

Moormann, A. See Benno Bleyer. Moosbrugger, W. See Karl Auwers. Mooser, W., [new alkaloid in] earth-

nut, 1905, A., i, 79. the aromatic compounds in urine,

1909, A., ii, 1039. [estimation of phenol and p-cresol in urine], 1909, A., ii, 1056.

biological-chemical processes in soils; contribution to nitrogen the question, 1911, A., ii, 530.

Mooser, W. See also Paul Liechti. Mooy, W. J. de. See Andreas Smits.

Moraczewski, Waclaw von, the amount of sulphur in the digestion products of casein, 1904, A., i, 790.

estimation of indole in fæces, 1908, A.,

ii, 441.

Morales Chofré, Eugenio, modifications in Victor Meyer's vapour density apparatus, 1909, A., ii, 381.

arrangement for filtering liquids maintained at constant temperature in a thermostat, 1909, A., ii, 393.

Morales Chofré, Eugenio, physicochemical constants of the mineral waters "Alturas de Palacios" (Plasencia), Casas de Vés (Alicante), and San Anton (Ori-huela), 1910, A., ii, 477.

radioactivity of medicinal mineral waters of the Valencian district,

1910, A., ii, 477.

Moran, Robert C. See Treat Baldwin

Johnson.

Morancé, purification of hydrated sulphuric acid from arsenic by cooling, 1909, A., ii, 395.

Morawetz, Wilhelm, condensation of methylethylacraldehyde with isobutaldehyde, 1905, A., i, 262.

Morawitz, Hugo, volumetric estimation of mercuric salts, 1909, A., ii, 185, 703.

adsorption by blood, 1910, A., ii,

adsorption and colloid precipitation,

1911, A., ii, 591.

Morawitz, Paul, the precursors of fibrin

ferment, 1904, A., ii, 59. blood coagulation, 1904, A., ii, 353; 1909, A., ii, 592.

the proteins of the blood, 1905, A., ii, 837.

post-mortem changes in the blood, 1906, A., ii, 291.

oxidative processes in the blood, 1909, A., ii, 592.

Morawitz, Paul. See also Joseph Barcroft.

Morchoisne, E. See Henri Labbé. Morden, Gilbert W., electrolytic estimation of thallium, 1909, A., ii, 1054.

Moré, Arnold. See Arnold Reissert.
Moreau, Barthélémy, qualitative analysis
of complex mixtures of salts, 1911,
A., ii, 331.

Moreau, Edmond, biological investigation of honey, 1911, A., ii, 326.

identification and estimation of proteins in honey, 1911, A., ii, 347.

Moreau, Georges [Gaston Emile], ionisaof a flame containing salt, 1903, A., ii, 125.

the Hall effect and the speed of ions of a salt vapour, 1903, A., ii, 196.

thermal ionisation of salt vapours, 1904, A., ii, 536.

new class of ions, 1905, A., ii, 9. mobility of ions of salt vapours, 1906, A., ii, 68.

recombination of the ions of salt vapours, 1906, A., ii, 217.

ionisation of saline vapours, 1906, A., ii, 651.

Moreau, Georges [Gaston Émile], ionisation of saline vapours produced by a corpuscular radiation, 1911, A., ii, 455.

corpuscular ionisation of saline vapours and the recombination of ions in the

flame, 1911, A., ii, 686. the mass and mobility of the positive

ions of a flame, 1912, A., ii, 1031.

Moreau, Léon, and Émile Vinet, lead arsenate in viticulture, 1910, A., ii, 443.

lead arsenate in viticulture, and the consumption of fresh and dried grapes, 1911, A., ii, 326.

how lead arsenate is eliminated at

vintage, 1911, A., ii, 529.

Moreigne, Henri, colour reaction of uric acid with phosphotungstic acid; preliminary treatment of urine before estimating urea, 1905, A., ii, 212.

Morel, Albert, combination of aminoacids derived from proteins, 1906, A.,

i, 730.

Morel, Albert. See also Chavassieu, Jean Chenu, Maurice Doyon, J. Galimard, and Louis Hugounenq.

Morel, J. See Léon Grimbert.

Morel, L., and Émile F. Terroine, action of pancreatic juice on esters, 1909, A., ii, 747.

Morel, Pierre, simple constant level water-bath, 1912, A., ii, 445.

Moreland, W. H., amount and composition of drainage waters, rain, dew, and canal water collected during the years 1903-4, 1904-5, 1905-6, 1907, A., ii,

Morelli, Eugenio, saponification of fats by means of hydroxylamine, 1908, A., i, 758.

Morelli, Eugenio, and Guerriero Marchetti, nitrosopyrroles, 1908, A., i, 363.

Morelli, Eugenio. See also Angelo Angeli.

Morelli, Giuseppe, a new method for detection of indole in culture media, 1909, A., ii, 711.

Morelli, Giuseppe. See also Luigi Bernardini.

Morentz, Paul. See Ludwig Knorr.

Moreschi, Annibale, the cholesterol group. VIII. Isocholesterol, 1910, A., i, 670.

Moreschi, Annibale. See also Emil

Fischer, and Angelo Menozzi.

Morey, George W., new apparatus for vacuum sublimation, 1912, A., ii, 444.

Morey. George W., occurrence of argon in commercial oxygen made from liquid air, 1912, A., ii, 450.

benzoic acid as an acidimetric standard,

1912, A., ii, 986.

Morey, S. R. See Morris Loeb.

Morgan, Agnes Fay. See Horace Greeley Byers.

Morgan, (Miss) Edith. See Arthur Hantzsch.

See Kennedy Joseph Morgan, Emrys. Previté Orton.

Morgan. Gilbert Thomas, notes on analytical chemistry, 1904, T., 1001; P., 167.

thorium salts of certain organic acids, 1904, A., i, 892.

triboluminescence in the acridine

series, 1905, A., ii, 786.

Morgan, Gilbert Thomas, and (Miss) Mary Alcock, the colour and constitution of diazonium salts. Part I., 1909, T., 1319; P., 202.

Morgan, Gilbert Thomas, and Arthur Bramley, the p-tolyl-1:2-naphthylenediazoimines (3-p-tolyl-p-naphthaisotriazoles); preliminary note, 1910, P., 151.

Morgan, Gilbert Thomas, and Edward Cahen, new cerium salts, 1907, T., 475; P., 74; discussion, P., 74; A., i, 1021.

Morgan, Gilbert Thomas, and Arthur Clayton, influence of substitution on the formation of diazoamines and aminoazo-compounds. Part IV. 5-Bromo-as(4)-dimethyl-2:4-diaminotoluene, 1905, T., 944; P., 182.

influence of substitution on the formation of diazoamines and aminoazocompounds. Part V. s-Dimethyl-4:6-diamino-m-xylene, 1906,

1054 : P., 174.

the dinitro-derivatives of dimethyl-ptoluidine, 1910, T., 2645; P., 323;

discussion, P., 324.

the absorption spectra of the nitration products of dimethyl-p-toluidine, 1911, T., 1941; P., 233.

Morgan, Gilbert Thomas, and Taylor Cook, apparatus for estimations involving distillation, 1908, A., ii, 424.

Morgan, Gilbert Thomas, and Evelyn Ashley Cooper, the germicidal action of arsenic and antimony compounds on Bacillus typhosus, 1911, A., ii, 519.

Morgan, Gilbert Thomas, and Edward Gordon Couzens, the colour and constitution of diazonium salts. Part II. Diazo-derivatives of as-benzoylethyl-1:4-naphthylenediamine, 1910, T., 1691; P., 165; discussion, P., 166.

Morgan, Gilbert Thomas, and William Godden, the constitution of the orthodiazoimines. Part I. The naphthylenediazoimines and their benzenesulphonyl derivatives, 1910, T., 1702;

Morgan, Gilbert Thomas, Edgar Jobling, and Raymond Theodore Fred Barnett, the absorption spectra of certain aromatic nitroamines and nitroamides. 1912, T., 1209; P., 152.

Morgan, Gilbert Thomas, and James Morton Hird, the diazo-derivatives of benzenesulphonylbenzidine, 1907, T.,

1505; P., 209.

Morgan, Gilbert Thomas, and (Miss) Frances Mary Gore Micklethwait, reduction of ammoniacal silver solutions by organic substances, 1903, A., ii, 189.

6-aminocoumarin, 1904, T., 1230; P.,

the diazo-derivatives of the benzenesulphonylphenylenediamines, 1905, T., 73; P., 8; discussion, P., 9.

the diazo-derivatives of monacylated aromatic paradiamines, 1905, T., 921; P., 179; discussion, P., 180. the arylsulphonyl-p-diazoimides, 1905,

T., 1302; P., 222.

the diazo-derivatives of 1:5- and 1:8benzenesulphonylnaphthylenediamines, 1905, P., 303; 1906, T., 4.

the residual affinity of coumarin as shown by the formation of oxonium salts, 1906, T., 863; P., 131; discussion, P., 131.

the diazo-derivatives of the mixed aliphatic aromatic w-benzenesulphonylaminobenzylamines, 1906, T.,

1158; P., 174.

azimino-compounds from aromatic paradiamines, 1906, A., i, 911.

influence of substitution on the formation of diazoanines and aminoazocompounds. Part VI. The partially methylated 4:6-diamino-m-xylenes, 1907, T., 360; P., 28; discussion, P., 28.

the interactions of aromatic amines and p-diazoimides, 1907, T., 1512;

P., 209.

derivatives of para-diazoiminobenzene, 1908, T., 602; P., 48; discussion, P., 49.

a study of the diazo-reaction in the diphenyl series, 1908, T., 614; P.,51.

organic derivatives of arsenic. Part I. Dicamphorylarsinic acid, 1908, T., 2144; P., 268; discussion, P., 269.

Morgan, Gilbert Thomas, and (Miss) Frances Mary Gore Micklethwait, organic derivatives of arsenic. Part II. Triaminotriphenylarsine oxide and tricamphorylarsinic acid, 1909, T., 1473; P., 212.

the colour and constitution of diazonium salts. Part III. The diazo-derivatives of 2:7-naphthylenediamine, 1910, T., 2557; P.,

organic derivatives of antimony. Part II. The orienting influence of antimonic substituents in the benzene 1911, T., 2286; P., nucleus, 274.

amino-derivatives of arylsulphonanilides and arylsulphon-\beta-naphthalides, 1911, P., 326; 1912, T.,

aromatic amino-derivatives containing antimony; preliminary note, 1912,

organic derivatives of arsenic and antimony; preliminary note, 1912, P.,

constitution of o-diazoimines. Part II. The p-tolylnaphthatri-

azoles, 1912, P., 325. Morgan, Thomas Gilbert, (Miss) Frances Mary Gore Micklethwait, and Edward Gordon Couzens, action of nitrous acid on the arylsulphonylmetadiamines, 1906, T., 1289; P.,

Morgan, Gilbert Thomas, (Miss) Frances Mary Gore Micklethwait, and George Stafford Whitby, organic derivatives Part I. Tricamof antimony. phorylstibine chloride and phenylstibine hydroxynitrate and hydroxysulphate, 1909, P., 302; 1910, T., 34.

note on the aromatic derivatives of

antimony, 1910, P., 151.

Morgan, Gilbert Thomas, (Miss) Frances Mary Gore Micklethwait, and Herbert Ben Winfield, a study of the substitution products of ar-tetrahydro-a-naphthylamine, 4-bromotetrahydro-a-naphthylamine and ar-tetrahydro-a-naphthylamine-4-sulphonic acid, 1904, T., 736; P., 109.

Morgan, Gilbert Thomas, and Walter Roman Moore, dicamphorylphosphinic acid, 1909, P., 310; 1910, T.,

1697.

Morgan, Gilbert Thomas, and Henry Webster Moss, co-ordination compounds of vanadium; preliminary note, 1912, P., 199.

Morgan, Gilbert Thomas, and Henry Webster Moss, co-ordination compounds of vanadium. Part I. The acylacetonates, 1912, P., 325.

Morgan, Gilbert Thomas, and Joseph Allen Pickard, the production of paradiazoimides from alkyl- and arylsulphonyl-para-diamines; a general reaction, 1909, P., 300; discussion, P., 301; 1910, T., 48.

Morgan, Gilbert Thomas, and Joseph Reilly, non-aromatic diazonium salts; preliminary 1 ote, 1912, P., 334.

Morgan, Gilbert Thomas, and Francis Edward Richards, azo-colouring matters derived from ar-tetrahydro-anaphthylamine, 1905, A., i, 616.

Morgan, Gilbert Thomas, and William Ord Wootton, influence of substitution on the formation of diazoamines and aminoazo-compounds. Part III. Azo-derivatives of symmetrically disubstituted primary meta-di-amines, 1905, T., 935; P., 179. contribution to the study of stable

diazo-compounds; preliminary note,

1906, P., 23.

a series of coloured diazo salts derived from benzoyl-1:4-naphthylenediamine, 1907, T., 1311; P., 180; discussion, P., 181. Morgan, Gilbert Thomas. See also Ed-

ward Cahen, and Harry Frank Vic-

tor Little.

Morgan, H. H. See Firman Thompson. Morgan, John Livingston Rutgers, dissociation of lead nitrate, 1904, A., ii,

effect of water on the freezing point of molten CaCl₂,6H₂O, 1909, A., ii,

calculation of the critical temperature of an associated liquid from surface-tension results, 1909, A., ii,

the weight of a falling drop and the laws of Tate. III. An apparatus for rapid and accurate determination of the weight of a falling drop of liquid, 1911, A., ii, 372.

a simple constant-temperature bath for use at temperatures both above and below that of the room, 1911,

A., ii, 384.

weight of a falling drop and the laws IV. Standardisation of of Tate. a tip, and the calculation of the surface-tension and molecular weight of a liquid from the weight of its falling drop, 1911, A., ii, 584.

Morgan, John Livingston Rutgers, and H. K. Benson, determination of molecular weights by distribution experiments, 1907, Λ., ii, 743.

molten hydrated salts as solvents for the freezing point method, 1907, A.,

ii, 747.

Morgan, John Livingston Rutgers, and Jessie Y. Cann, the weight of a falling drop and the laws of Tate. VIII. The relationship existing between the weight of the drop, the diameter of the tip from which it falls, and the surface tension of the liquid, 1911, A., ii, 699.

Morgan, John Livingston Rutgers, and G. K. Daghlian, weight of a falling drop and the laws of Tate. VI. Drop weights of twenty new non-associated liquids and the molecular weights calculated for them, 1911, A., ii, 585.

Morgan, John Livingston Rutgers, and Eric Higgins, weight of a falling drop and the laws of Tate; determination of molecular weights and critical temperatures of liquids by the aid of drop weights, 1908, A., ii, 668.

Morgan, John Livingston Rutgers, and Clarence Whitney Kanolt, combination of a solvent with the ions, 1904,

A., ii, 535; 1906, A., ii, 420.

Morgan, John Livingston Rutgers, and A. McD. McAfee, the weight of a falling drop and the laws of Tate. IX. The drop weights of the associated liquids, water, ethyl alcohol, methyl alcohol, and acetic acid, and the surface tensions and capillary constants calculated from them, 1911, A., ii, 857.

Morgan, John Livingston Rutgers, and John E. McWhorter, estimation of carbon monoxide in atmospheric air,

1908, A., ii, 66.

Morgan, John Livingston Rutgers, and Fayette T. Owen, molten hydrated salts as solvents for the freezing-point method. II., 1907, A., ii, 845.

weight of a falling drop and the laws of Tate. X. Drop weights of some further associated and non-associated liquids, and the surface tensions and capillary constants calculated from them, 1911, A., ii, 1067.

Morgan, John Livingston Rutgers, and Frederick W. Schwartz, the weight of a falling drop and the laws of Taie. VII. The drop weights of some of the lower esters and the surface tensions and molecular weights calculated from them, 1911, A., ii, 698.

Morgan, John Livingston Rutgers, and Reston Stevenson, weight of a falling drop and the laws of Tate; determination of the molecular weights and critical temperatures of liquids by the aid of drop weights, 1908, A., ii, 356.

Morgan, John Livingston Rutgers, and Edgar G. Thomssen, weight of a falling drop and the laws of Tate. V. Drop weights of fifteen non-associated liquids as found by the use of the new form of apparatus, and the molecular weights calculated for them, 1911, A., ii, 584.

Morgan, Will J. See William Jay

Karslake.

Morgen, August, Carl Beger, and Gustav Fingerling, influence of fat and other substances on milk production when given in addition to a scanty basal food, 1905, A., ii, 649.

action of single foods on milk produc-

tion, 1906, A., ii, 563.

Morgen, August, Carl Beger, Gustav Fingerling, Paul Doll, Erwin Hancke, Herman Sieglin, and Willy Zielstorff, effect of food fat and some other food constituents on the production of milk, 1904, A., ii, 750.

Morgen, August, Carl Beger, and F. Westhausser, influence of the nonprotein nitrogen compounds of foods on milk production, 1907, A., ii,

294.

utilisation of ammonium acetate and asparagin for maintenance and for production of milk, 1911, A., ii, 751.

Morgen, August. See also Carl Beger. Morgenroth, Julius, and Umberto Carpi, toxolecithide of bee poison, 1907, A., ii 2028

toxolecithides, 1907, A., ii, 570.

Morgenroth, Julius, and Ludwig Halberstædter, the influence of quinine on experimental trypanosome infection, 1910, A., ii, 881. the influence of quinine and quinine

derivatives on experimental trypanosome infection, 1911, A., ii, 219.

Morgenroth, Julius, and Riukichi Kaya, the action of cobra venom in destroying complement, 1908, A., ii, 313. toxolecithides, 1910, A., ii, 641.

Morgenroth, Julius, and Felix Rosenthal, the influence of potassium hexatantalate on the action of antimony compounds in experimental trypanosome infection, 1912, A., ii, 376.

Morgenroth, Julius, and Oskar Rosenthal, modifications of toxins, 1907,

A., ii, 119.

Morgenroth, Julius, and Oskar Rosenthal, the action of antimony on experimental trypanosome infection, 1911, A., ii, 632.

Morgenroth, Julius, and Paul Schäfer. the hæmolytically acting organ ex-

traets, 1909, A., ii, 1036.

Morgenstern, Ferdinand von, amount of solanin in potatoes and the influence of soil cultivation on the production of solanin, 1907, A., ii, 293.

Morgenstern, Max, action of dilute sulphuric acid on the glycol from isovaleraldehyde, 1903, A., i, 787.

Morgenstern, Otto, condensation opianie and phthalaldehydie acids with cyclohexanone and diethyl ketone, 1909, A., i, 803. compounds of 3:5-dinitro-4-hydroxy-

benzoic acid with hydrocarbons, 1910, A., i, 482; 1911, A., i, 976.

laserpitin, 1912, A., i, 708.

Morgenstern, Otto, and Ernst Zerner, attempts to synthesise ac-diaminopentan-y ol, 1910, A., i, 656.

See also Moritz Morgenstern, Otto.

Kohn.

Mori. Yûkō, electrolytic dissociation of partially neutralised weak acids, 1907, A., ii, 937.

Morisse, R. See Emil Knoevenagel. Moritz, proteins in exudations, 1903, A.,

Moritz, B., antimony double lactates, 1904, A., i, 845.

Moriya, Gazo, lactic acids in the animal organism, 1905, A., ii, 181.

Edward Williams, Morley, vapour pressure of mercury at ordinary temperatures, 1904, A., ii, 703.

quantity of moisture left in a gas after its passage over phosphoric oxide,

1905, A., ii, 381.

Morozewicz, Józef [Marian], two new mineral compounds analogous to pyrophyllite, 1903, A., ii, 381.

[minerals from] the neighbourhood of Mount Magnitnaia, Urals, 1904, A., ii, 51.

weathering of the ore-bearing rock of Mount Magnitnaia, 1904, A., ii,

dioritic rock from Lower Austria, 1904,

A., ii, 670.

beckelite, a calcium cero-lanthanodidymosilicate, 1905, A., ii, 177.

separation of potassium from sodium as potassium platinichloride, 1907, A., ii, 396.

composition of nepheline, 1908, A., ii,

201.

orozewicz, Józef [Marian], preparation of rare earths from Mariupolite, 1909, A., ii, 404.

hatchettite from Bonarka, near Cra-

cow, 1909, A., ii, 409.

stellerite, a new zeolite, 1909, A., ii, 1028.

calcium carbonate, 1911, A., ii, 121, terminology of alumosilicates, 1911, A., ii, 121.

hatchettite and [glauconite] from Bonarka, near Cracow, 1912, A., ii,

Morozoff, Nicolai, water of crystallisa-

tion, 1907, A., ii, 536.

Morrell, George Francis, dihydroterpenylamine, 1911, A., i, 914.

Morrell, George Francis. See also Arthur William Crossley.

Morrell, Robert Selby, studies of Chinese wood oil; Belæostearic acid, 1912, T., 2082; P., 235.

Morrell, Robert Selby, and Albert Ernest Bellars, ethyl benzylideneanilineacetoacetate, 1903, T., 1292; P.,

the separation of \$\beta\$-crotonic acid from a-crotonic acid, 1904, T., 345; P.,

47.

action of hydrogen peroxide on carbohydrates in the presence of ferrous sulphate. Part V., 1905, T., 280; P., 79.

some compounds of guanidine with sugars, 1905, A., i, 577; 1907, T.,

1010; P., 87.

Morrell, Robert Selby, and James Murray Crofts, action of hydrogen peroxide on carbohydrates in the presence of ferrous sulphate, IV., 1903, T., 1284; P.,

Morrell, Robert Selby, and Edward Kenneth Hanson, the resolution of aß-dihydroxybutyrie acid into its optically active constituents, 1904,

T., 197; P., 20. studies on the dynamic isomerism of a- and β-crotonic acids. Part I.,

1904, T., 1520; P., 191.

Morrill, W. P. See Samuel Amberg. Morris-Airey, H., and E. D. Spencer, temperature-coefficient of electrical resistivity of carbon at low temperatures, 1905, A., ii, 668.

Morrison, A. W. See L. W. Gorham.

Morrow, Genevieve V., the ultimate lines of the vacuum tube spectra of manganese, lead, copper, and lithium, 1912, A., ii, 711.

Morschöck, Fritz. See Wilhelm Lossen,

and Heinrich Lührig.

Morse, Fred Winslow, effect of moisture on the availability of dehydrated aluminium phosphate, 1903, A., ii, 449.

effect of temperature on the respiration of apples, 1908, A., ii, 616.

soluble carbohydrates in asparagus roots, 1911, A., ii, 324.

Morse, Harry, dissociation of mercury haloid salts, 1903, A., ii, 12.

Morse, Harmon Northrop, new osmotic membranes prepared by the electrolytic process, 1903, A., ii, 272.

Morse, Harmon Northrop, and Joseph Christie Whitney Frazer, new electric furnace and various other electric heating appliances for laboratory use, 1904, A., ii, 651.

osmotic pressure and freezing points of solutions of sucrose, 1905, A., ii,

575.

Morse, Harmon Northrop, Joseph Christie Whitney Frazer, and Paul B. Dunbar, osmotic pressure of sucrose solutions in the vicinity of 5°, 1907, A., ii, 744.

Morse, Harmon Northrop, Joseph Christie Whitney Frazer, Ernest Jenkins Hoffman, and William Lee Kennon, redetermination of the osmotic pressure and depression of the freezing point of sucrose solutions, 1906, A., ii, 601.

Morse, Harmon Northrop, Joseph Christie Whitney Frazer, and William West Holland, osmotic pressure of cane sugar solutions in the vicinity of the freezing point of water, 1907, A., ii, 440.

Morse, Harmon Northrop, Joseph Christic Whitney Frazer, and B. Smith Hopkins, osmotic pressure and depression of the freezing point of solutions of dextrose. 1., 1906, A., ii, 600.

dextrose. I., 1906, A., ii, 600.

Morse, Harmon Northrop, Joseph Christie
Whitney Frazer, and Benjamin
Franklin Lovelace, osmotic pressure
and depression of the freezing points
of solutions of dextrose, 1907, A., ii,
439.

Morse, Harmon Northrop, Joseph Christie Whitney Frazer, and Francis M. Rogers, osmotic pressure of dextrose solutions in the vicinity of the freezing point of water, 1907, A., ii, 533.

Morse, Harmon Northrop, and C. W. Gray, electrical method for the simultaneous estimation of hydrogen, carbon, and sulphur in organic compounds, 1906, A., ii, 399.

Morse, Harmon Northrop, and William West Holland, osmotic pressure of dextrose solutions at 10°, 1908, A., ii, 759.

osmotic pressure of sucrose solutions at 25°, 1909, A., ii, 216.

regulation of temperature in the measurement of osmotic pressure, 1909, A., ii, 299.

osmotic pressure of sucrose solutions at 20°, 1909, A., ii, 386.

Morse, Harmon Northrop, William West Holland, and John Lattimore Carpenter, relation of osmotic pressure to temperature. II. The manometers, 1911, A., ii, 375.

Morse, Harmon Northrop, William West Holland, Joseph Christie Whitney Frazer, and Brainerd Mears, relation of osmotic pressure to temperature. I. Manufacture of the cells employed in the measurements, 1911, A., ii, 191.

Morse, Harmon Northrop, William West Holland, and Chester Newton Myers, relation of osmotic pressure to temperature. IV. The membranes,

1911, A., ii, 473.

Morse, Harmon Northrop, William West Holland, Chester Newton Myers, G. Cash, and J. B. Zinn, osmotic pressure of sucrose solutions at high temperatures, 1912, A.; ii, 835.

Morse, Harmon Northrop, William West Holland, and Emanuel George Zies, relation of osmotic pressure to temperature. III. Regulation of temperature, 1911, A., ii, 473.

Morse, Harmon Northrop, William West Holland, Emanuel George Zies, Chester Newton Myers, William Mansfield Clark, and Eugene Edward Gill, relation of osmotic pressure to temperature. V. The measurements, 1911, A., ii, 701.

Morse, Harmon Northrop, and Benjamin Franklin Lovelace, improved manometers for measurement of osmotic pressure, 1908, A., ii, 1020. Morse, Harmon Northrop, and Brainerd

Mears, osmotic pressure of sucrose solutions at 15°, 1908, A., ii, 1019. improvement in cells for the measurement of osmotic pressure, 1908, A., ii, 1019.

Morse, Harmon Northrop, and H. V. Morse, osmotic pressure of sucrose solutions at 10°, 1908, A., ii, 671.

Morse, Harmon Northrop, and Levi Shoemaker Taylor, electrical method for the combustion of organic compounds, 1905, A., ii, 480. Morse, H. V. See Harmon Northrop Morse.

Morse, Harry Wheeler, and George Washington Pierce, diffusion and supersaturation in gelatin, 1904, A., ii, 14.

Mortensen, M. L., poisonous action of cobalt salts on Aspergillus niger in cultures on solid and liquid media, 1909, A., ii, 921.

Morton, Darwin Abbot, See John D.

Pennock.

Moruzzi, Giovanni, the quantitative recovery of choline from lecithin, 1908, A., i, 395.

the gelatinisation of egg-albumin by hydrochloric acid. I., 1910, A., i,

the changes produced by urea in the internal friction and electrical conductivity of protein solutions, 1910, A., i, 791.

action of acids and alkalis on the artificial antiserum of the ox, which is hæmolytic to rabbits, 1910, A.,

ii, 970.

Moscati, Giuseppe, behaviour of starch in the organism, 1907, A., ii, 118. glycogen in the human placenta, 1907,

A., ii, 898.

glycogen in human muscles and its diminution after death, 1907, A., ii, 979.

Moschini, Augusto. See Bernardo Oddo. Moschkoff, (Mlle.) A. N. See Giovanni

Malfitano.

Moscicki, J., formation of hydrogen cyanide in the high tension electric flame, 1911, A., ii, 1057; 1912, A., ii, 896.

Mosebach, Gerhard. See Franz Sachs. Moseley, H. G. J., the number of β particles emitted in the transformation of radium, 1912, A., ii, 1024.

Moseley, H.G. J., and Kasimir Fajans,

radioactive products of short life, 1911,

A., ii, 956.

Moseley, H. G. J., and Walter Makower, y-radiation from radium-B, 1912, A., ii, 220.

Mosengeil, Kurd von, phosphorescence of nitrogen and sodium, 1906, A., ii, 714.

Mosenthal, Henry de, observations on cotton and nitrated cotton, 1911, A.,

Moser, Alexander, and N. Isgarischeff, chemical action of the silent electrical discharge, 1910, A., ii, 926.

Alexander. See also Fritz Moser,

Haber.

Moser, H. See Hugo Bauer.

Moser, Ludwig, titration of copper by potassium iodide, and applicability of the method in presence of iron and arsenic, 1905, A., ii, 64, 422. volumetric estimation of lead as iodate,

1906, A., ii, 198.

gravimetric estimation of bismuth as phosphate and its separation from cadmium and copper, 1906, A., ii, 199.

action of hydrogen peroxide on bismuth salts, 1906, A., ii, 618.

critical studies on volumetric estimations of bismuth, 1907, A., ii, 403.

copper peroxide, 1907, A., ii, 549. iodometric estimation of copper according to de Haën, 1907, A., ii, 988. bismuth hydroxide and its behaviour

towards alkalis, 1909, A., ii. 320. the supposed copper quadrantoxide,

1909, A., ii, 891.

the preparation and estimation of nitric oxide and its behaviour towards water, 1911, A., ii, 598.

estimation of nitric oxide, 1911, A., ii,

titration of copper salts with titanium trichloride, 1912, A., ii, 1097.

Moser, Ludwig, and L. Machiedo, separation of strontium from calcium, 1911,

A., ii, 439.

Moser, Ludwig, and F. Perjatel, estimation of arsenious acid with potassium permanganate in presence of hydrochloric acid, 1912, A., ii, 866.

separation of arsenic from antimony and other metals by means of methyl alcohol in a current of air, 1912, A.,

ii, 866.

Moses, Alfred Joseph, eglestonite, terlinguaite, and montroydite, new mercury minerals from Terlingua, Texas, 1904, A., ii, 46.

the synthetic sapphires of Verneuil,

1910, A., ii, 965.

Moseshvili, J. P., osmosis between mineral acids and organic salts, 1907, A., ii, 606.

Moskopp, Paul. See Karl Fries.

Moss, Eugene G. See Charles Baskerville.

Moss, Herbert. See Hugh Longbourne Callendar, and Samuel Walter Johnson Smith.

Henry Webster. See (Sir) Walter Noel Hartley, and Gilbert

Thomas Morgan.

Moss, Richard Jackson, state in which helium exists in pitchblende, 1905, A., ii, 520.

Moss, Richard Jackson, sublimation of sulphur at the ordinary temperature, 1907, A., ii, 20.

the taxine in Irish yew, Taxus baccata var. fastigiata, 1909, A., ii, 605.

Mosse, Max, staining reactions of animal cells, 1905, A., ii, 182.

Mosse, Max, and Carl Neuberg, physiological decomposition of iodoalbumin, 1903, A., ii, 496.

Mosse, Max. See also Hermann Silber-

gleit.

Mossler, Gustav, conversion of the αγglycol from isobutaldehyde into the isomeric αδ-glycol, 1904, A., i, 2.

estimation of small quantities of sodium sulphate in magnesium sulphate, 1906, A., ii, 395.

chemical examination of Eriodictyon glutinosum. II., 1907, A., i, 947;

ii, 291.

fission of hydrogen cyanide from amides of a-bromo-fatty acids accompanied by the formation of an aldehyde or ketone, 1908, A., i, 133.

decomposition of chloroform by alcoholic alkali hydroxides, 1908, A., i,

150.

decomposition of trichloroisopropyl alcohol by aqueous or alcoholic alkali hydroxides, 1908, A., i, 751.

apparatus for the preparation of pure oxygen, 1909, A., ii, 993.

action of cyanogen bromide on brucine and strychnine, 1910, A., i, 275.

amine peroxides of brucine and strych-

nine, 1910, A., i, 584.

a modification of the nitrometer for estimating urea, 1910, A., ii, 663.

methylation of brucine, 1912, A., i, 297.

Mossler, Gustav, and Erich Tschebull.

Mossler, Gustav, and Erich Tschebull, codeine oxide, 1911, A., i, 223.

Mosso, Angelo, sensibility to earbon dioxide diminished by barometric depression, 1904, A., ii, 577.

experiments made on Monte Rosa on the respiration of pure oxygen and of oxygen mixed with carbon dioxide, 1904, A., ii, 622.

physiology of smooth muscle, 1906,

A., ii, 466.

chemical analyses of Minoan metals from the excavations of Crete, 1910, A., ii, 955.

Mosso, Angelo, and Gino Galeotti, physiological action of alcohol at great altitudes, 1904, A., ii, 757. Mosso, Angelo, and Giacomo Marro, analyses of the gases of the blood at different barometric pressures, 1903, A., ii, 735.

changes occurring in the gases of the blood on the summit of Monte Rosa,

1903, A., ii, 735.

Mostowitsch, Wl., lead oxide and silica, 1907, A., ii, 870.

Mostowitsch, Wl. See also F. O. Doeltz, and H. O. Hofmann.

Mostowski, St., behaviour of glucosophenetidide and of tetra-acetylglucosophenetidide in the animal organism, 1909, A., ii, 751.

glycogenic property of dihydroxyacet-

one, 1911, A., ii, 635.

Mostowski, St. See also Léon Marchlewski.

Mostynski, B. See Leonor Michaelis.

Mothwarf, Arthur, action of triphenylcarbinol on hydroxylamine, 1904,
A., i, 877.

tri-p-tolylcarbinol, 1904, A., i, 879.

Motion, John. See Edward Chancey

Worden.

Motolese, Francesco, pharmacological properties of pieric acid, 1910, A., ii, 638.

Motschmann, Oskar. See Richard Anschütz, and Georg Schroeter.

Mott, Frederick Walker, the choline test for active degeneration of the nervous system, 1903, A., ii, 310.

Mott, Frederick Walker, and William Dobinson Halliburton, coagulation temperature of cell-globulin, 1903, A., ii, 311.

the suprarenal capsules in cases of nervous and other diseases, 1906, A., ii, 184.

Mott, Frederick Walker. See also Leonard Erskine Hill.

Mott, William Roy. See Hector Russell Carveth, and Harrison Eastman Patten.

Mottek, Louis. See August Michaelis. Mottek, Siegbert. See Emil Knoeven-

agel.

Mottram, V. H., granules of mammalian liver cells; changes in fat of liver cells during hunger, 1907, A., ii, 795. fatty filtration of the liver in hunger, 1909, A., ii, 415.

fatty acid metabolism in the liver. I.,

1910, A., ii, 525.

Motylewski, Sigmund, capillarity constants and specific weights of salts at their melting points; method for capillary solubility determination, 1904, A., ii, 240.

Motylewski, Sigmund, 3-hydroxy-1:2dihydroquinoxaline and its derivatives, 1908, A., i, 370.

methoxy-2-phenylcoumarones,

A., i, 821.

Motylewski, Sigmund. See also G. G. Wilenko.

Moufang, Ed., the solubility of ozone in

water, 1912, A., ii, 447. Mouilpied, Alfred Theophilus de, the condensation of phenylglycinoacetic esters in presence of sodium alkyloxides, 1905, T., 435; P., 63.

Mouilpied. Alfred Theophilus de, and 'Alexander Rule, tetraketopiperazine,

1907, T., 176; P., 13; 1909, T., 549; P., 71. Moulin, A., action of mercurous nitrate and of neutral mercurosomercuric reagent on antipyrine, 1903, A., i,

estimation of vanillin in vanilla, 1903,

A., ii, 457.

action of chromic acid on diphenylcarbazide, 1904, A., i, 455.

colorimetric estimation of chromium, 1904, A., ii, 368.

reactions of pyramidone, 1911, A., ii, 777; 1912, A., ii, 399.

Moulin, Marcel, ionisation of gases by a-rays, and the hypothesis of initial recombination of the ions, 1908, A., ii, 921.

use of cooling curves in determining the cryoscopic point of solution,

1910, A., ii, 825.

the recombination of ions produced in gases by a-rays, 1911, A., ii, 171. Moulin, Marcel. See also P. Langevin. Mouline. See Maurice Vèzes.

Mouneyrat, Antoine, action of iodine bromide on proteins and organic

bases, 1903, A., i, 665.

influence of chemical combination of an element on the rapidity of its passage into the blood, 1903, A., ii, 438.

distribution in the organism and elimination of arsenic given as sodium methylarsinate, 1903, A., ii, 444.

does glycerol exist in normal blood? 1904, A., ii, 56, 183.

detection and estimation of minute quantities of iron, 1906, A., ii,

iron in living tissues, 1906, A., ii,

toxicity of arsenic compounds employed in therapeutics, 1912, A., ii, 281.

Mounié, A., diethyl-o-hydroxylphenylcarbinol and derivatives, 1903, A., i,

Mountain, Harold. See (Miss) Martha Annie Whiteley.

Mourawiew-Winigradoff, Anna. Fritz Ullmann.

Moureu, Charles [Léon François], [derivatives of carboxylic acids of the acetylene series], 1903, A., i, 312.

condensation of acetylenic esters with alcohols, 1903, A., i, 698; 1904, A., i, 286.

some springs of mineral gas, 1903.

A., ii, 222.

alkyloxyalkylethylenic acids hydrocarbons, 1904, A., i, 285.

chemical composition of the radioactive gaseous mixtures evolved from the waters of thermal springs; presence of helium, 1905, A., ii, 5. molecular refraction and dispersion of

acetylenic compounds, 1906, A., ii, 1. determination of rare gases in natural

gaseous mixtures, 1906, A., ii, 126, the gases of thermal springs; determination of the rare gases; general presence of argon and helium, 1906,

A., ii, 442.

rare gases of thermal springs and the information yielded by them in regard to radioactivity and the physics of the earth, 1911, A., ii, 808.

Moureu, Charles, and Robert Biquard, presence of neon in the gases of thermal springs, 1906, A., ii, 685.

fractionation of rare gases mineral waters; proportion of hel-

ium, 1907, A., ii, 22.
rare gases of thermal waters; gaseous outputs of some springs, 1908, A.,

ii. 277.

Moureu, Charles, and J. Charles Bongrand, carbon subnitride, C4N2, 1910, A., i, 159.

propiolic compounds; cyanoacetylene,

C₃HN, 1911, A., i, 22.

Moureu, Charles, and Maurice Brachin. acetylenic ketones; new method of synthesis of pyrazoles, 1903, A., i,

the acetylenic ketones; new method of synthesising isooxazoles, 1904,

A., i, 95.

condensation of acetylenic ketones with the alcohols and phenols, 1904, A., i, 811.

action of hydroxylamine and of hydrazine on β -alkyloxy- and β -phenoxyethylenic ketones, 1904, A., i, 824.

Moureu, Charles, and Raymond Delange. some new acids of the acetylene

series, 1903, A., i, 312.

hydration of acetylenic acids; new method of synthesis of unsubstituted B-ketonic acids and esters, 1903, A., i, 399.

new fatty acid; \gamma\gamma\gamma-trimethylacid [yy-dimethylvaleric butvric

acid], 1903, A., i, 676.

amylchloroacrylic esters [8-chloro-Aaoctenoic] esters, 1903, A., i, 676. new method of preparing acetylenic

aldehydes; action of hydroxyl-

amine, 1904, A., i, 650.

Charles, and I. Lazennec, acetylenic amides and nitriles, 1906,

A., i, 148.

condensation of acetylenic nitriles with alcohols; general method of synthesising B-substituted derivatives of B-alkyloxyacrylonitriles, 1906, A., i, 240.

condensation of acetylenic nitriles with phenols; general method of synthesis of B-substituted B-phenoxyacrylonitriles, 1906, A., i, 276.

condensation of acetylenic amides with phenols; general method of synthesis of B-substituted derivatives of B-phenoxyacrylamides, 1906, A., i,

researches pyrazolones; new on methods of synthesis of pyrazolones,

1906, A., i, 702.

condensation of acetylenic nitriles with amines; general method of synthesis of \(\beta\)-substituted derivatives of B-amino-substituted acrylonitriles, 1906, A., i, 956.

condensation products of acetylenic esters and amines, 1906, A., i, 956.

condensation of hydrazines with acetylenic nitriles; general method of synthesising pyrazolonimines [5iminopyrazolines], 1907, A., i, 159.

method of synthesis of non-substituted β-ketonic nitriles, 1907, A., i, 397.

method of synthesis of B-ketonic nonsubstituted amides, 1907, A., i, 487.

action of hydroxylamine on acetylenic nitriles, amides, and esters, and on the corresponding β-ketonic compounds, 1907, A., i, 716.

Moureu, Charles, and Adolphe Lepape, radioactivity of the thermal springs of Bagnères-de-Luchon, 1909, A., ii,

gas from thermal springs: presence of krypton and xenon, 1910, A., ii,

Moureu, Charles, and Adolphe Lepape, constancy of the ratio of helium to argon in natural gaseous mixtures; explanatory hypothesis, 1911, A., ii,

spectro-photometric method for the estimation of krypton, 1911, A., ii,

ratio of argon to nitrogen in natural gaseous mixtures and its significance, 1911, A., ii, 602.

rare gases of coal mine natural gases.

1911, A., ii, 1087.

spectrophotometric estimation xenon; constancy of the xenon-argon and xenon-krypton ratios in natural gaseous mixtures, 1911, A., ii. 1134.

ratios of the rare gases to one another and to nitrogen in mine gases, 1912,

A., ii, 47.

some natural gases particularly rich in

helium, 1912, A., ii, 843.

Moureu, Charles, and Amand Valeur, sparteine; general characters: action of some reducing agents, 1903, A., i, 717.

sparteine sulphate, 1904, A., i, 187. action of methyl iodide on sparteine,

1905, A., i, 608.

stereoisomerism of sparteine meth-

iodides, 1905, A., i, 608. action of ethyl iodide on sparteine,

1905, A., i, 609. symmetry of the sparteine molecule,

1905, A., i, 659. sparteine, 1905, A., i, 716; 1908,

A., i, 563.

sparteine; application of Hofmann's reaction to sparteine; methylhemisparteilene, 1908, A., i, 43.

two isomeric methylsparteines, 1908,

A., i, 44.

sparteine; isomerisation of a-methylsparteine, 1908, A., i, 44.

isosparteine, an isomeride of sparteine,

1908, A., i, 103.

constitution of a- and B-methylsparteine and of isosparteine, 1908, A., i, 206.

preparation of isosparteine; action of methyl iodide on the base, 1911, A., i, 319.

isosparteine; a case of stereoisomerism

of nitrogen, 1911, A., i, 319. sparteine. XXIII. Decomposition of isosparteine a'-methylhydroxide. XXIV. Methylisosparteine, 1911, A., i, 562.

degradation of sparteine; formation of a hydrocarbon: sparteilene,

1912, A., i, 210.

Moureu, Charles, and Amand Valeur, the symmetry of sparteine, 1912, A., i,

Moureu, Charles. See also Armand Gautier.

Mouson, Johann Georg. See Otto Fischer. Moussu, G., and Emile Paul Goupil, action of chlorine in the tubercle bacillus, 1908, A., ii, 123.

Moutier, F. See Emile Louise.

Mouton, Henri, digestion of amœbæ, and their intracellular diastase, 1903, A., ii, 36.

Mouton, Henri. See also A. Cotton, and

C. Delezenne.

Moycho, Stefan, and Franz Zienkowski, methylcamphenylol, 1905, A., i. 654. camphene, 1905, A., i, 710.

Moycho, Stefan. See also Georg Wagner. Moye, Albert, plaster of Paris, 1906, A., ii, 447.

Mozdzenski. See S. Serkowski.

Możdzenski, Leo von. See Felix Benjamin

Much, Hans. See Wilhelm Biltz.

Muchin, G., influence of a third component on the freezing point of a binary mixture, 1912, A., ii, 898.

Muckermann, Ernst, formation of nitrosopyrazolidones and pyrazolones from hydrazides of unsaturated acids, 1909, A., i, 838.

of 1-nitroso-5-phenyl-3formation pyrazolidone from cinnamoylhydr-

azide, 1911, A., i, 682. rmation of 1-nitroso-5-methyl-3formation pyrazolidone from crotonovlhydrazide, 1911, A., i, 814.

Mudge, George Percival, pigmentation and intravascular coagulation, 1905,

A., ii, 539.

Mügge, [Johannes] Otto [Conrad], hemihedrism of sylvite, 1906, A., ii, 454. crystalline form and deformation of bischofite and related chlorides of

cobalt and nickel, 1906, A., ii, 620. Tschermak's method of preparing silicic acids from natural silicates,

1908, A., ii, 277, 688. change of state in quartz at 570°, 1908, A., ii, 302.

radioactivity and pleochroic halos, 1909, A., ii, 286.

micro-structure of magnetite, 1911, A., ii, 1100.

Mühlberg, Thilo. See August Michaelis. Mühlenbein, Johannes. See Julius Wagner.

Mühlhausen, Gottfried, a new mode of formation of phenylacetylene, 1907, A., i, 25.

Mühlhausen, Gottfried. See also Theodor

Mühlhauser, Benno. See Fritz Ullmann. Mühlinghaus, Paul. See Wilhelm

Autenrieth.

Müller, "basic slag-ammonia," a new manure; its composition and results of manurial experiments in 1904, 1905, A., ii, 650.

Müller, A., estimation of carbon and sulphur in iron and steel, 1904, A., ii,

779.

Müller, A. See Emil Bose.

Müller, A. See Franz Lehmann.

Müller, Albert (Aachen), preparation, composition, and thermal properties of electrolytic iron, 1909, A., ii, 485.

Müller, Albert (Wien), physiology of the digestive tract. II. and III., 1907,

A., ii, 107.

Müller, Alex., the formation of acetone

in urine, 1907, A., ii, 376. Müller, Alfred. See Wilhelm Koenigs.

Müller, Arthur, estimation of nitric acid in water, 1903, A., ii, 690.

classification of colloids, 1904, A.,

suspensions in media of high viscosity, 1904, A., ii, 160.

bibliography of colloids, 1904, A., ii, 392.

solubility of metallic hydroxides in glycerol, 1905, A., i, 254.

thorium hydroxide hydrosol, 1906, A., ii, 762.

zirconium salts and colloidal zirconium hydroxide, 1907, A., ii, 272.

preparation of hydrosols of metallic hydroxides from hydrogels, 1908, A., ii, 286.

preparation of the hydrosol of tungstic

acid, 1911, A., ii, 206.

Müller, Arthur, and Paul Artmann, experiments on the precipitation with colloidal solutions of metal sulphides. 1904, A., ii, 547.

Müller, Arthur. See also Anton Waegner. Müller, Br. See Benno Bleyer.

Müller, Carl, distillation arrangement for ammonia and nitrogen estimations, 1911, A., ii, 68.

Müller, Carl. See also Julius von

Braun.

Mueller, Edward. See Gregory Paul Baxter, and Theodore William Richards.

Müller, Erich (Berlin), metabolism in children, 1907, A., ii, 194. m-toluic acid, 1909, A., i, 159.

Müller, Erich (Berlin). See also Walter Cronheim.

Müller, [Max] Erich (Stuttgart), diminution of cathodic depolarisation by potassium chromate, 1903, A., ii,

electrochemistry of the compounds of iodine and oxygen. I. and II., 1903, A., ii, 629.

electrolytic preparation of alkali selenates, 1904, A., ii, 121.

electrolytic formation of periodic acid and its salts, 1904, A., ii, 249.

influence of indifferent ions on the electrolytic formation of periodic acid and its salts, 1904, A., ii, 181.

preparation of persulphates, 1904, A., ii, 812.

passive copper or the anodic behaviour of copper in solutions of sodium hydroxide, 1907, A., ii, 428.

copper peroxide and the catalytic decomposition of hypohalogenite solutions by copper, 1907, A., ii, 771. explanation of supertension, 1908,

A., ii, 802.

preparation of colloidal vanadic acid by a new dispersion method, 1911, A., ii, 732.

Müller, Erich, and Paul Bahntje, action of organic colloids on the electrolytic deposition of copper, 1906, A., ii, 330.

Müller, Erich, and Otto Diefenthäler, the supposed lead ferricyanide is a lead ferricyanide-nitrate, 1910, A., i, 721. the volumetric estimation of hydro-

ferro- and hydroferri-cyanic acids,

1910, A., ii, 910.

the simultaneous volumetric estimation of iron and vanadium, 1911, A., ii, 824. volumetric estimation of vanadic acid with potassium ferrocyanide, 1912,

A., ii, 300.

Müller, Erich, and Bernardo Diethelm, estimation of carbon and sulphur in high-percentage alloys of tungsten, molybdenum, and vanadium with iron, 1910, A., ii, 1110.

Müller, Erich, and R. Emslander, influence of current density on the formation of persulphuric acid and the changes in concentration of persulphuric acid and Caro's acid, 1912, A., ii, 895.

Müller, Erich, and Friedrich Kapeller, the reducing and oxidising power of salts of iron, 1908, A., ii, 192.

Müller, Erich, and Paul Koppe, electrolytic reduction of acetophenone and benzophenone, 1910, A., ii, 387. the preparation of manganic fluorides and the titration of manganese by Volhard's method in presence of fluorides, 1910, A., ii, 957.

Müller, Erich, and Paul Koppe, influence of current concentration on the formation of chlorates by electrolysis, 1911, A., ii, 797.

Müller, Erich, and Richard Loebe. electrolytic preparation of bromoform,

1904, A., i, 705.

Müller, Erich, and Richard Lucas, cathodic pulverisation of tellurium,

1905, A., ii, 672.

Müller. Erich. and Otto Müller, the velocity coefficient of the chemical formation of chlorate determined by electrolysis, 1912, A., ii, 1154.

Müller, Erich, and Romuald Nowakowski, preparation of colloidal solutions of selenium and sulphur by electrical pulverisation, 1906, A., ii, 18.

cathodic behaviour of sulphur, selenium, and tellurium, 1906, A., ii.

145.

Müller. Erich, and Eberhard Sauer, electrolytic formation of dichromate from chromate, 1912, A., ii, 1037.

Müller, Erich, and Alfred Scheller, abnormal anodic polarisation produced by fluorine, chlorine, and bromine

ions, 1906, A., ii, 64.

Müller, Erich, and H. W. Hugo Schellhaass, the rôle of Caro's acid in the electrolytic formation of persulphuric acid and its salts, 1907, A., ii,

Müller, Erich, and Max Soller, lead peroxide as anode in the electrolytic oxidation of chromium sulphate to chromic acid, 1906, A., ii, 66.

Müller, Erich, and Fritz Spitzer, electrolytic oxidation of ammonia nitrites, 1905, A., ii, 242, 314.

electrolytic reduction of nitrates to

nitrites, 1905, A., ii, 314.

electrolytic preparation of nitrite from nitrate, especially at silver cathodes, 1905, A., ii, 703.

electrolytic oxidation of ammonia and its dependence on the material of the anode, 1906, A., ii, 158.

anodic oxide formation and passivity, 1906, A., ii, 724.

electrolytic formation of copper peroxide, 1907, A., ii, 174.

dehydration of colloidal copper hydroxide by electro-osmosis, 1907, A., ii, 351.

Müller, Erich, and Theophil Stanisch, Prussian blue and Turnbull's blue. I. and II., 1909, A., i, 142, 705.

Müller, Erich, and W. Treadwell, ferrous ferrocyanides, 1909, A., i, 706.

Müller, Erich, and Julius Weber, preparation of nitrites by the electrolytic reduction of aqueous solutions of nitrates, 1904, A., ii, 116.

Müller, Erich, and Gustav Wegelin, volumetric estimation of ferric salts with permanganate after reduction

with zinc, 1911, A., ii, 937.

Müller, Erich, Gustav Wegelin, and Ernst Kellerhoff, copper salts of hydroferrocyanic acids, 1912, A., i,

Müller, Erich, Gustav Wegelin, Frederick Pearson Treadwell, and Otto Diefenthäler, Prussian blue and Turnbull's blue. III., 1911, A., i, 844.

Müller, Erich (Stuttgart). See also Consortium für Elektrochemische Industrie, and Fritz Foerster.

Müller, Ernst. See Otto Diels.

Müller, Ernst (Berlin), absorption of light by aqueous solutions of copper and nickel salts, 1904, A., ii, 4.

absorption of light in solutions, 1907,

A., ii, 2.

optical behaviour of colloidal metals, 1907, A., ii, 829.

Müller, Ernst (Berlin). See also Edgar Mever.

Müller, Ernst (Heidelberg), 4-diazoacetic acid, 1908, A., i, 922.

alkylamides of 3:4-dihydro-1:2:4:5-tetrazine-3:6-dicarboxylic acid and 1:2-dihydro-1:2:4:5-tetrazine-3:6-dicarboxylic acid, 1909, A., i, 846.

the formation of nitrogen oxides by the electric spark discharge in liquid

air, 1912, A., ii, 753.

Müller, Ernst (Heidelberg). See also Samuel Bondi, and Theodor Curtius.

Müller, Ernst (Leipzig). See Hans Stobbe.

Müller, Eugen, gas-generating apparatus for analytical purposes, 1908. A., ii. 129.

Müller, Ernst Emil. See Frederick T. B. Dupré.

Mueller, E. F. See Hobart C. Dickin-

Müller, Eugen R. E., estimation of phosphorus in pig iron and cast iron without separation of silicon, 1911, A., ii, 1132.

Müller, Franz, the ferricvanide method of estimating oxygen in blood, 1904, A., ii, 795.

[physiological] action of choline, 1910,

A., ii, 881.

Müller, Franz, and Bruno Fellner. vasotonin,-a new drug which lowers blood pressure, 1910, A., ii, 725.

Müller, Franz, and Alfons. Ott. reaction of brain, 1904, A., ii, 627.

Müller, Franz, Walter Schoeller, and Walther Schrauth, the pharmacology of certain organic mercury compounds; the action of metallic poisons, 1911. A., ii, 755.

Müller. Franz. See also Emil Abderhalden, Hans Aron, Joseph Barcroft, Rudolf Hefelmann, I. Markoff, and

Alfred Stock.

Müller, Friedrich, extraction of an aldehydic perfume from pine-wood tar, 1911, A., i, 897.

Müller, Friedrich. See also August Michaelis.

Müller, Fritz (Jena, 1902*). See Ludwig Knorr.

Müller, Fritz (Jena, 1906*). See Eduard Vongerichten.

Müller, Fritz (Leipzig, 1903*), antipeptones, 1903, A., i, 783.

use of magnesia usta in the estimation of amido-nitrogen, 1903, A., ii,

Müller, Fritz (Leipzig, 1908*). Heinrich Ley.

Müller, Fritz (Zürich). See Richard Willstätter.

Müller, Friedrich C. G., new experimental arrangement for the synthesis of hydrogen chloride and water, 1907, A., ii, 538.

electrolysis of aqueous ammonia, 1911,

A., ii, 598.

Müller, Gerhard, See Wilhelm Autenrieth.

Müller, Gustav, circulation burette, 1908, A., ii, 626.

new burettte clamp; 1908, A., ii. 1069.

ozone apparatus, 1909, A., ii, 137.

Müller, Gustav, and O. Berchem, automatic safety burette, 1908, A., ii, 775.

Müller, Gustav (Zurich). See Paul Friedländer.

Müller, Hans, binary systems formed from the alkali sulphates and calcium sulphate, 1910, A., ii, 776.

Müller, Hans. See also Otto Wallach. Müller, Hermann. See Fritz Fichter.

Müller, Hugo, the occurrence of quercital (quercite) in the leaves of Chamacrops humiles, 1907, T., 1766; P., 218.

cocositol (cocosite), a constituent of the leaves of "Cocos nucifera" and "Cocos plumosa," 1907, T., 1767; P., 219.

* Year of Dissertation.

Müller, Hugo, inositol (inosite), 1907, T., 1780; P., 219.

the occurrence of alizarin in rhubarb, 1911, T., 967; P., 101.

inositol and some of its isomerides, 1912, T., 2383; P., 291.

Müller, Hermann August, B-benzylideneglutaric acid, 1906, A., i, 960.

sulphineazo-dyes, 1907, A., i, 89. Müller, Hermann August. See also Alexander McKenzie.

Müller, Hans C. See Friedrich Kretschmer.

Müller. Hans Eduard. See Richard Willstätter.

Müller, Johannes, scyllitol, 1907, A., i,

the utilisation of sugar during muscular

activity, 1908, A., ii, 713. Müller, Julius, bromine derivatives of o-amino- and of o-hydroxybenzaldehyde, 1909, A., i, 937.

Müller, Karl (Freiberg), essential oils from liverworts, 1905, A., i, 713.

chemical composition of the cell membrane in various cryptogams, 1905, A., ii, 648.

Müller, Karl (Greifswald). See Karl Auwers.

Müller, Ludwig von. See Alexander Gutbier.

Müller, Max, protein-sparing action of asparagine, 1906, A., ii, 465.

composition of flesh on different nutriments, 1907, A., ii, 111.

further investigations on the action of asparagine on the nitrogenous exchange of the animal body, 1907, A., ii, 491.

nutritive value of non-proteins in hay, 1907, A., ii, 645; 1908, A., ii,

nutritive value of non-protein nitrogenous substances, 1907, A., ii, 895.

Müller, Max. See also Alexander Naumann, and Wilhelm Schneider.

Müller, Noe L., minimum quantity of electricity, 1909, A., ii, 112.

the function of interatomic electrons in catalysis and electrolysis, 1912, A., ii, 530.

Müller, Noe L. See also Moritz Kohn, and Rudolf Wegscheider.

Müller, Otto (Berlin), the work of digestion after carbohydrate food, and its dependence on the physical condition of the nourishment, 1910, A., ii, 1083.

Müller, Otto (Braunschweig). See Julius Tröger, and Alexander Tschirch.

Müller, Otto (Stuttgart). See Erich Müller.

Müller, Paul, and Richard Abegg, boric acid, amyl alcohol, and water, 1907, A., ii, 159.

Müller, Paul. See also Karl Bornemann, and Arthur Rosenheim.

Müller, Paul Theodor. See Karl Helle. Müller, Richard, new calcium chloride U-tube, 1910, A., ii, 753.

Müller, Robert, the action of carbonyl chloride on the body of man and of animals, 1912, A., ii, 73.

Müller, Robert. See Martin Forster.

Müller, Rudolf. See Volkmar Kohlschütter. Fritz Straus. and Wallach.

Müller, Wilhelm, point of maximum density for aqueous solutions of some organic substances, 1903, A., ii, 355.

Müller, Wilhelm (Flix), apparatus for gas volumetric determinations, 1910, A., ii, 893.

Müller, Wilhelm (Giessen, 1901*). Alexander Naumann.

Müller, Wilhelm (Giessen, 1906*). Peter Rona.

Müller, Wilhelm (Leipzig). See Hermann Wedding.

Müller, Wilhelm (Miltitz). See Eduard Gildemeister, and Heinrich Walbaum.

Müller, Wolf [Johannes], titration of sulphuric acid with benzidine hydrochloride, 1903, A., ii, 691; 1904, A., ii, 83.

electrolytic preparation of nitrites from nitrates, 1904, A., ii, 117.

passivity of metals, 1904, A., ii, 610; 1906, A., ii, 76.

volumetric estimation of thallium, 1909, A., ii, 348.

electromotive behaviour of thallium as anode. I., 1909, A., ii, 961.

velocity of the transformation of oxonium bases, colour bases, cyanides into carbinol bases and leucocyanides, 1910, A., i, 868.

the radioactivity of the spring water of Miilhausen (Alsace), 1910, A., ii, 678.

Müller, Wolf, and Karl Dürkes, titration of sulphuric acid by benzidine hydrochloride, 1903, A., ii, 751.

Müller, Wolf, and Paul Kaufmann, solubility of ammonium nitrate in water between 12° and 40°, 1903, A., ii, 290.

Müller, Wolf, and Johann Georg Königsberger, the anodic and cathodic behaviour of iron mirrors and the passivity of iron, 1907, A., ii, 924. passivity of iron, 1909, A., ii, 1016.

* Year of Dissertation.

Müller, Wolf, and Friedrich Suckert, products of decomposition of bromosuccinic acid and its salts in aqueous solution, 1904, A., i, 647.

Müller, Wolf. See also Johann Georg

Koenigsberger.

Müllermeister, Wilhelm, the absorption spectra of chlorophyll and its derivatives, 1908, A., i, 197.

Münch, Eduard, See Robert Stollé. Münch, Siegmar. See Friedrich Wilhelm Küster, and Theodor Zincke.

Münchmeyer, Georg. See Otto Mumm. Münden, Max [forms of matter], 1909, A., ii, 133.

Münter, Friedrich. See Hans Rupe. and Wilhelm Schniedewind.

Muntz, [Charles] Achille, and Henry Gaudechon, diffusion of manurial salts in soil, 1909, A., ii, 259.

retardation of vegetal assimilation during cloudy weather, 1909, A., ii,

the awakening of the earth, 1912, A., ii, 292.

degradation of phosphatic manures during a rotation of crops, 1912, A., ii. 982.

Müntz, Achille, and E. Lainé, intensive nitrification, 1906, A., ii, 114.

rôle of organic matter in nitrification, 1906, A., ii, 298.

utilisation of peat holes for the intensive production of nitrates, 1906, A., ii, 476.

the function of septic tanks in the biological purification of sewage,

1909, A., ii, 423.

loss of nitrogen during the purification of water by bacterial beds, 1911, A., ii, 421.

purification of sewage by the soil and by bacterial beds, 1911, A., ii, 639. utilisation of sewage waters in agricul-

ture, 1911, A., ii, 764.

the proportion of carbon dioxide in the air of antarctic regions, 1912, A., ii, 154.

Müntz, Achille, and P. Nottin, the employment of calcium cyanamide in agriculture, 1909, A., ii, 88.

Muntz, Achille, and Auguste Trillat. origin and variations of sulphates in beer; interpretation of analytical results, 1908, A., ii, 782.

Münzhuber, Alfons. See Fritz Ull-

mann.

Münziger, A. See Paul Wagner.

Müther, Aloys, and Bernhard Tollens, some hydrazones and their melting points, 1904, A., i, 224.

Müther, Aloys, and Bernhard Tollens. products of hydrolysis of Fucus, Laminaria, and Carragheen moss, 1904, A., i, 225.

fucose and fuconic acid and a comparison with Votoček's rhodeose and rhodeonic acid, 1904, A., i, 226.

Müther, Aloys. See also Conrad von Seelhorst.

Mugdan, Martin, the rusting of iron and its passivity, 1903, A., ii, 484. velocity of transformation of per-

sulphuric acid into Caro's acid, and the formula of the latter, 1903, A., ii, 640.

formula of Caro's acid, 1904, A., ii, 115.

Muhs, Georg. See Walter Herz.

Muir, Matthew Moncrieff Pattison, permanganic acid, 1907, T., 1485; P.,

volumetric estimation of iron in ferric

compounds, 1908, A., ii, 228. iodine dioxide, 1909, T., 656; P., 88. Muir, Robert, and Carl Hamilton

Browning, chemical combination and toxic action as exemplified in hæmolytic sera, 1905, A., ii, 107.

anti-immune substances and complementoids; the action of complement as agglutinin, 1906, A., ii, 98.

bactericidal action of normal serum, 1908, A., ii, 959.

Muir, Robert, and Alexander Robert Ferguson, hæmolytic receptors of the red corpuscles, 1906, A., ii, 96.

Muir, Robert, and William Blair Morton Martin, deviation of complement by a serum and its anti-serum, and its relation to the precipitin test, 1906, A., ii, 688.

Mukerjee, Beni Madhav, new forms of

pipettes, 1904, A., ii, 327.

Mukerji, Satish Chandra. See John Arthur Cunningham, and Prafulla Chandra Rây.

Mulder, Arnold, synthesis of secondary mixed amines by Hinsberg's method,

1906, A., i, 484.

synthesis of alkyl derivatives of 2:4dinitroaniline and of two isopropyl-2:4:6-trinitroanilines, 1906, A., i, 491.

oxidation of 2:4-dinitroanilines with chromic anhydride, 1906, A., i,

hexanitrodiphenylamines, 1906, A., i,

a-anilinoisobutyronitrile and derivatives, 1907, A., i, 508.

burette for calibrating measuring flasks, 1909, A., ii, 90.

Mulder, Eduard, spontaneous decomposition of silver peroxynitrate, 1904, A., ii, 32.

electrolysis of an aqueous solution of silver selenate, 1904, A., ii, 32.

action of hydrogen peroxide on silver oxide, peroxide, carbonate, nitrate, 1904, A., ii, 32.

new reaction of silver peroxide, 1904,

A., ii, 33.

structural formula of the "so-called" silver peroxynitrate, 1904, A., ii, 33. chemical composition of matter, 1909,

A., ii, 34; 1911, A., ii, 33. Botho, 3-ethylcinchonic acid and 2-hydroxy-3-ethylcinchonic acid,

1906, A., i, 534.

Mulert, Otto, thermochemistry of silicic acid and the silicates, 1912, A., ii,

Muller, Ch., estimation of phosphoric acid by means of citro-molybdic acid solution, 1912, A., ii, 487.

Muller, Joseph Auguste, action of carbon monoxide on potassium ferricyanide in solution, 1903, A., i, 238.

action of carbon monoxide on potassium mangano-, cobalti-, chromi-, and platino-cyanides, 1903, A., i, 238.

relative stability of carbonylferrocyanides towards oxidising agents,

1904, A., i, 147.

carbonylferricyanides, 1904, A., i, 147. source of the excessive moisture found in certain combustions, 1905, A., i,

action of ketone reagents on sodium carbonylferrocyanide, 1905, A., i,

estimation of lead and antimony as sulphides, 1905, A., ii, 118.

analysis of lead minerals, 1905, A., ii,

estimation of carbon, hydrogen, and nitrogen in cyanides, 1905, A., ii, 767.

heat of formation of carbonylferroeyanic acid, 1906, A., ii, 525.

volumetric estimation of zinc, 1907, A., ii, 131.

analysis of zinc ores, 1907, A., ii, 301. acid energy of thiosulphuric acid and the decomposition of this acid, 1908, A., ii, 102.

volumetric estimation of mercury in its ores, 1908, A., ii, 227.

deduction of Gibbs' phase rule, 1908, A., ii, 466.

volumetric estimation of lead in ores, 1909, A., ii, 96.

Muller, Joseph Auguste, estimation of chromic acid, 1909, A., ii, 96.

phase rule, 1910, A., ii, 24.

action of iodine on sodium dithionate or trithionate in solution, 1910, A., ii, 154.

estimation of chromium in chrome iron ore, 1910, A., ii, 159.

heat of combustion and relative density of methylamines, 1910, A., ii, 485.

velocity of decomposition of dissolved dithionic acid, 1911, A., ii, 266.

catalysis in a homogeneous system, 1911, A., ii, 266.

John Hughes, the action of salicylic acid on the metallic acids, 1911, A., ii, 940.

Muller, Paul Thiebaud, physico-chemical studies on the acid function of the oximino-group. I. Electrical conductivity of oximinocyanoacetic esters, 1903, A., i, 77.

physico-chemical studies on the acid function of the oximino-group. II. Optical properties of the oximinocyanoacetic esters, 1903, A., i, 77.

physico-chemical studies on the acid function of the oximino-group. III. Sodium salts of isonitroso-derivatives and the diagnosis of pseudo-acids, 1903, A., i, 78.

chemical changes in bone marrow after intraperitoneal injection of bacteria,

1905, A., ii, 468.

affinity of sodium phosphate for water, 1910, A., ii, 113.

Muller, Paul Thiébaud, and H. Allemandet, alkali electrode, 1908, A., ii, 146.

Muller, Paul Thiébaud, and Edmond Bauer, optical study of isonitrosoderivatives; influence of negative radicles, 1903, A., ii, 705.

optical method for recognition of pseudo-acids, 1903, A., ii, 705. cacodylic acid and amphoteric sub-

stances, 1904, A., i, 482.

heat of neutralisation of some pseudoacids (isonitroso-compounds), 1904, A., ii, 702.

determination of the heat of dissociation of some isonitroso-acids (pseudoacids) by the conductivity method, 1904, A., ii, 703.

Muller, Paul Thiébaud, and E. Carrière, refraction and dispersion of nitrates of

mercury, 1912, A., ii, 402.

Muller, Paul Thiébaud, and Charles Fuchs, determination of specific heats of solutions; molecular heats of good and bad electrolytes, 1905, A., ii, 504.

Muller, Paul Thiebaud, and (Mlle.) V. Guerdjikoff, refraction and magnetic rotation of mixtures, 1912, A., ii, 325, 1113.

Muller, Paul Thiébaud, and M. Thouvenot, isodynamic change revealed by magnetic rotatory power, 1909, A., ii,

Muller, Paul Thiebaud. See also Albin Haller

Mulon, Paul, lecithin in the suprarenal body of the guinea-pig, 1903, A., ii,

Mulzer, Paul, behaviour of iodoform in the body, 1905, A., ii, 409.

Mulzer, Paul. See also Walther Löb. Mumm. Otto, action of oxygen on aqueous

solutions; the processes involved in the electrolytic decomposition of water and in the hydrogen-oxygen gas cell, 1907, A., ii, 527.

cathode of a decomposition cell as iuductor ("autoxydator") in oxidation process; experiments with sodium arsenite, 1907, A., ii, 528.

anode of an electrolytic decomposition cell as acceptor in oxidation processes; experiments with oxalic acid, 1907, A., ii, 528.

kinetics of ethyl diazoacetate and the dilution law, 1908, A., ii, 469.

Mumm, Otto, and Clemens Bergell, free acetoneoxalic [acetylpyruvic] acid and its derivatives, 1912, A., i,

derivatives of triketopyrrolidine and their conversion into trimethylparamide, 1912, A., i, 1015.

Mumm, Otto, and Hugo Hesse, reaction of imino-chlorides with salts of organic acids and with potassium cyanide, 1910, A., i, 311.

constitution of benzoylanthranil, 1910, A., i, 770.

Mumm, Otto, and Georg Münchmeyer, conversion of hydroxymethyleneacetophenone into benzoylpyruvic acid and some new derivatives, 1911, A., i, 79.

2:3-diketo-5-phenylpyrroline, a uninuclear analogue of isatin, 1911,

A., i, 79.

Mumm, Otto. See also Heinrich Biltz. Mumme, Erich. See Daniel Vorländer.

Mummery, John Percy Lockhart, and William Legge Symes, duration of effect of pituitary extract on blood pressure, 1908, A., ii, 767. Mummery, William Rest. See Frederick

Thomas Harry.

Munblit, N. See Leopold Spiegel.

Mundici, Curio Manio, Gattermann's reaction for the synthesis of aromatic aldehydes; application to p-xylene, 1904, A., i, 897.

disengagement of the formyl group from certain aromatic aldehydes, 1909, A., i, 719.

Mundici, Curio Manio. See also Mario Betti, and Luigi Francesconi.

Munk, Julius, action of dilute sulphuric acid on the glycol obtained by reduction of propionaldol, 1905, A., i, 559.

Muñoz del Castillo, José, the supposed derivation of radium from uranium,

1907, A., ii, 62.

the radioactivity of Spanish medicinal springs, 1907, A., ii, 63, 218. the radioactivity of medicinal springs

containing nitrogen, 1907, A., ii, 63. probable relationship subsisting between the radioactivity of minerals and cold springs in the Sierra de

Guadarrama, 1907, A., ii, 63. the radioactivity of ashes from the last eruption of Vesuvius [April 1906],

1907, A., ii, 64.

minerals from Motril (Granada), 1907, A., ii, 64.

radioactive cinnabar from Granada

[Spain], 1907, A., ii, 64. radioactivity from the human body,

1907, A., ii, 64. criticisms of the disintegration theory of radioactivity and the theory of chemico-physical molecular dissocia-

tion, 1907, A., ii, 217. production of radioactivity in liquids exposed to the emanation of minerals from San Rafael de el Espinar, 1907,

A., ii, 217.

decay of radioactivity of Spanish mineral waters, 1907, A., ii, 219.

radioactivity of water from Castromonte and Puertollano, 1908, A., ii, 550.

co-efficient of absorption of radioactive emanations in different liquids, 1908, A., ii, 749.

radioactivity of the waters of Lerez, 1908, A., ii, 750.

radioactivity of water from Cucho, 1908, A., ii, 750.

extraordinary radioactivity of water from a spring at Valdermorillo, 1908, A., ii, 1004.

radioactivity of three springs at Ona (Burgos), 1908, A., ii, 1004.

decay of radium emanation when dissolved in water, 1909, A., ii, 109. radioactivity of waters from Alange,

1909, A., ii, 110.

Muñoz del Castillo, José, and Faustino Díaz de Rada, photographic impressions produced by radium emanation, 1908, A., ii, 749.

variation in the electrical conductivity at constant temperature of mineral waters containing radium, 1909, A., ii, 113.

Munroe, Charles Edward, artificial hæmatite crystals, 1908, A., ii, 116.

Munson, Lewis Storms, examination of writing inks, 1906, A., ii, 405.

Munson, Lewis Storms, and Percy Hargraves Walker, reducing sugar methods, 1906, A., ii, 634.

Munson, Lewis Storms. See also Lucius

Moody Tolman.

Munteanu-Murgoci, G., enclosures of garnet-idocrase rock in the Serpentine of Paringu [Southern Carpathians], 1903, A., ii, 29.

Muntz, Edith. See William Alexander

Osborne.

Murachi, Nagataka, sulphur metabolism in cancer patients, 1912, A., ii, 665.

Muraour, Henri, constant head of water for laboratories, 1908, A., ii, 479.

Muraour, J., peppermint oil prepared from dry leaves of Mentha piperita, 1911, A., i, 138.

Muraro, F., estimation of lecithin in grape stones and in wine, 1905, A., ii, 564.

solubility of true and false tannates of quinine, 1908, A., i, 451, 1004.

Murat, Marcel, 1-methylcyclohexan-2-ol and its derivatives, 1909, A., i, 146. condensation of menthones with organo-magnesium compounds; synthesis of homologues of menthol, 1911, A., i, 890.

Murat, Marcel, and Gaëtan Amouroux, condensation of butyrone with organomagnesium compounds, 1912, A., i,

527.

Murat, Marcel, and Cathala, acetals derived from cyclic alcohols, 1912, A., i. 846.

Murat, Marcel. See also Gaëtan Amouroux, Alphonse Mailhe, and Paul Sabatier.

Murco, H. See A. Astruc.

Murdfield, Rudolf. See Josef König, and Karl Lendrich.

Murlin, John Raymond, gelatin as a substitute for protein in food, 1905, A., ii, 180.

sparing action of gelatin, 1907, A., ii, 186.

nutritive value of gelatin, 1907, A., ii, 793, 895.

Murlin, John Raymond, influence of carbohydrates on protein metabolism, 1908, A., ii, 306.

protein metabolism in development,

1909, A., ii, 250.

the nitrogen balance in pregnant dogs, 1910, A., ii, 729.

metabolism of development. II. Nitrogen balance during pregnancy and menstruation in the dog, 1910, A., ii, 1082.

metabolism of development. III. Qualitative effects of pregnancy on protein metabolism in the dog, 1911.

A., ii, 1004.

Murlin, John Raymond, and H. C. Bailey, the urine of late pregnancy and the puerperium, 1912, A., ii, 371.

Murlin, John Raymond, and Thorne M. Carpenter, the protein metabolism of parturient women, 1910, A., ii, 729.

Murmann, Ernst, preparation of 2phenylquinoline, 1904, A., i, 818. trinitro-m-cresol, 1904, A., i, 870.

potassiuphonic acid, 1904, A., i, 970.

3-sulphonic acid, 1904, A., i, 921.

2-phenylquinoline, 1904, A., i, 926. solubility of copper oxide, hydroxide, and carbonate in ammonia, 1904, A., ii, 783.

analysis of bar copper (reply to Hampe's criticism), 1905, A., ii, 421.

titration of zinc with potassium ferrocyanide, 1906, A., ii, 396.

estimation of the atomic weight of copper, 1906, A., ii, 613.

formation of nitric acid in soils, 1907, A., ii, 905.

laboratory methods, 1909, A., ii, 990; 1911, A., ii, 539.

the precipitation of calcium oxalate, 1910, A., ii, 454.

separation of calcium and magnesium, 1910, A., ii, 897; 1911, A., ii, 440. derivatives of 2-phenylquinoline. II.,

1911, A., ii, 157. estimation of lithium, 1911, A., ii, 334, 439.

simplification of gravimetric analysis, 1912, A., ii, 87.

Murphy, Arthur, jun. See Arthur Michael.

Murphy, F. T. See Walter Bradford Cannon.

Murray, Charles, influence of calcium salts on the heat-coagulation of fibrinogen and other proteins, 1906, A., ii, 291.

Murray, Charles. See also John Alexander Macwilliam. Murray, Grantland. See Harry Clary Jones.

Murschhauser, Hans, burette for the analysis of high-grade oxygen, 1909,

A., ii, 90.

what influence does the exact estimation of the tension of water vapour exert on the results obtained in the respiration experiments in the Regnault-Reiset apparatus as modified by Zuntz and Oppenheimer, 1910, A., ii, 784.

the respiratory exchange at extreme external temperatures in relation to the body surface; the time course of carbon dioxide production and oxygen consumption at such temperatures, 1912, A., ii, 776.

a respiration apparatus, 1912, A., ii,

851

Murschhauser, Hans, and H. Haffmans, the utilisation of different sugars for the formation of glycogen in the liver, 1911, A., ii, 414.

Murschhauser, Hans, and Hubert Hidding, the influence of dry and moist air on gaseous metabolism, 1912, A.,

ii, 850.

Murschhauser, Hans. See also Stephan Engel, Wilhelm Prandtl, and Arthur Schlossmann.

Murúa, A. See Alfred Schaeffer.

Musatty, Iginio. See Luigi Mascarelli.
 Muset, Joseph, secondary C₇ and C₈ alcohols, 1907, A., i, 374.
 Muset, Joseph. See also Louis Henry.

Muset, Joseph. See also Lowis Henry. Mushinsky, P. G. See Jacob I. Michailenko.

Musselius, R., crystalline polymeride of

isobutaldol, 1908, A., i, 761.

Mussell, Albert George, Ferdinand Bernard Thole, and Albert Ernest Dunstan, the viscosity of compounds containing tervalent nitrogen. Part I. The amines, 1912, T., 1008; P., 70.

Mussell, Albert George. See also Albert

Ernest Dunstan.

Musuroff, Nicolaus. See Alexander M. Saytzeff.

Mutch, N., histozyme, 1912, A., ii, 579. Mutch, N., and Marcus Seymour Pembrey, the influence of tetrahydro-β-naphthylamine on temperature and respiratory exchange, 1911, A., ii, 1017.

· Muter, John, obituary notice of, 1912,

T., 691.

Mutermilch, W. See Gabriel Bertrand. Muth, Geory, preparation of aluminium, chromium, and iron formates, 1911, A., i, 257. Muthmann, [Friedrich] Wilhelm, [preparation of metals, metalloids, alloys], 1904, A., ii, 410.

Muthmann, Wilhelm, and Emil Baur, dissociation of lanthanum hydride and cerium hydride, 1903, A., ii, 213.

Muthmann, Wilhelm, and Heinrich Beck, alloys of cerium and lanthanum, 1904, A., ii, 408.

hydrides and nitrides of neodymium and praseodymium, 1904, A., ii, 409.

Muthmann, Wilhelm, and Hans Hofer, burning of nitrogen to nitric oxide in the electric flame, 1903, A., ii, 206.

Muthmann, Wilhelm, and Karl Kraft, cerium and lanthanum, 1903, A., ii,

212

Muthmann, Wilhelm, and A. Schaidhauf, behaviour of carbon dioxide and of some mixtures of gases in the high tension electric flame, 1911, A., ii, 790.

Muthmann, Wilhelm, and Ludwig Weiss, metals of the cerium group,

1904, A., ii, 406.

Muthmann, Wilhelm, Ludwig Weiss, and Heinrich Heramhof, absorption and reflection spectra of some rare earths, 1907, A., ii, 726.

porcelain colours, 1907, A., ii, 774.

Muthmann. Wilhelm, Ludwig Weiss, and Alfred Mai, preparation of metallic molybdenum, 1907, A., ii, 781.

Muthmann, Wilhelm, Ludwig Weiss, and Josef Metzger, metallic calcium,

1907, A., ii, 767.

Muthmann, Wilhelm, Ludwig Weiss, and Rudolf Riedelbauch, metallic vanadium, columbium, and tantalum, 1907, A., ii, 781.

Muthmann, Wilhelm, Ludwig Weiss, and Julius Scheidemandel, preparation of the metals of the rare earths by electrolysis of the fluorides, 1907, A., ii, 772.

Muto, K., the toxicity of atoxyl, 1910, A., ii, 640.

Muttelet, F., analysis of artificial honey, 1910, A., ii, 660.

Muynck, R. de, conductivity of-gaseous mixtures at the moment of explosion, 1908, A., ii, 345.

Myers, Chester Newton. See Harmon Northrop Morse.

Myers, James Eckersley, a method of estimating potassium iodate, 1912, P., 99.

Myers, James Eckersley. See also James Brierley Firth, and Alfred Holt, jun. Myers, Ralph E., results obtained in electrochemical analysis by the use of a mercury cathode, 1904, A., ii, 780.

Myers, Victor Caryl, the potassium in cerebro-spinal fluid, 1909, A., ii,

salts of cytosine, thymine, and uracil, 1910, A., i, 344.

Myers, Victor Caryl, and G. O. Volovic. metabolism in an experimental fever with special reference to creatinine elimination, 1912. A., ii, 277.

Myers, Victor Caryl. See also Francis

Gano Benedict.

Mylius, Bruno. See Walter Herz. Mylius, Franz [Benno], the albumin reaction of acids, 1903, A., i, 373.

molybdic acid, 1903, A., ii, 298. eosin reaction of glass at fractured surfaces, 1907, A., ii, 910; 1910, A., ii, 656.

quantitative gold analysis with ether. 1911, A., ii, 444.

the purity of commercial metals, 1912.

A., ii, 450. Mylius, Franz, and Rudolf Dietz, zinc chloride; solubility of salts. XIV.,

1905, A., ii, 321. Mylius, Franz, and Eric Groschuff, aand B-silicie acids, 1906, A., ii, 160. production and alteration of glass containing water, 1907, A., ii, 764.

Mylius, Franz, and Karl Hüttner, the use of ether in metal analysis, 1911,

A., ii, 540.

Mylius. Franz, and Adolph Meusser, estimation of boric acid as phosphate, 1904, A., ii. 209.

use of quartz vessels in the laboratory. 1905, A., ii, 316.

Mylius, Franz. See also Friedrich Kohl-

Mylo, Bruno, action of acid chlorides on ethyl diethoxyacetate, 1912, A.,

dichloroacetaldehyde and the formation of vinyl acetates from bromoacetaldehydes, 1912, A., i, 335.

Mylo, Bruno. See also Ernst Koenigs, Franz Sachs, and Alfred Wohl.

Mysik, B. See Karl Andrlik.

N

Nabarro, David Nunes, action of certain metadic salts on the growth of microorganisms, 1903, A., ii, 387.

Nabokich, A. J., anaerobic changes in seeds in potassium nitrate solutions, 1904, A., ii, 69.

Nabokich, A. J., intramolecular respiration in higher plants, 1904, A., ii,

the liberation of carbon dioxide by dead parts of plants, 1908, A., ii,

Nabokich, A. J., and A. F. Lebedeff, oxidation of hydrogen by bacteria, 1907, A., ii, 43.

Nachtigall, Godhart; See Ferdinand Henrich.

Nacken, Richard, the direction of the freezing-point curve of a binary system at a point corresponding with the formation of a compound, 1907, A., ii, 530.

miscibility of the cadmium haloids,

1907, A., ii, 546.

formation and transformation of mixed crystals and double salts in the binary systems of the dimorphous sulphates of lithium, sodium, potassium, and silver, 1907, A., ii,

langbeinite and vanthoffite [KoSO4, 2MgSO₄ and 3Na₂SO₄, MgSO₄], 1908,

A., ii, 692.

transformations in mixed crystals of sodium and potassium sulphates,

1910, A., ii, 501.

miscibility of glaserite with sodium sulphate and its dependence on the temperature, 1911, A., ii, 109.

formation of apatite, 1912, A., ii, 1061.

Nacken, Richard. See also Siegfried Hilpert.

Nádai, Géza. See Fritz Ullmann. Näbe, (Fräulein). See Ernst von Meyer. Nägele, Hans, substituted rhodanins and some of their aldehyde condensa-

tion products. XII., 1912, A., i, 794. Nägeli, Walter. See Conrad Willgerodt.

Naegell, Heinrich. See Heinrich Kili-

Nagano, Junzo. See Franz Röhmann. Nagaoka, Muneshige, action of various insoluble phosphates on rice plants, plants, 1904, A., ii, 837.

behaviour of the rice plant to nitrates and ammonium salts, 1904, A., ii,

837.

effects of soil ignition on the availability of phosphoric acid for rice culture in paddy fields, 1904, A., ii, 838;

influence of liming on the action of phosphatic manures, 1904, A., ii, 839.

Nagaoka, Muneshige, stimulating action of manganese on rice, 1906, A., ii, 888.

Nagel, George, formation of solid surfaces on liquids, 1909, A., ii, 797. Nagel, W. A., and Ernst Roos, iodine

in the thyroid, 1903, A., ii, 226. Nagelschmidt, E. See Alfred Wohl.

Nagelschmidt, Franz, and F. L. Kohlrausch, the physiological basis of radium emanation therapy, 1909, A., ii. 165.

Nagornoff, Nicolai N., isomorphous mix ures of para-dihalogen derivatives

of benzene, 1911, A., i, 27.
Nagornoff, Nicolai N., and Léon Rotinjanz, a simple direct electrical method of determining heats of vaporisation, 1911, A., ii, 965.

Nagornoff, Nicolai N., S. F. Schemtshuschny, and Nicolai S. Kurnakoff, efflux pressure of isomorphous mixtures of p-dihalogen derivatives of benzene,

1911, A., ii, 18.

Nakamura, Masajiro, can lithium and eæsium exert any stimulant action on phanerogams? 1904, A., ii, 762.

can salts of zinc, cobalt, and nickel in high dilution exert a stimulant action on agricultural plants? 1904, A., ii, 766.

the most favourable ratio of lime to magnesia for the mulberry tree,

1908, A., ii, 126.

Nakamura, Teikichi, improvement of a soil relatively deficient in magnesia, 1906, A., ii, 389.

Nakano, Tomonori. See Masataro Hayakawa.

Nakaseko, Rokuro, new transformations of m-sulphamidobenzoic acid under the influence of heat, 1912, A., i, 452.

Nakayama, Morihiko, modification of Huppert's test for bile pigment, 1903, A., ii, 120.

erepsin, 1904, A., ii, 425.

Namba, I., behaviour of onions to stimu-

lants, 1908, A., ii, 618. Namba, I., and C. Kanomata, efficacy of calcium cyanamide under different

manuring conditions, 1908, A., ii, 623. Name, Ralph Gibbs van, conductivity of saturated aqueous solutions of black and red mercuric sulphides, 1904, A., ii, 378.

Name, Ralph Gibbs van, and Rowland Sherwood Bosworth, mixed crystals of silver sulphate and dichromate, 1910, A., ii, 410.

rates of solution of certain metals in dissolved iodine and their relation to the diffusion theory, 1911, A., ii, 973. Name, Ralph Gibbs van, and Graham Edgar, velocities of certain reactions between metals and dissolved halogens. 1910, A., ii, 280.

Name, Ralph Gibbs van, and Leopold Gräfenberg, formation of electrolytic gas by an alternating current, 1904,

A., ii, 465.

Nametkin, S. S., action of nitric acid on saturated hydrocarbons, 1908, A., i, 329; 1909, A., i, 93, 372; 1910, A., i, 829.

cyclohexyl-\psi-nitrole, 1910, A., i. 829. action of nitric acid on methylcyclo-

hexane, 1910, A., i, 830.

preparation of methylcyclopentane,

1912, A., i, 172.

action of nitric acid on evclopentane and methylcyclopentane, 1912, A., i, 175.

Namias, Rodolfo, analyses of some alloys and slags, 1908, A., ii, 326.

Namias, Rodolfo. See also Luigi Carcano.

Namikawa, S., fresh-water algæ as human food, 1906, A., ii, 884.

effect of various potassium manures on the growth of Colocasia antiquorum, 1906, A., ii, 891.

lime factor for flax and spinach, 1906,

A., ii, 892.

Nance, John Trengrove, the existence of a carbide of magnesium, 1905, P.,

the rusting of iron, 1906, P., 143; discussion, P., 144.

Nankivell, A. T., the sand-filtration and precipitation of chalk waters. 1911, A., ii, 977.

Nanty, the equilibrium between potassium hydrogen carbonate and trihydrated magnesium carbonate, 1911, A., ii, 103.

action of potassium hydrogen carbonate on magnesium chloride and on soluble magnesium salts in general, 1911, A., ii, 282.

Naoum, Phokion. See Hans Stobbe. Napper, Sidney Scrivener. See Robert Robertson.

Naquin, W. P. See Fritz Zerban.

Narbutt, J. von, fusion, boiling-point, and vapour composition curves (760 mm. pressure) in the binary systems ortho-+para-, ortho-+meta-, para-+ meta-bromonitrobenzene; fusion curves for mixtures of diphenylamine and phenanthrene, 1906, A., ii, 147.

Narbutt, J. von. See also Alex. D. Bogojawlenski, and Karl Andreas

Hofmann.

Nardacci, Angelo. See Luigi Balbiano. Nardelli, Giulio, new organo-mercury compounds: "iodoargyrum," 1908,

A., ii, 715.

Nardelli, Giulio, and Vincenzo Paolini, preparation of a hydriodide of 4-dimethylamino-1-phenyl-2:3-dimethyl-5-pyrazolone, 1907, A., i, 448.

Narracott, Percival. See Charles Alex-

ander Keane.

Nasari, V., influence of some artificial oxydases and of some metallic compounds on the growth of wheat, 1910, A., ii, 1103.

Nash, Leonard Myddleton, Chinese tallow-

seed oil, 1904, A., ii, 597.

Nasini, Raffaele, radioactivity in relation to the presence of helium, 1904, A.,

ii, 399, 461.

fundamental laws of stoicheiometry and the atomic theory; the Faraday lecture by W. Ostwald, 1905, A., ii, 514.

the optical influence of contiguity of unsaturated groups, 1907, A., ii,

519

the most urgent problem of chemistry, 1907, A., ii, 612.

origin of the boric acid in the suffioni of Tuscany, 1908, A., ii, 862.

the history of spectrochemistry, 1912,

A., ii, 709.

Nasini, Raffaele, and Fernando Ageno, solubility of orthoboric acid, its molecular weight, and its transformation into other hydrates, 1911, A., ii, 485.

the presence of uranium in Italian rocks; granites from the island of Monteeristo and radioactive tufa from Fiuggi, 1912, A., ii, 724.

volatility of boric acid in steam: boiling of its saturated solutions with the solid phase, 1912, A., ii, 937

Nasini, Raffaele, and I. Ageno, solubility and hydrates of boric acid,

1909, A., ii, 999.

Nasini, Raffuele, and Francesco Anderlini, spectroscopic observations at very high temperatures, 1907, A., ii, 61.

experiments with the hot-cold tube in the electric furnace, 1907, A., ii,

81.

Nasini, Raffaele, Francesco Anderlini, and Mario Giacomo Levi, radioactivity of the boric acid suffioni of Tuscany, and the amount of the emanation contained therein, 1905, A., ii, 786.

Nasini, Raffaele, Francesco Anderlini, and Roberto Salvadori, Italian terrestrial emanations. II. Gases from Vesuvius, the Flegrei Plains, the Albule waters of Tivoli, and the springs of Viterbo, Pergine, and Salsomaggiore, 1905, A., ii, 538.

Nasini, Raffaelle, and Enrico Baschieri, analysis of molybdenite from Calabria,

1912, A., ii, 773.

Nasini, Raffaelle, and Mario Giacomo Levi, radioactivity of the springs of Finggi, near Anticoli, 1906, A., ii, 324.

radioactivity of volcanic products of the last eruption of Vesuvius (April, 1906) compared with that of older materials, 1907, A., ii, 3.

physico-chemical investigation of the springs of Fiuggi, near Anticoli,

1908, A., ii, 401.

ozonisation of air by the action of radium salts and emanation, 1908, A., ii, 798.

appearance of radioactivity in inactive volcanic materials of the last great eruption of Vesuvius (April, 1906), 1909, A., ii, 7.

radioactivity of rocks and other materials from the island of Ischia,

1909, A., ii, 7.

radioactivity of Italian gaseous emanations, 1909, A., ii, 110.

radioactivity of Italian minerals, 1910,

A., ii, 1026.

Nasini. Ruffaele, Mario Giacomo Levi, and Fernando Ageno, chemico-physical investigations and analysis of the ironand arsenic-containing water of Roncegno, 1910, A., ii, 222.

Nasini, Raffuele, and C. Porlezza, radioactivity of the waters of Monte Amiata and experiments on the atmospheric dispersion of that district, 1912, A., ii, 525, 1123.

presence of notable quantities of boric acid in the mineral waters of Salsomaggiore, 1912, A., ii, 1184.

Naske, Theodor, analysis of iron, 1903, A., ii, 185.

forms of silicon in iron, 1903, A., ii,549.

Nasmith, G. G., and E. Fidlar, the nitro-molybdate method for the detection of phosphorus in tissues, 1908, A., ii, 776.

Nasmith, G. G., and D. A. L. Graham, poisoning by carbon monoxide, 1907,

A., ii, 118.

Nastukoff, Alexander M., reaction between benzene and formaldehyde, 1904, A., i, 242. Nastukoff. Alexander M., action of formaldehyde on naphtha and its distillation products, 1904, A., i, 801.

condensation of aromatic hydrocarbons with the carbohydrates, cellulose, and dextrose, 1907, A., i, 413.

preparation of diphenylmethane, 1909,

A., i, 19.

Nastukoff, Alexander M., and I. I. Kotukoff, phenyldesoxyn of dextrose,

1912, A., i, 762.

Nastukoff, Alexander M., and P. M. Kroneberg, condensation of formalde-

hyde with o-toluidine, 1912, A., i, 962. Nastukoff, Alexander M., and K. L. Maljaroff, action of formaldehyde on petroleum distillates; formation of liquid condensation products, 1911, A., i, 249.

Nastukoff, Alexander M., and V. I. Malkaln, condensation of formaldehyde with aniline, 1912, A., i, 962.

Natanson, Ladislas, theory of dispersion in gaseous substances, 1910, A., ii, 170.

Nathan, Leopold, influence of metals on fermenting liquids, 1904, A., ii, 505.

Nathan, Leopold, and Willy Fuchs, relations of oxygen and of movement of the nutrient solution to the increase and fermentative activity of yeast, 1906, A., ii, 697.

Nathan, Leopold, Arthur Schmid, and Willy Fuchs, influence of metals on fermenting liquids, 1905, A., ii, 340,

847; 1906, A., ii, 569.

Nathanson, Sigismund. See August Michaelis.

Nauckhoff, Sigurd, the crystallographic distinctions of nitroglycerol, 1912, A., i, 63.

Naumann, Alexander [Nicolaus Franz], and Erich Alexander, reactions of salts in solutions other than aqueous, 1904, A., ii, 819.

Naumann, Alexander, Wilhelm Eidmann, Max Müller, Paul Schulz, and Ernst Voigt, reactions between salts in non-aqueous solutions. In acetone, 1905, A., ii, 29.

Naumann, Alexander, Max Hamers, and Emil Henninger, reactions in non-aqueous solutions. V. In ethyl ace-

tate, 1910, A., ii, 211.

Naumann, Alexander, Ludwig Moeser, and Ernst Lindenbaum, vanadium pentoxide as an accelerator of oxidation, 1907, A., ii, 273.

Naumann, Alexander, and Wilhelm Müller, estimation of hydrolysis by distillation, 1906, A., ii, 732.

Naumann, Alexander, Wilhelm Müller, and Eduard Lantelme, hydrolysis of sodium phenoxide, 1907, A., i, 314.

Naumann, Alexander, Jean Rill, and Ferdinand Bezold, reactions in nonaqueous solutions. IV. In methyl

acetate, 1909, A., ii, 1018.

Naumann, Alexander, and Adolf Rücker, influence of silver nitrate on the solubility of silver nitrite, 1905, A., ii, 522.

earlier methods for the estimation of hydrolysis, 1906, A., ii, 732.

hydrolysis of ammonium salts, 1906, A., ii, 851.

Naumann, Alexander, and Johannes Schroeder, reactions of salts in nonaqueous solutions. III., 1905, A., ii,

Naumann, Kurt. See Alwin Goldberg, and Julius Tafel.

Naumann, Robert, electromotive force of the hydrocyanic acid cell, 1910, A., hydrolysis of evanogen 1910, A., ii,

938.

Wilhelm, estimation of Naumann, citrate-soluble phosphoric acid, 1903, A., ii, 330.

Naumann, Wilhelm. See also Paul Rabe.

Naumova, (Miss) S. See (Miss) S. Woinarowskaja.

Naumoff, S. See Wassili-W. Scharwin. Naumoff, Wladimir, reaction between organic magnesium compounds and dibromoanthracene tetrabromide, 1910, A., i, 549.

Naumoff, Wladimir. See also Wassili W. Scharwin.

Naunton, William Johnson Smith. Siegfried Ruhemann.

Navassart, Emanuel, the influence of alkalis and acids on the autolysis of yeast, 1911, A., ii, 141.

influence of antiseptics on yeast autolysis, 1911, A., ii, 640.

Navassart, Emanuel. See also Ferdinand Blumenthal.

Nawiasky, Paul, the decomposition of amino acids by Bacillus vulgaris, 1908, A., ii, 614.

Nawiasky, Paul, and S. W. Korschun, estimation of the hardness of water, 1907, A., ii, 579.

Nawiasky, Paul. See also Otto Diels.

Naylor, Jonathan. See William Henry Perkin, jun.

Naylor, William Arthur Harrison, and E. J. Chappel, colouring matters of Rosa gallica, 1904, A., i, 909.

Naylor, William Arthur Harrison, and E. J. Chappel, examination of drugs for arsenic, 1905, A., ii, 117.

on Cucumis trigonus and colocynthin,

1907, A., ii, 807.

Nazari, Viltorio, action of wines and of alcohols on the frog, 1908, A., ii, 973. old and new nitrogenous fertilisers: calcium cyanamide, calcium nitrate, ammonia sulphate, and sodium nitrate, 1908, A., ii, 1068.

Neave, George Ballingall, a proposed test for halogens, 1909, A., ii, 827.

the Sabatier-Senderens test for distinguishing between primary, secondary, and tertiary alcohols, 1909, A., ii, 835.

the catalytic action of copper at 300° on some alcohols of the terpene group, 1912, T., 513; P., 53.

group, 1912, T., 513; P., 53.
solubilities of the lead salts of the
higher fatty acids in ether and in
light petroleum, 1912, A., i, 748.

Neave, George Ballingall. See also Thomas Purdie.

Neber, Peter. See Otto Fischer.

Neckel, Wilhelm. See Richard Stoermer.

Neckel, Withelm. See Richard Stoermer.

Nedokuchaeff, Nikolai K., proteins and some other nitrogen compounds in plants, 1903, A., ii, 508.

storage of nitrates in plants, 1904, A.,

ii, 282.

Needham, Edward Rushton, and William Henry Perkin, jun., o-nitrobenzoylacetic acid, 1904, T., 148; P., 10.

Neelmeier, Wilhelm, action of iodine on silver nitrate, 1904, A., ii, 403.

Nef, John Ulric, dissociation of the glycols and of the glycerols. I. and II., 1905, A., i, 3.

fundamental conceptions underlying the chemistry of the element carbon,

1905, A., i, 109.

dissociation processes in the sugar group. I. Behaviour of carbohydrates towards Fehling's solution and other oxidising agents, 1908, A., i, 5.

dissociation processes in the sugar group. II. Behaviour of carbohydrates towards alkali hydroxides,

1910, A., i, 711.

Nefgen, August. See Richard Anschütz. Negreanu, Demetre, variation of temperature of fusion with pressure; relation ship between absolute temperature of fusion and pressure, 1906, A., ii, 422.

Negro, Carlo, the radioactivity of dew,

1910, A., ii, 249.

Negro, Carlo. See also Giovanni Costanzo. Neher, Fred, and William Foster, preparation and physical properties of as-tetrachloroethyl ether, 1909, A., i, 202.

as-dichlorovinyl ethyl ether: its preparation from tetrachloroethyl ether and its physical properties, 1909,

A., i, 202.

Neidig, Ray E., fruit of Menispermum canadense, 1910, A., ii, 801.

Neidig, Ray E. See also Arthur Wayland Dox.

Neil, Archibald A., dinaphthylene dioxide, 1906, A., i, 356.

Neilson, Charles Hugh, hydrolysis and

synthesis of fats by platinum black, 1904, A., i, 4. catalysis and enzyme action, 1906. A..

i, 125.

inversion of starch by platinum black,

1906, A., i, 235.

Neilson, Charles Hugh, and Orville

Harry Brown, effect of ions on the
decomposition of hydrogen peroxide
by platinum black, 1904, A., ii,

229. effect of ions on the decomposition of hydrogen peroxide and the hydrolysis of ethyl butyrate by an aqueous extract of pancreas, 1904, A., ii,

229.
further proof of ionic action in physiological processes, 1905, A., ii, 45.

Neilson, Charles Hugh, and D. H. Lewis, effect of diet on the amylolytic power of saliva, 1908, A., ii, 709.

Neilson, Charles Hugh, and M. H. Scheele, effect of diet on saliva, 1909,

A., ii, 70.

Neilson, Charles Hugh, and Oliver Perkins Terry, effect of dextrose and certain salts on the rate of transformation of glycogen into dextrose, 1905, A., ii, 736.

effect of hypnotics and antipyretics on the rate of catalysis of hydrogen dioxide by kidney extract, 1905,

A., ii, 738.

adaptation of the salivary secretion to diet, 1906, A., ii, 238.

effect of potassium iodide on ptyalin, 1908, A., ii, 612.

Neilson, Charles Hugh. See also Orville Harry Brown.

Neimann, Ernst. See Carl Neuberg. Neimann, Wilhelm. See Carl Neu-

berg.

Neish, Arthur Colon, separation of thorium from cerium, lanthanum, and didymium by m-nitrobenzoic acid, 1904, A., ii, 663. Neish, Arthur Colon, preparation of pure cerium salts and the colour of cerium oxide, 1909, A., ii, 483.

Neisser, Max, and Ulrich Friedemann, phenomena of flocculent precipitation,

1904, A., ii, 546.

Neizert, Carl. See Eberhard Rimbach. Nelken, Fritz, and Hugo Simonis, action of Grignard compounds on o-phthalaldehyde, 1908, A., i, 348.

Nelson, E. K., chemical investigation of the oil of chenopodium, 1911, A., i,

797.

capsaicin, the pungent principle of capsicum, and the detection of capsicum, 1911, A., ii, 551.

the quantitative estimation of ketones in essential oils, 1912, A., ii, 396.

Nelson, John Maurice, and Kaufman George Falk, electron conception of valency in organic chemistry, 1909, A., i, 349.

Nelson, John Maurice. See also Marston Taylor Bogert, Kaufman George

Falk, and John White.

Nelson, Louis, the composition of the protamine from salmon spermatozoa, 1908, A., i, 1030.

thymamine, a protamine from the thymus gland, 1908, A., i, 1030.

Němeček, Hynek. See Emil Votoček. Nemeth, Karl. See Josef Mayrhofer. Neminsky, W. W., and Wladimir

Alexandrowitsch Plotnikoff. trolysis of the compounds of aluminium bromide with toluene and benzene, 1908, A., i, 407.

Némirowsky, G. See Charles Couchet. Nemlich, J. See Adolf Franke.

Nemser, M. H., digestion in animals. IV. Fate of calomel given by the mouth, 1906, A., ii, 778.

animal digestion. XIV. Behaviour of alcohol in the digestive tract,

1907, A., ii, 894.

Nenadkewitch, K. A., analysis of zincblende from Russia, 1903, A., ii, 378. turanite and alaite, two new vanadium minerals, 1909, A., ii, 411.

Nenning. See Joh. Matuschek.

Neogi, Pañchānan, new method of preparing mercurous iodide, 1907, A., ii, 772.

reduction of Fehling's solution to metallic copper; decomposition of copper mirrors on glass, 1908, A., ii, 848.

orthophosphoric acid as a dehydrating catalytic agent. Part I. The condensation of acetone in presence of phosphoric acid, 1911, T., 1249; P., 71.

Neogi, Panchanan, trialkylammonium nitrites and nitrites of the bases of the pyridine and quinoline series. Parts I. and II., 1911, T., 1252, 1598; P., 71, 208.

preparation of the nitrites of the primary, secondary, and tertiary ammonium bases; preliminary note,

1911, P., 242.

nitrites of primary, secondary, and tertiary bases, 1912, T., 1608; P.,

preparation of the nitrites of primary, secondary, and tertiary amines.

Part I., 1912, P., 41.

Neogi, Pañchanan, and Birendra Bhusan Adhicary, preparation of ammonium nitrite by the sublimation in a vacuum of a mixture of ammonium chloride and alkali nitrites, 1910. P., 297; 1911, T., 116.

preparation of phenylnitromethane [ω-nitrotoluene] by the action of mercurous nitrite on benzyl chloride,

1911, A., i, 120.

reactions in the presence of nickel. (a) Inability of nitrogen and hydrogen to combine in presence of nickel. (b) Reduction of oxides of nitrogen. sulphur, and phosphorus in presence of nickel, 1911, A., ii, 107.

Neogi, Panchanan. See also Prafulla

Chandra Ray.

Neovius, Werner. See Roland Scholl. Neresheimer. Heinrich. See Dietrich Harries.

Neresheimer, Julius. See Oscar Piloty. Neresheimer, Karl. See Carl Dietrich Harries.

Nerking, Joseph, chemistry of bonemarrow, 1908, A., ii, 516.

the partition of lecithin in the animal organism, 1908, A., ii, 608. the methods of lecithin estimation,

1910, A., ii, 162.

Nerking, Joseph, and E. Haensel, the lecithin-content of milk, 1908, A., ii,

Nernst, [Hermann] Walther, proof of Gibbs' phase rule, 1903, A., ii, 356.

determinations of molecular weights at very high temperatures, 1903, A., ii, 636.

limits of stability of hydrogen per-

oxide, 1904, A., ii, 249.

theory of reaction velocity in nonhomogeneous systems, 1904, A., ii,

chemical equilibrium and fall of temperature, 1904, A., ii, 389.

Nernst, [Hermann] Walther, application of the laws of chemical equilibrium to mixtures of toxins and antitoxins, 1904, A., ii, 578.

numerical values of some important physico-chemical constants, 1904,

A., ii, 706.

formation of nitric oxide at high temperatures, 1905, A., ii, 24; 1906, A., ii, 437.

determination of chemical equilibrium from explosion processes. II., 1905, A., ii. 444.

formation of hydrogen peroxide at high temperatures, 1906, A., ii, 17. calculation of chemical equilibria from

thermal measurements, 1906, A., ii,

727.

relation between development of heat and maximum work in the case of condensed systems, 1907, A., ii, 153.

the development of general and physical chemistry in the last forty years, 1908, A., ii, 1.

calculation of electromotive forces from thermal data, 1909, A., ii, 291.

lecture experiment to show the rate of chemical action, 1909, A., ii, 878. specific heat at low temperatures. II.,

specific heat at low temperatures. 11., 1910, A., ii, 263; 1911, A., ii, 368.

specific heat and chemical equilibrium of ammonia gas, 1910, A., ii, 265.

thermodynamic calculation of the vapour pressure of water and ice, 1910, A., ii, 826.

the specific heat of ice, water, and water vapour, 1910, A., ii, 844.

theory of specific heats and the application of the doctrine of definite increments of energy to physical chemical questions, 1911, A., ii,

the energy content of solid substances,

1911, A., ii, 964.

Nernst, Walther, Fritz Koref, and F. A. Lindemann, specific heat at low temperatures. I., 1910, A., ii, 263.

Nernst, Walther, and F. A. Lindemann, specific heat at low temperatures. V., 1911, A., ii, 466.

specific heat and the theory of finite increments of energy, 1911, A., ii, 1059.

Nernst, Walther, and Edmund S. Merriam, theory of the residual current, 1905, A., ii, 674.

Nernst, Walther, and Ernst Hermann Riesenfeld, gravimetric analysis of minute quantities of material, 1903, A., ii, 571. Nernst, Walther, and Julius Sand, hypochlorous acid; electromotive behaviour, 1904, A., ii, 612. Nernst, Walther, and H. von Warten-

Nernst, Walther, and H. von Wartenberg, dissociation of carbon dioxide,

1905, A., ii, 629.

dissociation of water vapour. II., 1906, A., ii, 729.

Nesmjeloff, V., the simultaneous esti-

Nesmjeloff, V., the simultaneous estimation of carbon monoxide, hydrogen, and methane by fractional combustion, 1909, A., ii, 519.

Nest, J. S. van, mercury haloids, 1910,

A., ii, 295.

Nestler, Anton, fruit of Capsicum annuum [chilies], 1906, A., ii, 640. a simple method for detecting benzoic acid in cranberries, 1909, A., ii,

Netolitzky, Fritz, poisonous constituent of the Alpine salamander, Salamandra

atra, 1904, A., i, 770.

Netscher, Hans. See Ernst Beckmann. Nettel, Rudolf. See Hans Stobbe.

Netto, M., decanting apparatus for laboratory purposes, 1910, A., ii, 540.

Neubauer, Ernst, is the difference in the behaviour of lævulose and dextrose as glycogen formers in diabetes characteristic only for this condition? 1909, A., ii, 915.

the fate of lactic acid in normal animals, and in those poisoned with phosphorus, 1909, A., ii,

1041.

the action of antiglycosuric medicaments and liver glycosuria, 1912, A., ii, 962.

Neubauer, Ernst, and Otto Porges, the inefficiency of the suprarenals in cases of phosphorus poisoning, 1911, A., ii, 637.

Neubauer, Ernst. See also Sigmund Fränkel, Hermann Fühner, Otto

Loewi, and Otto Porges.

Neubauer, Hugo, estimation of citratesoluble phosphoric acid in basic slags by the molybdate method, 1903, A., ii, 102.

estimation of potassium by the modified Finkener method, 1903, A., ii,

181.

estimation of the alkalis in vegetable substances, 1904, A., ii, 209.

simplified method for determining potassium, sodium, calcium, magnesium, and phosphoric acid in hydrochloric acid soil extracts 1906, A., ii, 52.

lupines, 1906, A., ii, 625.

Neubauer, Hugo, estimation of potassium in mixed manures by the modified Finkener method, 1907, A., ii, 578.

Neubauer, Hugo, and F. Lücker, Lorenz's method for the estimation of phosphoric acid, 1912, A., ii, 386.

Neubauer, Otto, the degradation of amino-acids in the organism under normal and pathological conditions, 1909, A., ii, 750.

Neubauer, Otto, and Wilhelm Falta, fate of certain aromatic acids in acids in alcaptonuria, 1904, A., ii, 629.

Neubauer, Otto, and Hans Fischer, liver functions (deamidation, reduction, and carbon dioxide cleavage in the artificially perfused liver), 1910, A., ii, 790.

Neubauer, Otto, and Leopold Flatow, synthesis of alcaptonic acids, 1907,

Neubauer, Otto, and Konrad Fromherz, degradation of amino-acids by fermentation with yeast, 1911, A., i, 201.

Neubauer, Otto, and Walter Gross. tyrosine katabolism in the artificially perfused liver, 1910, A., ii, 790.

Neubauer, Otto, and Otto Warburg, a synthesis with acetic acid in the artificially perfused liver, 1911, A., ii, 53.

Neuberg, Carl, resolution of racemic aldehydes and ketones, 1903, A., i,

the phenylmethylhydrazine reaction of fructose, 1905, A., i, 90.

amyloid, 1905, A., i, 162.

the pyrrole reaction, 1905, A., ii, 127. chemistry of cancer. II. Abnormal fermentative occurrences, 1905, A., ii, 338.

estimation of glycuronic acid, 1905,

A., ii, 658.

detection of lævulose in the presence of glucosamine, 1905, A., ii, 769.

hydrogenation of cholesterol, 1906, A., i, 356.

origin of optically active fatty acids in nature, 1906, A., i, 923.

tryptophan, 1906, A., i, 1000; 1907, A., i, 955.

reaction of cholesterol with δ-methylfurfuraldehyde, 1906, A., ii, 497. cancer, 1906, A., ii, 875.

resolution of raffinose into sucrose and galactose, 1907, A., i, 388.

origin of mineral oil (artificial preparation of optically active petroleum), 1907, A., i, 577.

synthesis of optically active petroleum,

1907, A., i, 997.

Neuberg, Carl, electrolysis of sugars, 1908, A., i, 128.

reduction of amino-acids to aminoaldehydes, 1908, A., i. 322.

the chemical changes in adrenaline produced by enzymes, 1908, A., i,

the relation of the cyclic inosite to the aliphatic sugars, 1908, A., i, 394.

phytin, 1908, A., i, 394; 1909, A., i,

the depolymerisation of sugars, 1908, A., i, 765.

lipolysis, agglutination and hæmolysis. IV., 1908, A., ii, 708.

chemical changes produced by different kinds of rays. I. Catalytical reactions of sunlight, 1908, A., ii, 915. "glucothionic acids," 1909, A., i, 276.

the pentose from inosic acid and from the pancreas, 1909, A., i, 686.

the degradation of certain di- and hydroxy-amino-acids, 1909, A., i, 771.

the relationship of pyridine to the sugars, 1909, A., i, 832.

reaction of bile acids with rhamnose and 8-methylfurfuraldehyde, 1909, A., ii, 195.

chemical changes produced by different kinds of rays. II. Action of the direct electric current, 1909, A., ii,

the behaviour of racemic glutamic acid in putrefaction, 1909, A., ii,

the oxidation products of erythritol (dl-erythronic acid and dl-hydroxyerythronic acid), 1910, A., i, 214.

behaviour of racemic aspartic acid on putrefaction, 1910, A., i, 366.

iodoproteins, 1910, A., i, 704. new formation of carboxylic acids of the carbohydrates, 1910, A., i, 711.

various short analytical communications, 1910, A., ii, 446.

pigment formation, 1910, A., ii, 527. chemical changes produced by different kinds of rays. III. The change of benzoic acid into salicylic acid in sunlight, 1910, A., ii, 814.

chemical changes produced by different kinds of rays. IV. Catalytic action of sunlight in the presence of inorganic substances, 1910, A., ii, 1020.

the pentose from the pancreas, 1911,

A., i, 97.

the reaction between dextrose and phenylmethylhydrazine, 1912, A., i, 608.

Neuberg, Carl, preparation of d-glucosamine, 1912, A., i, 836.

the biochemical conversion of pyrrolidine-2-carboxylic acid into n-valeric and 8-aminovaleric acids, 1912, A.,

the origin of optically active valeric acid in the putrefaction of proteins,

1912, A., ii, 76.

does d-ornithine undergo racemisation treatment with putrefactive bacteria ? 1912, A., ii, 76.

chemical changes produced by different kinds of rays. V., 1912, A., ii,

314.

fermentations with yeast in absence of VII. The formation of Bhydroxybutaldehyde in the fermentation of butyric acid, 1912, A., ii, 973. short notices, 1912, A., ii, 1105.

the iodoform reaction of lactic acid,

1912, A., ii, 1106.

Neuberg, Carl, and Erich Ascher, optically active a B-diaminopropionic and a- and \$-thioglyceric acids, 1906, A., i, 937.

deaminocystine and aminoethyl disulphide, 1907, A., i, 1008.

formation of isoserine from a B-dibromopropionic acid, 1907, A., i, 1014.

Neuberg, Carl, and Benno Brahn, inosic acid, 1907, A., i, 1097; 1908, A., i, 1029; 1909, A., i, 541.

Neuberg, Carl, and Cesare Cappezzuoli, biochemical change of asparagine and aspartic acid into propionic and succinic acids, 1909, A., ii, 691.

Neuberg, Carl, and Max Federer, dphenylamylhydrazine, 1905, A., i,

299.

resolution of racemic substances. II.,

1905, A., i, 299.

synthesis of hydroxy- and diaminoacids. III. aa-Diaminoazelaic acid, as-diaminobutyric acid, and amino-a-hydroxybutyric acid, 1906, A., i, 805.

Neuberg, Carl, and Paul Grosser, a new compound of sulphur in dogs' urine,

1905, A., ii, 739. Neuberg, Carl, and Arnold Hildesheimer, estimation of phenol in the urine of oxen, 1910, A., ii, 1116. sugar-free yeast fermentation.

1911, A., ii, 320.

Neuberg, Carl, and Else Hirschberg, · degradation experiments with carbohydrates, 1910, A., i, 653.

compounds of a-naphthylearbamide with some physiologically important substances, 1910, A., i, 694.

Neuberg, Carl, and Migaku Ishida, the estimation of sugars in natural products, 1912, A., ii, 99.

sugar analysis, 1912, A., ii, 210.

Neuberg, Carl, and Eugen Kansky, the isolation of aliphatic alcohols, 1909, A., i, 690.

reduction of amino-acids to aminoaldehydes, 1909, A., i, 702.

Neuberg, Carl, and Laszló Karczag, the behaviour of dl-aminovaleric acid (dl-valine) in putrefaction, 1909, A., ii, 691.

lecture experiment: the fermentation of pyruvic and oxalacetic acids,

1911, A., ii, 976.

fermentations with yeast in absence of sugar. III. and VI., 1911, A., ii,

1019; 1912, A., ii, 78.

fermentations with yeast in absence of sugar. IV. A new enzyme in yeast-carboxylase, 1911, A., ii, 1020.

fermentations with yeast in absence of sugar. V. Carboxylase, 1911, A.,

ii, 1020.

Neuberg, Carl, and Johannes Kerb, precipitating reagents for aminoacids, 1912, A., i, 540.

fermentation with yeast in absence of sugar. VIII. The formation of acetaldehyde by auto-fermentation, 1912, A., ii, 973.

Neuberg, Carl, and Erich Kretschmer. preparation of phosphoric acid esters of carbohydrates and of glycerol, 1911, A., i, 837.

p-cresolglycuronic acid, 1911, A., i,

875.

Neuberg, Carl, and Siegbert Lachmann, stachyose, 1910, A., i, 225.

a new process for obtaining glycuronic acid (and menthylglycuronic acid), 1910, A., i, 325.

Neuberg, Carl, and Albert Manasse, isolation of amino-acids, 1905, A., i,

Neuberg, Carl, and Fritz Marx, application of metallic calcium to reductions in the sugar series, 1907, A., i. 387.

detection of small quantities of raffin-

ose, 1907, A., ii, 408. Neuberg, Carl, and Paul Mayer, crystallised i-mannose, 1903, A., i, 551.

behaviour of stereoisomerides in the II. The transanimal system. formations of the three mannoses in rabbits, 1903, A., ii, 496.

cysteine. II., 1905, A., i, 567.

d-, l-, and r-protein-cystines, 1905, A., i, 568.

Neuberg, Carl, and Paul Mayer, two new methods of formation of isoserine, 1907, A., i, 295.

Neuberg, Carl, and Richard Milchner. the behaviour of carbohydrates in autolysis, 1905, A., ii, 45.

Neuberg, Carl, and Soichiro Miura, the hydrolytic action of hydrogen per-

oxide, 1911, A., i, 935

Neuberg, Carl, and Ernst Neimann, diamines. II. New synthesis of diamines, 1905, A., i, 686.

synthesis of hydroxy- and diamino-II. Diaminosuberic acid and diaminosebacic acid, 1905, A., i, 687.

gelatinous inorganic salts of the alkaline earth metals, 1906, A., ii,

Neuberg, Carl, and Wilhelm Neimann, new reactions and derivatives of glycuronic acid. VII., 1905, A., i, 411.

synthesis of condensed glycuronic

acids, 1905, A., i, 412.

estimation of condensed glycuronic

acids. IX., 1905, A., ii, 426.
Neuberg, Carl, Wilhelm Neimann, and Hans Wolff, d-glucosamine and chitose,

1903, A., i, 74.

Neuberg, Carl, and Hugo Pollak, phosphoric acid esters of carbohydrates. I. On sucrose-phosphoric acid, 1910, A., i, 157.

phosphoric esters of carbohydrates. II. Sucrose-sulphuric acid and the phosphoration of protein, 1910, A.,

i. 610.

Neuberg, Carl, and Nikolaus Popowsky, indoleaminopropionic acid and its halogen derivatives: the tryptophan reaction, 1907, A., i, 253.

Neuberg, Carl, and Dora Rauchwerger,

new test for cholesterol, 1905, A., ii,

122.

Neuberg, Carl, and Karl Reicher, lipolysis, agglutination, and hæmolysis. II., 1907, A., ii, 570.

Neuberg, Carl, and Bruno Rewald, 1and d-hexoic acids, 1908, A., i,

310.

the colloidal and gelatinous salts of · the alkaline earths, 1908, A., ii, 39, 495.

Neuberg, Carl, and Paul Friedrich Richter, free amino-acids in the blood in acute atrophy of the liver, 1904, A., ii, 500.

Neuberg, Carl, and Egon Rosenberg, compounds of a-naphthylcarbimide with amino-acids, 1907, A., i, 1029.

Neuberg, Carl, and Egon Rosenberg, fatty acids of protein putrefaction and optically active valeric and hexoic acids, 1908, A., i, 116.

conversion of optically active triolein into an optically active glyceride and an optically active acid, 1908,

A., i, 116.

Neuberg, Carl, and Sumio Saneyoshi, the behaviour of stereoisomeric tartaric acids in the dog's organism, 1911, A., ii, 1016.

detection of small quantities of disaccharides, 1911, A., ii, 1036.

detection of small quantities of glycuronic acid as osazone, 1911, A., ii, 1038.

Neuberg, Carl, and Omer Schewket, the polarimetric estimation of the glucosamine content of ovomucoid and pseudomucin, 1912, A., i, 922.

the changes produced by light on certain pharmaceutical products,

1912, A., ii, 1021.

the detection of conjugated glycuronic acid in normal urine, 1912, A., ii, 1106.

Neuberg, Carl, Leonhard Scott, and Siegbert Lachmann, the electrolytic degradation of the saccharic acids from mono- and di-saccharides, and also of certain hydroxy-amino-acids, 1910, A., i, 218.

Neuberg, Carl, and Martin Silbermann, researches in the glyceric acid series. I. d- and l-Glyceric acids, 1904, A.,

researches in the glyceric acid series. II. Conversion of diaminopropionic acid into isoserine, 1904, A., i,

glyceric acid derivatives. III. figuration of glyceric acid, 1905, A., i, 408.

synthesis of aminohydroxysuccinic acid, 1905, A., i, 418.

Neuberg, Carl, and Hermann Strauss. the composition of the "residual nitrogen" in blood and serous fluids, 1906, A., ii, 461.

Neuberg, Carl, and L. Tir, fermentations with yeast in the absence of sugar. II., 1911, A., ii, 520.

Neuberg, Carl, and Julius Wohlgemuth, preparation of r- and l-galactoses,

1903, A., i, 9.

Neuberg, Carl, and Hans Wolff, new hydroxyamino-acid, 1903, A., i,

and \(\beta\)-2-amino-d-glucoheptonic acids, 1903, A., i, 319,

Neuberg, Carl. See also Albert Albu, Hermann Beitzke, Walther Brasch, T. Kikkoji, Leo Langstein, Adolf Loewy, John Alfred Mandel, Max Mosse, Arnold Orgler, Ernst Salkowski, and Julius Wohlgemuth.

Neuberger, Walther. See

Scholl.

Neuburger, Albert, history of the electrolysis of water, 1904, A., ii, 11.

Neufeld, Fred, and Ludwig Händel, hæmolytic poisons, especially bile salts and soaps, 1908, A., ii, 959.

Neufeld, Martin W. See Alfred Burger. Neugebauer, Franz, analysis of dognac-

skaite, 1906, A., ii, 767.

Neukam, Karl. See Hermann Pauly. Neukirch, P., estimation of physiological values in the small intestine; action of pilocarpine, 1912, A., ii, 967.

Neumann, A. See Oskar Drude. Neumann, Albert, simple method for decarbonising substances; estimation of iron, phosphoric and hydrochloric acids in the decarbonised product,

1903, A., ii, 243.

addenda to simple method for decarbonising substances; estimations in the decarbonised product, 1905, A., ii, 68.

Neumann, Albert, and Arthur Mayer, iron in normal and pathological human

urine, 1903, A., ii, 227.

Neumann, Albert, and Joseph Meinertz, estimation of sulphur by aid of sodium

peroxide, 1905, A., ii, 59. Neumann, Alfred. See Alois Kreidl. Bernhard, the Neumann, chemical equation for reduction by calcium carbide, 1903, A., ii, 20.

a new apparatus for gas analyses, 1905,

A., ii, 855.

electrolytic precipitation of gold from cyanide solutions, 1906, A., ii, 764. silicon as a reducing agent for the oxides of refractory metals, 1908, A., ii, 377.

diamonds in iron, 1909, A., ii, 1000. estimation of siticon in high grade. ferrosilicon, 1910, A., ii, 547.

Neumann, Bernhard, and Hjalmar Olsen, preparation of aluminium as a laboratory experiment, 1910, A., ii, 412.

Neumann, Carl. See Max Siegfried. Neumann, Eugen. See Ludwig Weiss. Neumann, Franz, use of cobaltic oxide in the combustion of coals, 1906, A., ii, 399.

Neumann, Franz. See also Edmund

Parow.

Heinrich. Neumann. See Robert Kremann.

Neumann, Julius. See Georg Büttner, and Edmund Herrmann.

Neumann, K. O., the oxygen exchange of the suprarenal gland, 1912, A., ii, 367.

Neumann, M. See Enos Ferrario. Neumann, Otto, estimation of nitrogen

in barley, 1905, A., ii, 202. Neumann, Paul. See Carl Mannich.

Neumann, R., estimation of fat in feeding-stuffs by means of trichloroethylene, 1911, A., ii, 1040.

simplification of the method of estimating nitrogen, 1912, A., ii, 682.

Neumann, R. See also Oskar Kellner. Neumann, Rudolf Otto, the daily nutritive requirements of man, especially in relation to protein, 1903, A., ii, 88.

Neumann, Walter, peptones, 1905, A., i, 726. detection of small quantities of zinc by

electrochemical means, 1908, A., ii, 67. Neumann, Walter. See also Herbert Freundlich.

Wilhelm. Isidor J. Neumann. See Klimont.

Neumann-Wender, the mechanism of the guaiacum reaction, 1905, A., ii, 199.

Neumüller, Theodor, substitution products of p-diaminodiphenylmethane and of p-diaminodiphenyl, 1908, A., i, 369.

Neurath, Gustav, condensation of cinnamyl chloride with o-cresol, 1907. A., i, 221.

Neustadt, Joseph, the potentials of chlorine, bromine, and iodine in methyl and ethyl alcohol, 1910, A., ii,

Neustadt, Joseph, and Richard Abegg, electrochemical potentials in nonaqueous solvents, 1909, A., ii, 959.

Neustadt, Joseph, See also Richard Abegg.

Neustadtl, Leo. See Anton Skrabal. Neustädter, Viktor, methylethylacet-aldehyde [a-methylbutaldehyde] and some of its condensation products, 1907, A., i, 14.

Neveu, Emilien, assay of platinum and of its alloys with the precious metals,

1903, A., ii, 514. Neville, Francis Henry. See Charles Thomas Heycock.

Henry Allen Dugdale, the Neville, resolution of 2:3-dihydro-3-methylindene-2-carboxylic acid into its optically active isomerides, 1906, T., 383; P., 64.

optically active dihydrophthalic acid,

1906, T., 1744; P., 274.

Neville, Henry Allen Dugdale, the "crude fat" of Beta vulgaris, 1912,

T., 1101; P., 130.

Neville, Henry Allen Dugdale, and Robert Howson Pickard, studies on optically active carbimides. Part I., 1904, T., 685; P., 114.

Neville, Henry Allen Dugdale. See also Bernard Foster, (Miss) Kate Maud Jackson, Leslie Frank Newman, and

Robert Howson Pickard.

Newerowitsch, N., action of potassium hydroxide on a mixture of phenylacetylene and pinacolin: synthesis of phenylacetylenylmethyltert.-butylcarbinol, 1905, A., i, 775.

Newfield, Joseph and Jos. P. Marx, the

nitrometer, 1906, A., ii, 628.

Newman, H. H., respiration of heart, with special reference to the heart of

Limulus, 1906, A., ii., 237.

Newman, Leslie Frank, Gilbert Wooding Robinson, Edward Thomas Halnan, and Henry Allen Dugdale Neville, relative digestibility of white and wholemeal breads, 1912, A., ii, 658.

Newman, Sidney Herbert. See (Miss) Kathleen Balls, Martin Onslow For-ster, and John Theodore Hewitt.

Newton, Howard Douglass, volumetric estimation of titanium, 1908, A., ii, 325.

estimation of iron by permanganate after reduction with titanous sulph-

ate, 1908, A., ii, 538.

Newton, Howard Douglass. See also Frank Austin Gooch.

Ney, F. See Edgar Wedekind.

Ney, N., estimation of cantharidin in cantharides and its tincture, 1911, A., ii, 669.

Ney, W., estimation of arsenic in toxicological analysis, 1911, A., ii, 932.

Nicholl, R. H., ionic potentials of salts and their power of inhibiting glycolysis, 1909, A., i, 347.

Nicholls, William Walter Scott. Charles Alexander Keane, and Arthur

Lapworth.

Nicholson, John William, the number of electrons concerned in metallic conduction, 1911, A., ii, 836. a structural theory of the chemical

elements, 1912, A., ii, 35.

Nick, H. See Heinrich W. Schmidt. Nickell, G. See Heinrich Klinger.

Nickerson, Carleton Bell, a rearrangement of procedure for the removal of phosphate ions from the iron and alkaline earth groups, 1912, A., ii, 1210,

Nicloux, Maurice, carbon monoxide in the blood of isolated animals and of fishes, 1903, A., ii, 162.

extraction of carbon monoxide from coagulated blood, 1903, A., ii, 241. estimation of glycerol in blood, 1903.

A., ii, 337.

glycerol in the blood, 1903, A., ii. 438, 560, 660; 1904, A., ii, 56, 270. the saponifying power of the castor oil bean, 1904, A., ii, 508.

estimation of alcohol in very dilute

solutions, 1904, A., ii, 595.

lipolytic action of the cytoplasm of ricinus seed, 1904, A., ii, 635.

the lipolytic property of the cytoplasm of ricinus seed is not due to a soluble ferment, 1904, A., ii, 635.

mechanism of the action of the cytoplasm in germinating seeds, 1904,

A., ii, 677.

alcohol in animal organs, 1905, A., ii,

estimation of small quantities of chloroform; its estimation: (1) in air, (II) in blood or in an aqueous liquid, 1906, A., ii, 202.

estimation of alcohol in chloroform

1906, A., ii, 584.

elimination of chloroform by the urine. 1906, A., ii, 622.

decomposition of chloroform in the organism, 1910, A., ii, 637, 735.

method for the complete extraction of chloroform vapour from air and for its estimation, 1910, A., ii, 756.

preparation of iodic acid for the estimation of carbon monoxide, 1912,

A., ii, 549.

Nicodemus, O., pyrogenic decomposition of s-tetrachloroethane and trichloroethylene, 1911, A., i, 345.

Nicola, Francesco, action of methylamine on salicylic acid and methyl oethoxybenzoate, 1907, A., i, 853.

Nicola, Renato de, action of barium chloride on the normal heart, and the heart which has undergone fatty degeneration, 1909, A., ii, 72.

Nicolaier, Arthur, action of urotropine and allied compounds, 1905, A., ii,

188.

compounds of uric acid with formaldehyde, 1907, A., i, 656.

See Charles Fanny. Nicolajewsky, Marschalk.

Nicolardot, Paul, estimation of vanadium in alloys, 1903, A., ii, 576. separation of chromium and vanadium,

1904, A., ii, 369. ferric ethoxide, 1905, A., i, 316. Nicolardot, Paul, colloidal ferric oxide, brown modification, 1905, A., ii, 167.

composition and analysis of wolfram and hiibnerite, 1907, A., ii, 508.

a new chromium sulphate, 1908, A., ii, 112.

new method of attacking ferro-compounds, particularly ferro-silicon, 1908, A., ii, 1074.

separation of tungstic acid from silica,

1908, A., ii, 1074.

action of sulphur chloride (SoClo) on metalloids and metals, 1909, A., ii, 138.

action of mercury and its salts on aluminium, 1912, A., ii, 558.

apparatus for gas measurement, 1912,

A., ii, 597.

Nicolardot, Paul, and Georges Chertier, nitrous esters of cellulose, 1910, A., i,

Nicolardot, Paul, and Louis Clement, analysis of turpentine oils, 1910, A., ii, 356.

estimation of petroleum derivatives and resins in turpentine oils, 1910, A., ii, 460.

Nicolardot, Paul, and Louis Krell, assay of antimony alloys, 1909, A., ii, 622

Nicolas, Emile, detection of formaldehyde in milk, 1905, A., ii, 488. peroxydase of cow's milk and the pphenylenediamine reaction, 1911,

A., ii, 556. Nicolas, Emile, and Delaud, apparatus for the estimation of nitrogen, 1905,

A., ii, 60.

Nicolas, Émile. See also Georges Arth. Nicolas, G., respiratory gaseous exchanges in aerial vegetal organs of vascular plants, 1909, A., ii, 603.

Nicolas, G. See also A. Maige.

Nicolau, (Mlle.) E. See G. Dumitrescou. Th., copper-pitch-ore from Amzalar, Roumania, 1905, A., ii, 599. titanite from Urotva, Transylvania,

1905, A., ii, 599. crystals of sulphur from the deposits

of Miera and Valea-Sărei (Roumania), 1906, A., ii, 618.

Nicolaus, A. See Ernst von Meyer. Nicole, A. See William Küster.

Nicolet, Ben H. See Treat Baldwin Johnson, and Henry Lord Wheeler. Nicoll, Frank. See John Cannell Cain.

Nicolle, M., and Albert Frouin, action of piperidine and some other amines on bacteria, and particularly on the bacillus of glanders, 1907, A., ii, 713.

Nicolle, M., and Felix Mesnil, treatment of trypanosomiasis by benzidine colours, 1906, A., ii, 787.

Niederschulte, G. See Eilhard Wiedemann.

Niederstadt, K., the distinction between aragonite and calcite, 1912, A., ii, 760.

Niedzwiedzki, Julian, amber from the Galician Carpathians, 1911, A., ii. 497.

Niegemann, Carl, estimation of unsaponifiable matters in linseed oils,

1904, A., ii, 217. Niehrenheim, Max. See Wilhelm Lossen. Nielsen, Carl. See Alfred Stock.

Niemann, Albert. See Casimir Funk. Niemczycki, Stanislas, syntheses by means of zinc chloride [isobutyltoluene], 1905, A., i, 579.

Niementowski, Stefan [Dominik (Ritter)] von, chloraldianthranilic acid, 1903,

A., i, 91.

synthesis of quinoline derivatives: action of ethyl benzoylacetate on anthranilic acid, 1905, A., i. 611: 1907, A., i, 1081.

condensation of anthranilic acid with ethyl benzoylacetate, 1906, A., i, 38.

hydroxyquinacridine and phloroquinyl, 1906, A., i, 209.

o-azoacetanilide, 1906, A., i, 319. oxidoanhydro-compounds. I., 1911. A., i, 85.

Niementowski, Stefan von, and Mieczyslaw Seifert, diquinolyls, 1905, A., i, 300.

Niementowski, Stefan von, and Caesar Wichrowski, limits of the formation of diazoamino-compounds; some azodyes, 1903, A., i, 133.

Niementowski, Stefan von. See also Wl. Baczyński, and Zyg. von Jaku-

bowski.

Niemeyer, Rudolf, analysis of sodium peroxide, 1908, A., ii, 132.

Niemeyer, Rudolf. See also Robert Behrend.

Nienhaus, Heinrich, the photo-electric behaviour of solutions, 1912, A., ii, 5.

Nierenstein, Maximilian, tannins producing a "bloom" [on leather], 1905, A., i, 365, 805.

the carbonyl group as tannophore, 1905, A., i, 805.

constitution of tannins, 1905, A., i, 914; 1906, A., i, 446; 1907, A., i, 331; 1908, A., i, 90, 897; 1909, A., i, 402, 948; 1910, A., i, 265.

phloroglucinol, 1906, A., i, 497. quinine tannate, 1906, A., i, 529. quebracho tannin, II., 1906, A., i,

761.

Nierenstein, Maximilian, qualitative analysis of tannins, 1906, A., ii, 911.

tannins, 1908, A., i, 40; 1909, A., i, 174; 1912, A., i, 203, 468.

glaucohydroellagic acid, 1908, A., i,

rotation of tannin, 1909, A., i, 174. the so-called "bloom" of pyrogallol tannins and its identity with ellagic acid, 1909, A., i, 174.

tannins. III. Ellagitannic acid, 1910,

A., i, 389.

action of alcoholic ammonia on acetyltannin and triacetylgallic acid, 1910, A., i, 487.

tetrahydroellagic acid, 1910, A., i, 623. IV. Galloyl-ellagic acid, tannins.

1911, A., i, 382.

estimation of tannin by means of casein, 1911, A., ii, 236.

transformation of proteins into fats during the ripening of cheese, 1911, A., ii, 326.

"luteo-acid"; a correction, 1912,

A., i, 204.

formation of gallamide from acetyltannin, 1912, A., i, 290.

anthocyanins. II. An anthocyaninlike oxidation product of chrysin, 1912, A., i, 292

physiological action of atoxyl (paminophenylarsinic acid, 1912, A., ii, 75.

chemistry of Cheddar cheese, 1912,

A., ii, 291.

Nierenstein, Maximilian, and T. A. Webster, a case of the inhibiting action of the carboxyl group, 1908, A., i, 89.

formation of phlobaphens, 1910, A., i,

124.

Nierenstein, Maximilian, and (Miss) Muriel Wheldale, anthocyanins. I. An anthocyanin-like oxidation product of quercitin, 1912, A., i, 42.

Nierenstein, Maximilian. See Anton Breinl, Kenneth C. R. Daniel, Eric Drabble, Francis Ernest Francis, C. H. H. Harold, Rodger J. Manning, Benjamin Moore, Arthur George Perkin, and Herbert Eldon Roaf.

Nierop, A. S. van. See Louis Aronstein. Niescher, M. See Ernst Beckmann.

Niessen, Gebrüder von. See Gebrüder von Niessen.

See Hugo Erd-Nieszytka, Theodor. шапп.

Nieter, Adolf, detection of typhoid bacilli in drinking water by precipitation with ferric oxychloride, 1906, A., ii, 383,

Nietzki. Rudolf [Hugo], nitranilie acid [3:6-dinitro-2:5-dihydroxy-p-benzoquinone], 1911, A., i, 69.

Nietzki, Rudolf, and Victor Becker. oxazine dyes, 1907, A., i, 978.

Nietzki, Rudolf, and Alfred Human. 2-nitro-3:6-dihydroxy-p-benzoquinone-5-sulphonic acid, 1905, A., i, 217.

Nietzki, Rudolf, and Kesselring, quinol di-isobutyl ether, 1911, A., i, 39.

Nietzki, Rudolf, and Adolf Konwaldt, nitration of o-dichlorobenzene, 1904, A., i, 984.

Nietzki, Rudolf, and August Vollenbruck, fluorindines of the naphthalene

series, 1904, A., i, 1062. Nietzki, Rudolf, and Waldemar Zänker, a new chlorotrinitrobenzene, 1904, A.,

i, 150.

Nieuwenburg, C. J. van. See Willem Reinders.

Nieuwland, C. H., detection of traces of arsenic in various substances and the sensibility of the usual methods, 1908, A., ii, 896.

Nieuwland, C. H. See also Leopold

van Itallie.

Nieuwland, Julius A., some reactions

of acetylene, 1905, A., i, 557. Nieuwland, Julius A., and Joseph A. Maguire, reactions of acetylene with

acidified solutions of mercury and silver salts, 1906, A., ii, 721. Niggli, Paul, gaseous mineralisers in a

magma, I., 1912, A., ii, 632. colloidal chemistry and twin crystals,

1912, A., ii, 744.

Nihoul, Edouard, and L. van de Putte, decomposition of tannin solutions, 1904, A., ii, 459.

Nikitin, I. V. See Alexei E. Tschits-

chibabin.

Niklewski, Bronislaw, micro-organisms oxidising hydrogen, 1907, A., ii, 380; 1908, A., ii, 314.

the moving out of calcium and magnesium ions from the plant cell,

1909, A., ii, 694.

Niklewski, Bronislaw. See also Adam Karpiński.

Nilsen, Erling. See Otto Liebknecht. Nilson, Arvid, germination of barley, 1904, A., ii, 432.

Nimerovsky, Marie. See Irma Goldberg. Niquesa, F. de Simone. See Giuseppe

Kernot. Nirdlinger, Sidney, and Solomon Farley Acree, urazoles. XVII. Rearrangement of the tautomeric salts of 1:4and 1:4diphenyl-5-thionurazole diphenyl-5-thiolurazole, 1910, A., i, 785. Nirdlinger, Sidney, Solomon Farley
Acree, and William James Heaps,
urazoles. XV. Reactions of diazoalkyls with 1-phenyl-2-methylurazole,

1910, A., i, 341.

Nirdlinger, Sidney, Eli Kennerly Marshall, jun., and Solomon Farley Acree, reaction of diazoalkyls with 1-phenyl-2-methylurazole, 1910, A., i, 444.

Nirdlinger, Sidney. See also Solomon

Farley Acree.

Nishi, M., excretion of quinine in urine, 1909, A., ii, 687. estimation of quinine and its excretion

in the urine, 1909, A., ii, 710.
formation of glycogen in the liver of

tortoises with pancreatic diabetes, 1910, A., ii, 227.

absorption of sugar in the kidneys,

1910, A., ii, 525. Nishikawa, S. See S. Kinoshita. Nishimura, S. See Keijirō Asō.

Nissen, J. M. See Joseph H. James. Nissenmann, L. See Eduard Kurowski. Nissenson, H., and Fritz Crotogino,

sulphuric acid as solvent for alloys

of tin, 1903, A., ii, 108.

Nissenson, H., and Alwin Mittasch, volumetric estimation of arsenic and antimony in nickel ores, 1904, A., ii, 292.

Nissenson, H., and Ph. Siedler, titration of antimony in crude lead, 1903, A.,

ii, 697.

Nitchie, C. C., a rapid method for the estimation of sulphur in roasted blende, 1912, A., ii, 682.

Nithack, Walther. See Wilhelm Traube. Nitkowski, Stanislaus. See Stanislaus von Kostanecki.

Niviere, Jean, action of isobutylamine and di-isobutylamine on α-bromobutyric acid, 1911, A., i, 616.

Nizzi, Flaminio. See Giacomo Pighini. Njegovan, Vladimir, vegetable phosphatides, 1912, A., ii, 195.

process for drying fluids and tissues of animal and vegetable origin by anhydrous sodium sulphate, 1912, A., ii, 970.

Nobbe, Friedrich, and L. Richter, influence of the assimilable nitrogen of the soil on the action of nodule bacteria, 1904, A., ii, 139.

after effect of the inoculation of papilionaceous plants on other plants,

1904, A., ii, 140.

treatment of soil with ether, carbon disulphide, chloroform, benzene, and hydrogen peroxide; effect on the growth of plants, 1905, A., ii, 58.

Noble, von, and Marc Larchevêque, estimation of solid material in aqueous suspension, 1912, A., ii, 295.

Noble, Henry R. See Walter Makower. Noble, R. P., extraction apparatus, 1910, A., ii, 1053.

Noble, R. W. See Julius Stieglitz. Noda, Ichisaburo. See Yogoro Kato. Noda, Saburo. See Karl Bernhard Leh-

mann.

Noda, T., ionisation of gases exposed simultaneously to Röntgen rays and the radiation from radioactive sub-

stances, 1907, A., ii, 3.

Noda, T., and Emil Warburg, decomposition of carbon dioxide by the point discharge, 1906, A., ii, 144.

Nodon, Albert, ionisation of the hot spring of Hamman-Salahin, near Biskra, 1910, A., ii, 478.

Noeggerath, C. T. See Wilhelm

Noel, Clair. See Alphonse Seyewetz.

Nöll, Philipp. See Erwin Rupp. Noël Paton. See Paton.

Noelting, [Domingo] Emilio, indogenides with tinctorial properties, 1903, A., i, 198.

bromoxylenols, 1903, A., i, 338. equivalence of positions 2 and 6 in the benzene nucleus, 1904, A., i,

394. formation of indazoles from nitrated o-methylated amines, 1904, A., i,

constitution of fluorescein, 1906, A., i. 23.

Noelting, Emilio, and Martin Battegay, substitution of negative groups by the hydroxyl group in ortho-substituted diazonium salts, 1906, A., i, 221.

Noelting, Emilio, Henri Bourry, Jules Demant, Isaac Dreyfus, Georges Freyss, and Federico Serra, dyes of the diphenylnaphthylmethane, phenyldinaphthylmethane, and trinaphthylmethane series, 1904, A., i, 621.

Noelting, Emilio, and Jules Demant, nitro-p-dimethylaminobenzaldehyde,

1904, A., i, 424.

Noelting, Emilio, and Karl Dziewoński, rhodamines, 1905, A., i, 935; 1906, A., i, 874.

Noelting, Emilio, Hans Freimann, and Eugène Grandmougin, reduction products of β-naphthaquinonehydrazones [2-benzeneazo-α-naphthols], 1909, A., i, 442.

Noelting, Emilio, and Charles Gachot, 2-aminoisophthalic acid, 1906, A., i, 181. Noelting, Emilio, and Paul Gerlinger. influence of nuclear substituents on the shade of malachite-green, 1906, A., i, 607.

o-hydroxytriphenylmethane deriva-

tives, 1906, A., i, 610.

Noelting, Emilio, and Alex. Herzbaum, condensation products of isatic acid and hydroxythionaphthen, indandione, and indanone, 1911. A., i, 917.

Noelting, Emilio, and Victor Kadiera, phenylacetic acid; ketone dyes; trihydroxydeoxybenzoin and its deriva-

tives, 1906, A., i, 593.

Noelting, Emilio, and Emile Kopp, p-[2:5-dichlorodichloroaminobenzene

aniline], 1905, A., i, 872.

Noelting, Emilio, and K. Philipp, colour bases of triphenylmethane dyes, 1908,

A., i, 295; 1909, A., i, 61.

Noelting, Emilio, and Erich O. Sommerhoff, molecular compounds of nitrocompounds with amines, 1906, A., i, 157

Noelting, Emilio, and O. R. Steuer, quindoline and "thioquindoline,

1911, A., i, 165.

Noelting, Emilio, and Erhard Witte. dyeing properties of the condensation products of quinaldine with aldehydes, 1906, A., i, 886.

Noelting, Emilio, and Wilhelm Wortmann, diaminoanthraquinones, 1906,

A., i, 291.

Noelting, Francis A. M., orthovanillin [2-hydroxy-3-methoxybenzaldehyde] and its derivatives, 1910, A., i. 176.

Noerdlinger, H. See Chemische Fabrik Flörsheim, H. Noerdlinger.

Noerdlinger, Hugo, derive acetylene, 1912, A., i, 231. Hugo, derivatives

Nöther, Paul. See Johann Howitz. Noetzel, Max. See Hans Stobbe.

See Ernst Deussen, and Nötzel, Otto.

Gustav Heller.

Noga, Eugen, apparatus for maintaining the level of a liquid, 1911, A., ii,

Nogier, Th. See Jules Courmont.

Noguchi, Hideyo, chemical investigation and regeneration of complements, 1907, A., ii, 890.

a lipolytic form of hamolysis, 1907,

A., ii, 890.

certain chemical complementary substances, 1907, A., ii, 974. uchi, *Hideyo*. See als

Noguchi, Hideyo. also Simon Flexner, and Thorvald Madsen.

Nogueira, Alexander. See Sigmund Fränkel.

Nola, Ettore di. See Alberto Bianchi.

Nolan, Thomas Joseph, and Samuel Smiles, the interaction of bromine with the two sulphides of Bnaphthol, 1912, T., 1420; P., 188.

salts of naphthathioxonium; prelimin-

ary note, 1912, P., 276.

Nolan, Thomas Joseph. See also Hugh Ryan.

Nolda, Ernst. See Willy Marckwald. Nolf, Pierre, variations in respiration

and blood pressure produced by propeptone in dogs, 1904, A., ii, 422.

intestinal absorption of propeptone in

dogs, 1904, A., ii, 425.

coagulation of blood, 1906, A., ii, 460. Alfred, fat synthesis in the epithelium of the frog's intestine during fat resorption, 1909, A., ii,

chemical and microscopical investigation on fat transport through the intestinal wall during absorption,

1911, A., ii, 128.

Noll, Alfred. See also Volkmar Kohl-

schütter.

modification Noll. Hermann, Winkler's process for the estimation of [dissolved] oxygen in water, 1906, A., ii, 48.

estimation of manganese in drinking

water, 1907, A., ii, 400.

estimation of the hardness, also of the free, semi-combined, and combined carbon dioxide in waters, 1908, A., ii, 435.

the temporary hardness of water, 1910,

A., ii, 1064.

estimation of organic matter in waters by means of permanganate, 1911, A., ii, 925.

Trillich's method for the estimation of free carbonic acid in water, 1911,

A., ii, 685.

differentiation of the magnesium hardness in carbonate and non-carbonate hardness; detection of alkali carbonates in waters, 1912, A., ii, 997.

Noll. K. See Karl Fries.

Noll, Robert. See Wilhelm Manchot. Nolly, H. de, rapid estimation of total carbon [in iron and steel], 1911, A., ii,

Nolte, E. See Ludwig Wolff.

Nomblot, Louis, reduction of nitrosoderivatives of acetyl- and benzoylhydrazobenzene, 1910, A., i, 206.

Noon, Leonard, tetanus-toxin, antitoxin, and brain emulsions, 1907, A., ii, 190.

Noorden, Karl von, jun., Aladár Elfér, and Giovanni Piantoni, lactic acid formation in blood. IV., 1912, A., ii, 1064. Noot, (Mlle.) L. van der, determination of the surface tension at the contact of two liquids, 1911, A., ii, 859.

Noot, (Mile.) L. van der. See also Jules Émile Verschaffelt.

Norby, C. P. See James R. Bailey.

Nordenskiöld, Ivar, triplite from a new Swedish locality, 1905, A., ii, 174. the pegmatite of Ytterby, Sweden,

1911, A., ii, 296. the formation of "tore" in pine

wood, 1912, A., ii, 979.
Nordenson, Ebba. See Hans von Euler.
Nordman, Charles, registration of atmospheric ionisation by means of falling water, 1905, A., ii, 227.

Nordmeyer, Paul, specific heat of some elements and salts between the temperature of liquid air and room temperature, 1908, A., ii, 353.

Nordmeyer, Paul, and August L. Bernoulli, specific heat of some elements, alloys, and compounds between -185° and +20°, 1907, A., ii, 432.

Nordmeyer, Paul. See also Carl Forch. Nordström, Gunnar, transport numbers of potassium hydroxide in concentrated solutions, 1907, A., ii, 152.

Norlin, Evert. See Peter Klason.

Norman, George Marshall, some new diazoamino- and o-aminoazo-compounds, 1912, T., 1913; P., 232.

Norman, George Marshall. See also John Cannell Cain.

Norman, Karl H. van, the biuret and nitric acid tests for protein, 1909, A., ii, 452.

Normand, Charles William Blyth, and Alexander Charles Cumming, the action of halogens on silver salts and on potassium cyanate in presence of water, with a note on the decomposition of cyanic acid in aqueous solution, 1912, T., 1852; P., 225.

Normand, Léon. See Paul Pascal.

Normann, Wilhelm, copper alkali cellulose, 1906, A., i, 560. molecular weight determinations of

oils and fats, 1907, A., ii, 228.

Vorris, (Mrs.) Dorothy. See Arthur

Norris, (Mrs.) Dorothy. See Arthur Harden.

Norris, James Flack, action of zine on triphenylchloromethane. II., 1903, A., i, 618.

action of bromine on trimethylamine, 1906, A., i, 6.

base-forming property of carbon, 1907, A., i, 1034.

Norris, James Flack, and Llora R. Culver, action of zine on triphenyl-chloromethane, 1903, A., i, 333.

Norris, James Flack, and D. R. Franklin, action of zine on benzoyl chloride, 1903, A., i, 341.

Norris, James Flack, B. G. Macintire, and W. M. Corse, decomposition of diazonium salts with phenols, 1903, A., i, 372.

Norris, James Flack, Ruth Thomas, and B. Marion Brown, action of metals on aromatic keto-chlorides and the properties of compounds of the type R₂CCl CClR₂, 1911, A_{*}, i, 31.

Norris, James Flack, and W. C. Twieg, condensation of carbon tetrachloride with chlorobenzene by means of the Friedel and Crafts' reaction, 1904, A., i, 63.

Norris, Roland Victor. See Arthur Harden, and (Miss) Dorothy Harrop.

Norsa, Luigi, the electrical properties of copper-zinc alloys, 1912, A., ii, 890. North, Barker, and W. Blakey, preparation of standard solutions of sulphuric

acid, 1905, A., ii, 417.
North, Barker. See also Walter Myers

Gardner.

North, Henry Briggs, action of thionyl and sulphuryl chlorides on mercury and mercuric oxide, 1910, A., ii, 296.

action of sulphuryl chloride on certain metals, 1911, A., ii, 798.

North, Henry Briggs, and A. M. Hageman, action of thionyl chloride on metals and metalloids, 1912, A., ii, 842.

North, Henry Briggs. See also Victor Lenher.

Northall-Laurie, Dudley. See Herbert Jackson.

Northrup, Edwin Fitch, some electrical properties of sodium and potassium and their alloy, 1912, A., ii, 225.

Norton, F. A., Durum wheat, 1905, A., ii, 754. crude gluten, 1906, A., i, 324.

Norton, F. A., and Arthur E. Koch, detection and estimation of arsenic and antimony in presence of organic matter, 1905, A., ii, 858.

Norzi, G. See C. Porlezza. Noss, Felix. See Robert Kremann.

Nostitz, von, estimation of sulphur in sulphides, 1906, A., ii, 798.

Nostitz, von, and Jänkendorf, apparatus for the estimation of sulphur [in iron], 1907, A., ii, 393.

Notaris, F. de. See Gino Abati.

Nothmann-Zuckerkandl, Helene, the action of narcotics on plasma movements, 1912, A., ii, 1083.

Nothnagel, Günther, estimation of calcium and magnesium in hard water, 1911, A., ii, 1031.

Nottbohm, E. See Karl Lendrich.

Nottbohm, Ernst. See Carl Bülow. Nottbohm, F. E., and W. Weisswange, estimation of iron in milk, 1912, A., ii, 690.

Nottebohm, E. See Wilhelm Meigen. Nottin, P. See Achille Müntz.

Novak, Franz, alloys of cadmium and zinc containing lead, 1906, A., ii. 26.

Novak, Jan, action of metallic magnesium on acetylene, 1909, A., i, 865.

carbides of magnesium. I., 1910, A., ii, 778.

alkylation of amino-acids with alkyl sulphates, 1912, A., i, 337.

Nové, H., presence of dextrose in tannin solutions, 1905, A., ii, 210.

Nover, W., emeraldine, 1907, A., i, 262. aniline-black, 1907, A., i, 787.

Novicky, A. See Boris Glasmann, and Paul Lebeau.

Novikow, Wassily. See Herbert Freundlich.

Novotný, Karl, titration of sodium hydroxide in presence of sodium carbonate, 1905, A., ii, 765.

Novotný, Karl. See also Mar Le Blanc. Nowak, A. See Simon Zeisel.

Nowak, H., estimation of sucrose in condensed milk, 1912, A., ii, 1004.

Nowakowski, Romnald. See Erich

Nowell, John W., action of heat on p-sulphamido-o-toluic acid, 1912, A., i, 768.

Nowicki, Romuald, new form of U-tube, 1904, A., ii, 555.

form of absorption apparatus, 1904, A., ii, 555.

new gas-absorption apparatus, 1905, A., ii, 760.

improvements in gas analysis; estimation of small quantities of carbon monoxide, 1906, A., ii, 395.

Nowosielski, T., condensation of piperil with benzaldehyde and ammonia, 1907, A., i, 425.

Nowosielski, T. See also Józef Buraczewski.

Noyes, Arthur Amos, equivalent conductivity of the hydrogen ion derived from transference experiments with hydrochloric acid. II., 1903, A., ii, 259.

a system of qualitative analysis, including nearly all the metallic elements, 1906, A., ii, 803.

Noyes, Arthur Amos, quantitative application of the theory of indicators to volumetric analysis, 1910, A. ii, 746.

proposed system of notation for physico-chemical quantities, 1912,

A., ii, 213.

system of qualitative analysis for the common elements. V. Detection of the acidic constituents, 1912, A., ii, 599.

Noyes, Arthur Amos, Charles R. Boggs, F. S. Farrell, and M. A. Stewart, effect of salts on the solubility of other salts. II., 1911, A., ii, 1074.

Noyes, Arthur Amos, and Bertrand F. Brann, equilibrium of the reaction between metallic silver and ferric

nitrate, 1912, A., ii, 916.

Noyes, Arthur Amos, and William Crowell Bray, system of qualitative analysis for the common elements, 1907, A., ii, 391.

effects of salts on the solubility of other salts, 1911, A., ii, 1074.

Noyes, Arthur Amos, William Crowell Bray, and Ellwood B. Spear, a system of qualitative analysis for the common elements. III. Analysis of the aluminium and iron groups, including glucinum, uranium, vanadium, titanium, zirconium, and thallium, 1908, A., ii, 538.

Noyes, Arthur Amos, and William David Coolidge, electrical conductivity of aqueous solutions at high temperatures. I. Description of the apparatus. Results with sodium and potassium chlorides up to 306°, 1904, A., ii, 226.

Noyes, Arthur Amos, and Kaufman George Falk, properties of salt solutions in relation to the ionic theory. I. Mol.-numbers derived from the freezing-point lowering, 1910, A., ii, 929.

properties of salt solutions in relation to the ionic theory. II. Electrical transference numbers, 1911, A., ii, 861.

properties of salt solutions in relation to the ionic theory. III. Electrical conductivity, 1912, A., ii, 526.

properties of salt solutions in relation to the ionic theory. IV. Comparison of the ionisation values derived from the freezing-point lowering and from the conductivity ratio, 1912, A., ii, 527.

Noyes, Arthur Amos, and John Johnston, conductivity and ionisation of polyionic

salts, 1909, A., ii, 854.

- Noyes, Arthur Amos, and Yogoro Kato, equivalent conductivity of the hydrogen ion derived from transference experiments with nitric acid, 1908, A., ii, 346.
- Noyes, Arthur Amos, Yogoro Kato, and Robert B. Sosman, hydrolysis of ammonium acetate and the ionisation of water at high temperatures, 1910, A., ii. 257.
- Noyes, Arthur Amos, and Donald A.
 Kohr, the solubility equilibrium
 between silver chloride, silver oxide,
 and solutions of potassium chloride
 and hydroxide, 1903, A., ii, 201.

Noyes, Arthur Amos, and Robert H.
Lombard, the conductivity and ionisation of a penta and a hexa-ionic salt,

1911, A., ii, 864.

Noyes, Arthur Amos, Arthur C. Melcher, Hermon C. Cooper, and G. W. Eastman, conductivity and ionisation of salts, acids, and bases in aqueous solutions at high temperatures, 1910, A., ii, 257.

Noyes, Arthur Amos, Arthur C.
Melcher, Hermon C. Cooper, G. W.
Eastman, and Yogoro Kato, conductivity and ionisation of salts, acids, and bases in aqueous solutions at high temperatures, 1908, A., ii, 347.

Noyes, Arthur Amos, and George Victor Sammet, equivalent conductivity of the hydrogen ion derived from transference experiments with hydrochloric acid, 1903, A., ii, 126.

experimental examination of the thermodynamical relation between the heat of solution and the change of solubility with temperature in the case of dissociated substances, 1903, A., ii, 468.

Noyes, Arthur Amos, and M. A. Stewart, ionisation relations of sulphuric acid. 1910. A., ii, 937.

phuric acid, 1910, A., ii, 937.

Noyes, Arthur Amos, and William H.
Whitcomb, solubility of lead sulphate
in ammonium acetate solutions, 1905,
A., ii, 523.

Noyes, William Albert, camphoric acid. XIV. Derivatives of trimethylparaconic acid, 1905, A., i, 322.

boiling point of isobutane, 1908, A., i, 305.

atomic weight of hydrogen, 1908, A., ii, 100.

choice of the most probable value for an atomic weight; atomic weight of hydrogen, 1908, A., ii, 367. Noyes, William Albert, molecular rearrangements in the camphor series.
V. Mechanism of the reactions by which laurolene is formed, 1910, A., i, 754.

molecular rearrangements, 1910, A.,

11, 27

possible explanation of some phenomena of ionisation by the electron

theory, 1912, A., ii, 545.

Noyes, William Albert, and Charles E.

Burke, molecular rearrangements in
the camphor series. IX. Lauronolic
acid and campholactone, 1912, A., i, 159.

Noyes, William Albert, and Irving J. Cox, synthesis of β-methyladipic acid,

1904, A., i, 10.

Noyes, William Albert, Gilbert Crawford, Charles H. Jumper, Edgar L. Flory, and Robert B. Arnold, hydrolysis of maltose and of dextrin by dilute acids and the estimation of starch, 1904, A., i, 373.

1904, A., i, 373.

Noyes, William Albert, and Clarence G. Derick, molecular rearrangements in the camphor series. II. Laurolene, 1909, A., i, 560.

molecular rearrangements in the camphor series. III. Oxidation products of l- and d-laurolene, 1910, A., i, 753.

Noyes, William Albert, and Howard Waters Doughty, dimethyladipic and trimethyladipic acids, 1905, A., i, 321.

derivatives of trimethylparaconic and camphoronic acids, 1906, A., i, 4.

Noyes, William Albert, E. E. Gorsline, and Ralph S. Potter, molecular rearrangement in the camphor series VIII. Camphonolic acid and camphonololactone, 1912, A., i, 159.

Noyes, William Albert, and A. W. Homberger, molecular rearrangements in the camphor series. I. Hydroxylauronic acid and isocampholactone, 1909, A., i, 133.

molecular rearrangements in the camphor series. VI. Isocampholactone, 1911, A., i, 110.

Noyes, William Albert, and Luther Knight, molecular rearrangements in the camphor series. VII. Derivatives of isocamphoric acid; l-hydroxydihydrocampholytic acid, 1911, A., i, 111.

Noyes, William Albert, and L. P. Kyriakides, synthesis of the αδ-dimethyladipic acids and separation of the racemic acid into optical isomerides, 1910, A., i, 709.

Noyes, William Albert, and L. P. Kyriakides, molecular rearrangements in the camphor series. IV. Synthesis of laurolene, 1910, A., i, 754.

Noyes, William Albert, and Ralph S. Potter, nolecular rearrangements in the camphor series. X. Campholytic acid and related compounds; Walden's rearrangement, 1912, A., i, 786.

Noyes, William Albert, and René de Mortemer Taveau, decomposition of nitroso-compounds, 1904, A., i, 807.

camphoric acid. XV. Certain derivatives of aminolauronic acid, 1906,

A., i, 397.

Noyes, William Albert, and Robert C. Warren, camphoric acid. XXII. Camphanic and camphononic acids, 1903, A., i, 147.

Noyes, William Albert, and H. C. P. Weber, atomic weight of chlorine,

1908, A., ii, 371.

Nozari, Mario, colour of aqueous solutions of cupric chloride in relation to the electrolytic dissociation, 1907, A., ii, 351.

Nozari, Mario. See also Efisio Ferrero. Nübling, Richard. See Karl Elbs.

Nüranen, W., and Max Le Blanc, application of the law of mass action to the combustion of nitrogen in the high tension flame, 1907, A., ii, 614.

Nürnberg, A., coagulative action of autolytic organ extracts on milk and on albumose solutions, 1904, A., ii,

187.

iodothyrine, 1907, A., i, 805.

iodothyreoglobulin, 1909, A., i, 273. **Nukada**, *Yutoka*, the animal fats and the extract by light petroleum from the liver, 1909, A., ii, 73.

Nunez, Vasco Emilio. See Clarence

Frederic Hale.

Nuttall, J. M. See Hans Geiger.

Nuttall, Walter Harold. See William Francis Cooper.

Nyberg, B. See Roland Scholl.

Nydegger, Otto, estimation of chromium in chrome iron ore, 1911, A., ii, 773.

Nydegger, Otto. See also Carl Friedheim.

Nyman, Max, and Richard Björkstén, basic bismuth salicylate, 1911, A., i, 449.

precipitation of cocaine solutions with platinum chloride, 1911, A., ii, 235.

υ.

Oakley, Robert O'Field. Sec Albert Ernest Dunstan. Oates, W. M. See Alvin Sawyer Wheeler.

Oberheide, Fritz. See Edgar Wedekind.
Oberhoffer, Paul, the specific heat of iron, 1907, A., ii, 736.

metallographic observations in a vacuum at high temperatures, 1909, A., ii, 1017.

Oberhoffer, Puul, and A. Meuthen, specific heat of iron-carbon alloys,

1908, A., ii, 386. Obermaier, Carl Julius. See Alexander

Gutbier.

Obermaier, Gustav, decrease in the amount of citric acid in milk on heating, 1904, A., ii, 522.

Obermayer, Fritz, and Ernst Peter Pick, action of precipitins, 1906, A., ii,

98.

changes of refractive properties of glucosides and proteins produced by ferments, acids, and bacteria, 1906, A., ii, 100.

precipitins produced by chemicallyallied proteins, 1906, A., ii, 559. Obermeyer, Fritz, and Robert Willheim,

Obermeyer, Fritz, and Robert Willheim, the formaldehyde titration of proteins. I., 1912, A., ii, 399.

Obermiller, Julius, the benzene nucleus, its reactivity, and the valency strength of its substituting groups and of carbon, 1907, A., i, 200.

action of sulphuric acid on phenol,

1907, A., i, 910.

orientation in the benzene nucleus, 1908, A., i, 146; 1910, A., i, 826; 1911, A., i, 960; 1912, A., i, 174.

conditions of formation of phenolsulphonic acids, 1908, A., i, 260. acidity of the different phenolsulphonic

acids, 1908, A., i, 634.

separation of o- and p-phenolsulphonic acids, 1909, A., i, 224.

estimation of ortho- and para-sulphogroups in phenolsulphonic acids, 1910, A., i, 28.

peculiar change caused by heating salts of phenolsulphonic acids, 1910,

A., i, 475.

phenol-m-sulphonic acid and its isolation; its non-formation from phenol and sulphuric acid, 1911, A., i, 442.

the reactivity of benzene substituents and the acidity of aromatic acids in their dependence on orientating influences; the structure of benzene, 1911, A., i, 963.

Obermiller, Julius. See also Hans von

Pechmann.

Obermüller, Paul, determination of the decomposition-velocity of nitrocellulose, 1905, A., ii, 291.

Oberreit, Erwin, synthesis of 5:7:5':7'tetrachloroindigotin, 1910, A., i, 201.

Obiedoff. See Georges Urbain.

Obladen, Hans. See Fritz Fichter. Obolensky, Nikolai, dispersion in the

electrical spectrum of petroleum, 1910, A., ii, 562.

O'Brien, William B. See Treat Baldwin Johnson.

Occhialini, A. See Angelo Battelli.

Ochs, Felix. See Otto Diels.

Ochsner, Paul. See Fritz Ullmann. Ockinga, Klaas Anne. See Walther Borsche.

O'Connor, Ellen, spectrum of the magnesium high-frequency arc, 1912, A., ii, 110.

O'Connor, James M., the adrenaline content of the blood, 1912, A., ii,

O'Connor, James M. See also Oskar Gros. Odake, S. See Umetaro Suzuki.

Oddo, Bernardo, use of anhydrides and chloro-anhydrides in alkalimetry, 1903, A., ii, 333.

volumetric determination of copper by means of potassium xanthate, 1903,

A., ii, 758.

action of magnesium ethyl iodide on nitrobenzene, 1904, A., i, 862. action of acetylene on magnesium

phenyl bromide, 1904, A., i, 862. combination of mixed organo-magnesium compounds with the pyridine and quinoline bases, 1904, A., i, 920; 1907, A., i, 668.

action of sulphuryl chloride on mixed organo-magnesium compounds, 1905,

[⊕] A., i, 400.

new method of introducing alkyl or aryl groups into pyridine or quinoline bases; constitution of mixed organo-magnesium compounds, 1907, A., i, 549.

action of organo-magnesium pyridine compounds on aldehydes, 1908, A.,

i, 27.

II., magnesio-acetylene bromide. 1908, A., i, 748.

new method of preparing nitroso-benzene, 1909, A., i, 637.

magnesium pyrryl iodide and its use in the synthesis of pyrrole derivatives, 1909, A., i, 672

use of s-diphenylcarbazide in volumetric analysis; estimation of mercury in mercurous salts, 1909, A., ii, 766.

Oddo Bernardo, syntheses with the aid of magnesium pyrrole compounds. II. Alkyl pyrryl ketones, 1910, A., i, 426.

action of thionyl chloride and of sulphur dioxide on magnesium alkyl

haloids, 1911, A., i, 286.

supposed action of organo-magnesium compounds on the vinyl group of the cinchona alkaloids and of styrene, 1911, A., i, 433.

synthesis in the indole group. Alkylindoles, 1911, A., i, 486.

transpositions with the organo-magnesium compounds. I., 1911, A., i, 488.

estimation of active hydrogen organic molecules, 1911, A.,

syntheses in the indole group. III. Methylindole C- and N-carboxylic acids, 1912, A., i, 649.

syntheses in the pyrrole group. IV. Pyridine-pyrrole bases, 1912, A., i.

Oddo, Bernardo, and Gerolamo Andò, syntheses in the pyrrole group. III. Dipyrroyl and its derivatives, 1911, A., i, 496.

Oddo, Bernardo, and Antonio Beretta, volumetric estimation of lead and of sulphuric acid in their salts, 1909, A.,

ii, 764.

Oddo, Bernardo, and Cesarina Dainotti, syntheses in the pyrrole group. V. a., β., and γ-pyrryl diketones, 1912, A., i, 721.

syntheses in the pyrrole group. VI. Action of organic anhydrides on magnesium pyrryl compounds, 1912, A., i, 721.

Oddo, Bernardo, and Giovanni Del Rosso, allylxanthic acid, 1909, A., i, 129.

generalisation of the formation of mixed organo-magnesium compounds with oxygenated compounds, 1911, A., i, 443.

Oddo, Bernardo, and Augusto Moschini, syntheses in the pyrrole group. VII. Derivatives of pyrrole-2- and -3-carboxylic acids, 1912, A., i, 802. syntheses in the pyrrole group. VIII. Halogen- and amino-derivatives of

methylpyrroyl, 1912, A., i, 803.

syntheses in the pyrrole group. IX. Pyrroylacetic acid, 1912, A., i, 804.

Oddo, Bernardo, and Luigi Sessa, synthesis in the indole group. II. Alkylindolyl ketones and indole acids, 1911, A., i, 486.

Oddo. Bernardo, and Ettore = Vassallo. constitution of the phthaleins and their derivatives, 1912, A., i, 792.

Oddo, Giuseppe, ebullioscopic relations of volatile substances; molecular weight of inorganic chloro-anhydrides and of iodine; reply to Ciamician. I., 1903, A., ii, 60.

ebullioscopic relations of volatile substances; experimental method used by Ciamician. II., 1903, A., ii,

ordinary ebullioscopic method and apparatus, 1903, A., ii, 60.

constitution of camphor, 1904, A., i,

metallo-organic syntheses in the camphor group, 1904, A., i, 602. dicamphorquinoue and isodicamphor-

quinone, 1905, A., i, 448.

mesohydry, 1907, A., ii, 15. some derivatives of dicamphor, 1911,

A., i, 475.

Oddo, Giuseppe, and Giovanni Anelli, molecular weights and constitutional formulæ of nitric and sulphuric acids, 1911, A., ii, 717.

Oddo, Giuseppe, Giulio Buzio, Eugenio Ferrari, and Giovanni Moneta, solanidine. V., 1911, A., i, 671.

Oddo, Giuseppe, and Marcello Cesaris, solanine extracted from Solanum sodomaeum. IV., 1911, A., i, 670. Oddo, Giuseppe, and Amedeo Colombano,

solanine from Solanum sodomaeum, 1905, A., i, 455; 1906, A., i, 980.

products extracted from Solanum sodomaeum. II., 1906, A., i, 527.

Oddo, Giuseppe, and Guido Cusmano, n-propyl ether and the products of its direct chlorination, 1904, A., i,

chlorination of n-propyl alcohol, 1905,

A., i, 402. VI. αβ-Dichloro-nchloro-ethers. ether, propyl aBB'-trichloro-npropyl ether, and tetrachloro-n-propyl ether, 1911, A., i, 942. chloro-ethers. VII. aldehydic con-

densations by means of halogenated

ethers, 1911, A., i, 943.

Oddo, Giuseppe, Guido Cusmano, Efisio Mameli, and Eugenia Mantovani, catalytic actions of sulphuric acid. I., 1911, A., i, 943.

Oddo, Giuseppe, and Efisio Mameli, aBBtrichloroethyl ether, 1904, A., i, 280;

1906, A., i, 134, 619.

Oddo, Giuseppe, and Anna Mannessier, thiocamphorimide, 1910, A., i, 399.

Oddo, Giuseppe, and Anna Mannessier. phosphoryl chloride as a cryoscopic solvent, 1911, A., ii, 1060.

phosphoryl chloride as a cryoscopic solvent and its applications. VIII.

1912, A., ii, 906.

Oddo, Giuseppe, and Ernesto Puxeddu. 5-aminoeugenol, 1905, A., i, 432.

5-azoeugenol and its constitution.

1905, A., i, 492. reduction of hydroxyazo-compounds to aminophenols by phenylhydraz-

ine, 1905, A., i, 842.

derivatives of 5-azoeugenol and the constitution of the so-called ohydroxyazo-compounds, 1906, A., i. 991.

Oddo, Giuseppe, and Everado Scandola. condition of substances in absolute sulphuric acid; 1908, A., ii, 353; 1909, A., ii, 377, 792; 1910, A., ii, 1035.

Oddo, Giuseppe, and Mario Tealdi, cryoscopic behaviour of halogen compounds of the elements when dissolved in phosphorus oxychloride, 1904, A., ii, 236.

Odell, Allan F., sesquiterpene and an olefinic camphor occurring southern cypress, 1911, A., i, 548. modified Boltwood pump, 1911, A., ii,

oil of the southern cypress, 1912, A., i, 574.

Odén, Sven, the preparation of colloidal solutions of sulphur of different degrees of dispersity by fractional coagulation, 1911, A., ii, 388.

the significance of the degree of dispersity in the investigation of the general properties of sulphur hydrosols, 1911, A., ii, 971.

humic acid of sphagnum peat, 1912,

A., i, 336.

fractional coagulation; relationship between the size of particles and the stability of disperse systems, 1912, A., ii, 240.

physico-chemical properties of sulphur hydrosols, 1912, A., ii, 1143.

O'Donoghue, Charles H., the relation between the Corpus luteum and the growth of the mammary gland, 1912, A., ii, 70.

O'Donoghue, (Miss) Ida Guinevere, and (Miss) Zelda Kahan, thiocarbonic acid and some of its salts, 1906, T., 1812;

P., 273.

O'Dowd, Leslie, and Frederick Mollwo Perkin, determination of boiling points of very small quantities of liquids, 1909, A., ii, 20.

Oechslen, Robert. See Edgar Wedekind. Oechsli, Wilhelm, electrolytic formation of perchlorate, 1904, A., ii, 22.

Occhslin, Jakob. See Arthur Hantzsch. Ochslin, Karl. See Ernest Fourneau. Occhslin, K. J., quinine esters of phenyl-

arsinic acid derivatives, 1911, A., i, 760.

Oechslin, K. J. See also Arthur Michael.

Œchsner de Coninck, [François] William, phenylglycollic acid, 1903, A., i, 629.

quinonoid diketones, 1903, A., i, 710. action of heat on organic acids, 1903, A., i, 730.

uranous oxide, 1903, A., ii, 154; 1909,

A., ii, 811.

salts of uranium, 1903, A., ii, 216. action of certain salts on platinic

chloride, 1903, A., ii, 219.
position of uranium in the periodic
system, 1903, A., ii, 281.

uranyl bromide, 1903, A., ii, 299.

gold salts of pyridine bases, 1904, A., i, 342.

reactions of uranous and manganous salts, 1904, A., ii, 566.

uranium oxides and carbonate, 1904, A., ii, 566.

cobalt chloride, 1904, A., ii, 741, 821; 1905, A., ii, 393.

synthesis of sulphates by Spring's

process, 1904, A., ii, 821. crotonic and isocrotonic acids, 1905, A., i, 628; 1906, A., i, 4.

uranyl chloride, 1905, A., ii, 38; 1909, A., ii, 673.

cobalt chloride tetrahydrate, 1905,

A., ii, 254. synthesis of sodium uranyl sulphate by Spring's process, 1905, A., ii,

cæsium uranyl sulphate, 1905, A., ii,

selenic acid, 1905, A., ii, 517.

solubility of various salts in ethylene glycol, 1906, A., i, 2.

action of light on a solution of uranyl sulphate in ethylene glycol, 1906, A., i, 2.

pyruvic acid, 1906, A., i, 137.

mode of formation of polyhydric alcohols, 1906, A., i, 477.

selenium dioxide, 1906, A., ii, 280. hydroxybenzoates, 1907, A., i, 532. calcium p-hydroxybenzoate, 1907,

A., i, 621. sodium salicylate, 1907, A., i, 927. barium p- hydroxybenzoate, 1907, A., i, 1042.

Echsner de Coninck, [François] William, selenium, 1907, A., ii, 21.

formation of colloidal ferric hydroxide, 1907, A., ii, 353.

action of sulphur on acetylene, 1908, A., i, 750.

determination of the molecular weight of uranous oxide, 1908, A., ii, 501; 1911, A., ii, 403, 496.

the part played by ionisation in certain chemical reactions, 1908, A., ii,

804.

reactions between iodoform and silver fluoride and chloride, 1909, A., i, 126.

comparative stability of bromoform, chloroform, and iodoform, 1909, A., i, 198.

reduction of uranyl chloride, 1909, A., ii, 148.

analogies of uranium with other elements, 1909, A., ii, 318.

uranates, 1909, A., ii, 319. oxides of uranium, 1909, A., ii, 583.

oxides of uranium, 1909, A., ii, 583. Seliwanoff's reaction, 1909, A., ii, 625. action of soluble substances on in-

soluble substances, 1909, A., ii, 668, 732.

reactions of some salts, 1909, A., ii, 668, 734.

peruranic acid, 1909, A., ii, 673. lead chromate, 1909, A., ii, 734.

a mode of formation of uranyl nitrate, 1909, A., ii, 812.

stability and reactions of uranyl chloride, 1909, A., ii, 893.

action of uranic sulphate on calcium carbonate, 1909, A., ii, 893.

[preparation of] uranates by a wet method, 1909, A., ii, 894.

pyridine hydrate, 1910, A., i, 188. action of (1) hydracids, (2) hydrolysing agents, on starch, 1910, A., i, 655.

action of the alkali nitrates on the insoluble carbonates, 1910, A., ii,

barium sulphate, 1910, A., ii, 612. action of alkali nitrates on strontium

carbonate, 1910, A., ii, 612. colloidal state of calcium carbonate,

1910, A., ii, 612. action of sodium carbonate on insoluble

carbonates, 1910, A., ii, 846. action of lithium nitrate on insoluble

carbonates, 1910, A., ii, 847. action of potassium hydroxide on normal calcium phosphate, 1910,

A., ii, 953. easy method for preparing colloidal gold, 1910, A., ii, 963. Echsner de Coninck, [François] William, action of hydracids on starch. 1I., 1911, A., i, 181.

reactions of metallic oxalates with some salts, 1911, A., i, 419.

action of some organic acids on sodium formate. I and II., 1911, A., i, 764.

action of a solution of sodium hydroxide on tricalcium phosphate, 1911, A., ii, 396.

action of sodium carbonate on calcium

carbonate, 1911, A., ii, 396.

action of (1) potassium hydroxide, (2) sodium hydroxide solution on calcium carbonate, 1911, A., ii, 490.

a mode of formation of acraldehyde,

1912, A., i, 527.

molecular weight of calcium oxide; atomic weight of calcium, 1912, A., ii, 159.

action of lithium hydroxide on calcium carbonate, 1912, A., ii, 642.

Echsner de Coninck, William, and Léon Arzalier, action of soluble on insoluble substances, 1907, A., ii, 952; 1908, A., ii, 843.

Echsner de Coninck, William, and Edouard Chauvenet, two double sulphates of uranyl, 1905, A., ii,

394.

lithium uranyl sulphate and magnesium uranyl sulphate, 1905, A., ii, 530.

action of dextrose on selenious acid,

1906, A., ii, 81.

selenium obtained with organic reducing agents, 1906, A., ii, 279.

action of organic reducing agents on selenious acid, 1906, A., ii, 436.

sodium ethoxide, 1907, A., i, 377.

Cehsner de Coninck, William, and
René Dautry, reactions of mercuric
chloride with organic acids, 1908,
A., i, 392.

Echsner de Coninck, William, and Albert Raynaud, decomposition of some di- and tri-basic organic acids, 1903, A., i, 231.

organic acids, 1903, A., i, 457, 458. action of sulphuric acid on organic

acids, 1905, A., i, 321.

selenium, 1907, A., ii, 613; 1908, A., ii, 483.

celluloses. I., 1910, A., i, 654.

dextrin, 1911, A., i, 181. some reactions of calcium oxalete,

1911, A., i, 352.

action of (1) hydracids, (2) formic and acetic acids, in increasing proportions, on starch and dextrin, 1911, A., i, 428. Echsner de Coninck, William, and Albert Raynaud, action of hydriodic acid on starch and dextrin, 1911, A., i, 607.

action of oxalic and malonic acids on starch and dextrin, 1911, A., i, 770.

action of lactic and tartaric acids on starch and dextrin, 1911, A., i, 771. the dihydrate of uranic oxide, 1911, A., ii, 806.

action of dilute nitric acid on starch and on dextrin, 1912, A., i, 73.

uranyl oxalate, 1912, A., i, 535.

Oeder, Robert. See Carl Ramsauer.
Oedele, Felix (Baron) von, substances
soluble in ether in human fæces,
1905, A., ii, 102.

statistical tables of the amount of nitrogenous substances in human

fæces, 1905, A., ii, 337.

the amount of cholic acid in human fæces, 1906, A., ii, 471.

[estimation of] cholic acid occurring in human fæces, 1906, A., ii, 501.

the amount of sulphur containing substances in human fæces, 1906, A., ii, 565.

estimation of glycine in human fæces, 1908, A., ii, 439.

Oehler, Eduard. See Richard Kempf.
Oehler, G., the question of the existence of glycine in normal human urine, 1909, A., ii, 1039.

Oehler, K., disazo-dyes from 6-amino-anaphthol-3-sulphonic acid, 1904,
 A., i, 809; 1905, A., i, 162.

[azo-compounds from 3-hydroxydiphenylamine], 1905, A., i, 161.

[bistoluene-p-sulphone-m-tolylenediamide, 1905, A., i, 829.

disazo-dyes from 6-amino-a-naphthol-3:7-disulphonic acid, 1905, A., i, 845.

preparation of 4-chloro-2-nitroanisole, 1906, A., i, 256.

preparation of 1:2-dichloro-4-nitrobenzene, 1906, A., i, 642.

Öholm, Lars William, diffusion of electrolytes in water, 1905, A., ii, 147.

free diffusion of non-electrolytes. I., 1910, A., ii, 273.

new method for determining the diffusion of dissolved substances, 1912, A., ii, 905.

Oellers, Heinrich, nature and distribution of the emission in the arc spectrum of different metals, 1912, A., ii, 404.

Oertel, R., electrolytic decomposition of cellulose, 1911, A., i, 607.

Oertly, E., and Amé Pictet, piperonylic

3 I

849

acid, 1910, A., i, 485.

Oerum, H. P. T., colorimetric estimation of iron in blood by Meisling's universal colorimeter, 1904, A., ii, 449. two new methods for the estimation of

sugar, 1904, A., ii, 787.

human bile, 1905, A., ii, 337.

estimation of urinary indican by Meisling's colorimeter, 1905, A., ii, 872.

estimation of milk fat by count of the fat globules, 1911, A., ii, 943.

Oesper, Rulph. See Lauder William Jones.

Österberg, Emil, and Charles George Lewis Wolf, metabolism in dogs. I., 1907, A., ii, 794.

estimation of the total sulphur in urine, 1908, A., ii, 426.

Osterberg, Emil. See also Adolf Loewy, Henry Clapp Sherman, and Charles George Lewis Wolf.

Oesterheld. G. See Fritz Fichter.

Oesterle, Otto A., constituents of cathartic drugs, 1903, A., i, 356.

rhein from aloe-emodin, 1904, A., i, 80. chrysophanic acid, 1905, A., i, 911. aloxanthin, 1906, A., i, 527.

attempts to prepare aloe-emodin, 1906, A., i, 973.

a constituent of the wood of Morinda citrifolia, 1907, A., ii, 644.

relationship between chrysophanic acid, aloe-emodin, and rhein, 1911, A., i, 887.

constitution of rhein, 1912, A., i, 203. action of ammonia on chrysophanic acid methyl ether, 1912, A., i, 276. constitution of natural chrysazin derivatives, 1912, A., i, 632.

Oesterle, Otto A., and Alexis Babel, decomposition products of aloin, 1904,

A., i, 907.

Oesterle, Otto A., and U. Johann, chrysophanic acid, 1910, A., i, 860.

so-called methylchrysophanic acid, 1910, A., i, 860.

Oesterle, Otto A., and G. Riat, aloemodin, 1909, A., i, 946.

rhein, 1910, A., i, 126. aloin, 1910, A., i, 274.

Oesterle, Otto A., and W. Sypkens-Toxopéus, constitution of frangulaemodin, 1911, A., i, 887.

Oesterle, Otto A., and Eduard Tisza, morindin, 1908, A., i, 36.

trimethyl ethers of emodin from frangula and from aloes, 1908, A., i, 350.

the hydrocarbon nucleus of frangula emodin, aloe-emodin, and rhein, 1908, A., i, 905. Oesterle, Otto A., and Eduard Tisza, constituents of the root-bark of Morinda citrifolia, 1908, A., ii, 527. rhein, 1909, A., i, 115.

Oestermann, H. See H. Wagner.

Östling, Gustav Jim, the influence of three- and four-membered carbon rings on the refractive and dispersive power of organic compounds, 1911, P., 315; 1912, T., 457.

Oestreicher, E. See Hans Rupe.

Oetker, Ernst. See Richard Stoermer. Oettinger, Erich. See Alexander Thomas Cameron.

O'Farrelly, Alphons J. P. See Henri Moissan.

Offe, Gustav, oxidation of uracil derivatives, 1907, A., i, 645.
Offer, Theodor Rob, a new group of

Offer, Theodor Rob, a new group of nitrogenous carbohydrates, 1906, A., i, 811.

chitin, 1908, A., i, 98.

Offer, Theodor Rob. See also Sigmund Frankel.

Offerhaus, Cornelius, estimation of carbon dioxide in electrolytic chlorine, 1904, A., ii, 86.

Offringa, J., new method for the preparation of crystals of blood colouring

matter, 1910, A., i, 793.

Ofner, Rudolf, action of phenylbenzylhydrazine on sugars, 1904, A., i, 689. reactions of the hexoses, 1904, A., i, 798.

as-phenylbenzylhydrazine, 1904, A., i, 818.

action of phenylmethylhydrazine on sugar, 1904, A., i, 936.

separation of aldoses by secondary hydrazines, 1905, A., i, 90.

action of secondary asymmetric hydrazines on sugar, 1905, A., i, 158, 937; 1906, A., i, 385.

detection of lævulose in the human body fluids, 1905, A., ii, 769.

detection and estimation of raffinose, 1907, A., ii, 310.

Ogawa, Masataka, new element in thorianite, 1908, A., ii, 952.

new element allied to molybdenum, 1908, A., ii, 953.

Ogawa, Sagoro, action of adrenaline on blood-vessels, 1912, A., ii, 281.

Ogawa, Sagoro. See also Erwin Rohde.
Ogier, Jules, and Emile Kohn-Abrest,

detection of small quantities of carbon monoxide in air, 1908, A., ii, 631, 632.

Ogilvie, James Pettigrew, estimation of sucrose in beet sugar factory refuse by Clerget's process, using invertase as hydrolyst, 1911, A., ii, 232. Ogilvie, James Pettigrere, estimation of sucrose in cane molasses by the double polarisation method, using invertase and acid as hydrolysts, 1912, A., ii, 393. Oglialoro, Agostino, sand emitted from

Vesuvius, 1906, A., ii, 621.

Ogloblin, W. N., aniline-toluidine oil from Caucasian naphtha, 1904, A.,

preparation of benzene and its homologues from Russian naphtha by Nikiforoff's method, 1904, A., i,

electrolytic preparation of hypochlorites, 1909, A., ii, 804. nowsky, B. See Wladimir

Ogonowsky, Inatieff.

Ogorodnikoff, A. See Leo A. Tschu-

gaeff.

Oguro, Y., estimation of antipepsin in serum, 1909, A., ii, 1030.

detection of albumin in urine, 1910,

A., ii, 560.

O'Hehir, C. Jocelyn, coagulation of milk by Bacillus coli communis, 1907, A., ii, 120.

Ohl, A. See Gustav Jantsch.

Ohl. Herman. See Ernst Hermann Riesenfeld, and Alfred Thiel.

Ohlmer, Friedrich. See Max Boden-

Ohlmer, W., influence of manures and soil moisture on the disposition and perfection of the ears and the club shape of Göttingen square-headed winter wheat, 1908, A., ii, 726.

Ohlsen, Hjulmar. See Hans von Euler. Ohly, Julius, preparation of ammonium vanadate and sodium uranate, 1906,

A., ii, 762.

Ohmann, Otto, behaviour on impact of chemical elements, especially of light metals, 1906, A., ii, 228.

lecture experiments with electrolytically-prepared calcium, 1906, A., ii, 446.

two experiments on the sulphuration of metals, 1911, A., ii, 481.

prevention of hydrogen explosions by the interposition of steel wool, 1912, A., ii, 635.

some peculiarities of metal wools, 1912,

A., ii, 1172.

Ohta, Kohshi, the behaviour of the fat of organs in autolysis, and on preservation under aseptic conditions, 1910, A., ii, 1087.

the fat-destroying action of moulds and the behaviour of the fat of organs in putrefaction, 1911, A., ii, 321.

Ohta, Kohshi, the thermostability of trypsin and pepsin, 1912, A., i. 927.

the behaviour of d-a-glucoheptonic acid in the organism of the rabbit, dog, and man, 1912, A., ii, 279.

the formation of acetoacetic acid from certain dicarboxylic acids with four carbon atoms, 1912, A., ii, 1075.

the behaviour of malic acid in the animal body, 1912, A., ii, 1076.

Oinuma, Soroku, the relative rates of oxidation and reduction of blood, 1912, A., ii, 179.

Okada, Harukichi, solid constituents of Japanese train oil, 1909, A., i, 7.

Okada. Harukichi. See Diels.

Okada, Sadajiro, action of phosphorus pentachloride on tartranil, 1905, A., i, 875.

Okada, Teppei. See Rikō Majima.

Oknoff, M., the internal structure of pearlitic steel, 1911, A., ii, 495.

the internal structure of martensite and pearlite, 1911, A., ii, 986.

Oldenberg, Ludwig, dihydromorphine, 1911, A., i, 668.

Oldenberg, Ludwig. See also Oswald Loeb, and Otto Wallach.

Olds, W. H., jun., thyroidectomy and the resistance of rats to morphine poisoning, 1910, A., ii, 797.

Olie, Jacob, jun., equilibrium and transformations of the isomeric hydrates of chromium chloride, 1906, A., ii, 859.

preparation of small quantities of chromium for lecture experiment, etc., 1907, A., ii, 175.

proportion of chlorine precipitated by silver salts from solutions of the green hydrate of chromium chloride, 1907, A., ii, 176.

dehydration of the isomeric hydrates of chromium chloride, 1907, A., ii,

green chromic chloride decahydrate, 1907, A., ii, 355.

use of the electroscope in measuring activity, 1909, A., ii, 10.

the influence of cathode rays on the activity of metallic uranium, 1909, A., ii, 783.

Olie, Jacob, jun., and Hugo Rudolph Kruyt, photo-electric phenomena with antimony sulphide (antimonite), 1912, A., ii, 317.

Olie, Jacob, jun. See also Ernst Cohen, and Hendrik Willem Bakhuis Roozeboom.

Olig, A., and Josef Tillmans, the mean molecular weight of the non-volatile fatty acids of Dutch butter, 1905, A., ii, 212.

Olig, A. See also Josef König.

Olinger, Josef. See Emil Abderhalden. Olivari, Francesco, investigation of the

system: sulphur-iodine, 1909, A., ii,

molecular weight of selenium, 1909. A., ii, 39, 568.

polyiodides, 1909, A., ii, 128, 226. molecular weight of selenium in solution, 1909, A., ii, 805, 996; 1912, A., ii, 753.

iodine as a cryoscopic solvent, 1910,

A., ii, 18, 582.

solubility equilibria between iodine and organic substances, 1911, A., ii,

Olivari, Francesco. See also Enrico Rimini.

Oliveri, Vincenzo, methods of determining citric acid in commercial citrates, 1903, A., ii, 113.

Oliveri-Mandalà, E., addition of hydroxylamine to acetylene derivatives,

1909, A., i, 835.

action of azoimide on methylcarbylamine: synthesis of homologues of tetrazole, 1910, A., i, 343.

synthesis with diazomethane; new preparation of pyrazole, 1910, A., i,

433.

syntheses with diazomethane,

1910, A., i, 441.

clectrical conductivity of certain hydroxamic acids, 1910, A., ii, 482.

velocity of reaction between copper sulphate and potassium iodide, 1910,

A., ii, 490.

condensations of hydrazoic acid with cyanoformic ester and with cyanogen bromide. III., 1911, A., i, 337.

some hydroxamic acids of the pyrone

series, 1911, A., i, 428.

Oliveri-Mandalà, E., and B. Alagna, action of azoimide on the carbylamines,

1911, A., i, 243.

Oliveri-Mandalà, E., and A. Coppola, action of hydrazoic acid on some acids of the acetylene series; synthesis of derivatives of 1:2:3-triazole, 1910, A., i, 593.

esterification of the iso-oxazolones with diazomethane, 1911, A., i, 492.

Oliveri-Mandalà, E., and T. Passalacqua, action of hydrazoic acid on cyanogen; formation of cyanotetrazole, 1912, A., i, 144.

Oliveri-Mandalà. E. See also Francesco Carlo Palazzo.

Oliveri-Tortorici, Riccardo, mono-ethers of quinonedioximes, 1903, A., i, 838.

Olivi, G., hypothermolysin, 1908, A., ii,

changes in the nitrogenous constituents of the liver when the kidneys are placed out of action, 1908, A., ii, 407.

Olivier, Simon Cornelis Johannes, volumetric estimation of phenol by Lloyd's method; tribromophenol bromide and hexabromophenoquinone, 1910, A., ii, 80.

formulæ of aluminium salts and of the corresponding compounds of other

metals, 1910, A., ii, 507.

gravimetric estimation of phenol. 1910, A., ii, 806.

formulæ of aluminium salts, 1911,

A., ii, 206. Oliviero, transformation of cinnamic acid into styrene by moulds, 1906,

A., ii, 623. Olizy, R., is there contraction when sucrose is dissolved in water? 1909,

A., ii, 795.

Ollive, F., elastic force of saturated vapours, 1912, A., ii, 231.

Olmsted, Charles Morgan, band spectra of nearly allied compounds, 1907, A., ii, 210.

Olmsted, James Montrose Duncan. See Frederick Daniel Chattaway.

Olpp, Archibald E., nucleo-protein from the gastric mucosa, 1909, A., i, 447.

Olsan, Hjalmar. See Albert A. Epstein, and Bernhard Neumann.

Olsen, Julius, existence of free ions in aqueous solutions of electrolytes, 1903, A., ii, 53.

Olsen, John Charles, Ernest Seabury Clowes, and William O. Weidmann, estimation of manganese as green sulphide, 1905, A., ii, 206.

Olsen, John Charles, and Walter S. Rapalje, composition of the four sulphides of manganese, 1905, A., ii, 91.

Olsen, John Charles, and F. S. White, suggested explanation of the reduction of permanganic acid by manganese dioxide, 1903, A., ii, 372.

Olson, George A., milk proteins and

enzymes, 1908, A., i, 1031. Olszewski, Karl, apparatus for the liquefaction of air and hydrogen,

1903, A., ii, 203, 642. determination of the critical point of hydrogen, 1906, A., ii, 7.

852

Olszewski, Karl, attempt to liquefy helium, 1906, A., ii, 22.

inversion temperature of the Joule-Kelvin phenomenon for air and nitrogen, 1907, A., ii, 331.

avoidance of losses of cold in the liquefaction of hydrogen, 1912, A., ii, 342.

Oltrogge, Heinrich Conrad. See Wilhelm Manchot.

Omeis, Theodor, occurrence of copper in grape juice and wine, 1903, A., ii,

Omeliansky, V., organisms of nitrification, 1903, A., ii, 34.

decomposition of formic acid by microorganisms, 1904, A., ii, 277.

separation of the hydrogen fermentation from the methane fermentation of cellulose, 1904, A., ii, 278.

histological and chemical changes in flax stems under the influence of microbes of pectin- and cellulosefermentation, 1904, A., ii, 504. production of methane in biological

processes, 1906, A., ii, 188.

Omi, Kaoru, the behaviour of salicin in the normal and diabetic organism, 1908, A., ii, 613.

absorption experiments on dogs with intestinal fistulæ, 1909, A., ii, 326.

Onaka, Morizo, action of arsenic on the red corpuscles, 1911, A., ii, 212.

oxidation in the blood, 1911, A., ii, 409.

O'Neill, E. C. See John Maxson Still-

O'Neill, James George. See Louis Munroe Dennis.

Ongaro, Giuseppe, composition of the incrustations in Roberts-concentrators, 1904, A., ii, 770.

Ongaro, Giuseppe. See also Senofonte Squinabol.

Onnes, Heike Kamerlingh, experiments on the condensation of helium by expansion, 1908, A., ii, 490.

liquefaction of helium, 1908, A., ii, 944.

for the purification of apparatus gaseous hydrogen by means of liquid hydrogen, 1909, A., ii, 564.

isotherms of monatomic gases and their binary mixtures. III. Data concerning neon and helium, 1909, A., ii, 791.

calculation of temperatures, especially below the boiling point of the helium, 1911, A., ii, 368.

liquid helium, 1911, A., ii, 487.

Onnes, Heike Kamerlingh, liquid helium; the change of electric resistance of pure metals at very low temperatures. IV. The [electrical] resistance of pure mercury at helium temperatures, 1911, A., ii, 575.

experiments with liquid helium: change of the electrical resistance of pure metals at very low tempera-V. Disappearance of the resistance of mercury, 1911, A., ii, 687.

experiments with liquid helium; a helium cryostat, 1911, A., ii, 853.

experiments with liquid helium; isotherms of monatomic gases, etc. IX. Thermal properties of helium, 1912, A., ii, 251.

experiments with liquid helium: electrical resistance of pure metals, VI. The sudden change in the rate at which the resistance of mercury disappears, 1912, A., ii, 319.

Onnes, Heike Kamerlingh, and C. Braak, measurement of very low temperatures. XXI. Standardisation of temperatures by means of boiling points of pure substances; determination of the vapour pressure of oxygen at three temperatures, 1909, A., ii, 20.

Onnes, Heike Kamerlingh, and J. Clay. measurement of very low tempera-XXII. The thermo-element gold-silver at liquid hydrogen temperatures, 1909, A., ii, 117.

Onnes, Heike Kamerlingh, and C. A. Crommelin, isotherms of monatomic gases and of their binary mixtures. VII. Isotherms of argon between + 20° and - 150°, 1911, A., ii, 203.

isotherms of monatomic substances and of their binary mixtures. IX. The behaviour of argon with regard to the law of corresponding states, 1911, A., ii, 467.

isotherms of monatomic substances and of their binary mixtures. XI. The critical temperature of neon and the melting point of oxygen, 1911, A., ii, 854.

isotherms of monatomic substances and of their binary mixtures, XIII. The empirical reduced equation of state for argon, 1912, A., ii.

Onnes, Heike Kamerlingh, and W. J. de Haas, isotherms of diatomic substances and of their binary mixtures. XII. Compressibility of hydrogen vapour at and below the boiling point, 1912, A., ii, 1138.

Onnes, Heike Kamerlingh, and E. Oosterhuis, magnetic researches. VI. Paramagnetism at low temperatures, 1912, A., ii, 1133.

Onnes, Heike Kamerlingh, and Albert Perrier, magnetisation of liquid and solid oxygen, 1910, A., ii, 578.

researches on magnetism. III. Paraand dia-magnetism at very low temperatures, 1911, A., ii, 694.

researches on magnetism. IV. Paramagnetism at very low tempera-

tures, 1912, A., ii, 228.

Onnes, Heike Kamerlingh, and C. Zakrzewski, van der Waals's \(\psi\)-surface. IX. The conditions of coexistence of binary mixtures of normal substances according to the law of corresponding states, 1904, A., ii, 807.

determination of the conditions of coexistence of vapour and liquid phases of mixtures of gases at low temperatures, 1904, A., ii, 807.

validity of the law of corresponding states for mixtures of methyl chloride and carbon dioxide, 1905,

A., ii, 149.

Onnes, Heike Kamerlingh. See also Henri Becquerel, Jean Becquerel, Philipp Lenard, Émile Matthias, Albert Perrier, and Pierre Weiss.

Ono, S. See S. Kinoshita.

Onorato, P. See Francesco Carlo Palazzo.

Onorato, R. See Francesco Marino-

Oordt, Gabriel van, separation of glucinum from aluminium and iron,

1905, A., ii, 88.
transformation of glucinum hydroxide
into a form sparingly soluble or
insoluble in alkalis or acids, 1906,

A., ii, 447.
Oordt, Gabriel van. See also Fritz

Haber.

Oosterhuis, E. See Heike Kamerlingh Onnes.

Opfermann, Erich, action of formaldehyde on thiocarbanilide, 1905, A., i, 770. Opfermann, Erich. See also Max

Busch.
Opfermann, Gustav. See Ferdinand

Opie, Eugene Lindsay, enzymes and anti-enzymes of exudates, 1905, A., ii, 845.

Opie, Eugene Lindsay, and Bertha L. Barker, leucoprotease and anti-leucoprotease of mammals and birds, 1908, A., ii, 117. Opitz, Hermann. See Adolf Windaus. Opitz, K., comparative investigation of the results of chemical soil analyses and of cultivation experiments, 1908, A., ii, 421.

Opolski, Stanislaus, influence of light and heat on the chlorination and bromination of homologues of thiophen, 1905, A., i, 367; 1906, A., i, 33

salts and esters of benzenesulphonnitroanilide, 1907, A., i, 908.

esters of benzenesulphon-nitroanilides, 1910, A., i, 725.

Opolski, Stanislaus. See also Arthur Hantzsch.

Opp6, Alfred, hydrolytic products of a-chloromorphide, 1908, A., i, 362.
Opp6, Alfred. See also Richard Will-

stätter.

Oppenheim, Karl, estimation of lactose in milk by Michaelis and Rona's "iron method," 1909, A., ii, 836.

Oppenheim, Kurt. See Ferdinand Blumenthal.

Oppenheim, Moritz, detection of mercury in urine, 1903, A., ii, 696.

Oppenheim, Moritz. See also Adolf Jolles.

Oppenheim, Paul. See Martin Freund.
Oppenheimer, Carl, reduction of nitric oxide by alkaline pyrogallol, 1903, A., ii, 539.

influence of tryptic digestion on precipitin reactions, 1903, A., ii,

665.

fate of proteins introduced via the alimentary canal and otherwise, 1903, A., ii, 738.

supposed formation of nitrogen by fermentation with putrefactive bac-

teria, 1904, A., ii, 361.

the rôle of elementary nitrogen in animal metabolism, 1906, A., ii, 869; 1907, A., ii, 633.

the part played by elementary hydrogen in metabolism, 1909, A., ii,

250.

Oppenheimer, Carl, and Hans Aron, behaviour of serum towards tryptic digestion, 1903, A., ii, 738.

Oppenheimer, Carl. See also Emil Abderhalden, Siegfried Rosenberg, and Arthur Schlossmann.

Oppenheimer, Max, the action of dilute sodium hydroxide on glyceraldehyde and dihydroxyacetone, 1912, A., i, 831.

Oppenheimer, Max. See also Gustav Embden.

Oppenheimer, Paul. See Walter Borsche.

Oppenheimer, Siegfried, excretion of alanine by the urine, 1907, A., ii,

lactic acid formation in the artificially perfused liver. II., 1912, A., ii, 1071.

Oppermann, H. See Theodor Posner. Oppermann, Paul. See Johannes

Scheiber.
Oppler, Berthold, estimation of dextrose

in blood, 1910, A., ii, 463. estimation of chlorides in blood, 1911, A., ii, 150.

the estimation of dextrose in urine and blood, 1912, A., ii, 100.

substitute for Kipp's apparatus, 1912, A., ii, 245.

Oppler, Berthold. See also Emil Abderhalden.

Orabona, M. See Ugo Alvisi. Orbeli, L. See Joseph Barcroft.

Orchardson, Ian Quiller, Sydney Herbert Wood, and William Popplewell Bloxam, analysis of indigo, 1907, A., ii,

203.

Orchardson, Ian Quiller, and Charles Weizmann, some derivatives of naphthoylbenzoic acid and of naphthacenequinone, 1905, P., 307; 1906, T., 115.

Ordonneau, Charles, destruction of tartrates by fermentation, 1911, A.,

i, 420.

estimation of total tartaric acid by the Goldenberg process, 1911, A., ii, 77.

Ordway, John Morse, waterglass. VI.,

1908, A., ii, 37.

Ordway, Mabel D. See Arthur Everett Austin.

Orechoff, Alex., and R. Konowaloff, unsaturated compounds. I. Elimination of hydrogen chloride from unsymmetrical carbinyl chlorides, 1912, A., i, 436.

Orechoff, Alex., and S. Meerson, unsaturated compounds. II. Elimination of hydrogen chloride from unsymmetrical carbinyl chlorides, 1912,

A., i, 621.

Orgler, Arnold, remarks on Aron and Sebauer's work on the nutritive value of calcium salts, 1908, A., ii, 606, 872.

the assimilation of natural and artificial nourishment. II., 1910, A.,

ii, 1084.

Orgler, Arnold, and Carl Neuberg, chondroitin-sulphuric acid and the presence of a hydroxyamino-acid in cartilage. I., 1903, A., i, 589.

Orglmeister, Gustav, [effect of feeding with material rich in arginine], 1905, A., ii, 734.

estimation of arginine with perman-

ganate, 1905, A., ii, 777.

Orloff, Egor Ivanovitsch, introduction of the groups 'CH₂'OH and 'CH₂' into primary aromatic amines and preparation of compounds of an imidic character, 1905, A., i, 189.

crystalline and liquid modifications of formanilide and p- and o-formatoluidides, 1905, A., i, 643.

analysis of solutions of hyposulphites; analysis of formalin, 1905, A., ii,

200.

complex mercury cobalt and mercury nickel thiocyanates, 1906, A., i, 406.

new synthesis of benzyleneimide, 1906, A., i, 420.

isomeric diazoaminobenzene, 1907, A., i. 365.

condensation of ethyl acetoacetate and formaldehyde in the presence of sodium hydroxide, 1907, A., i, 380.

condensation of some hydroxy-acids and formaldehyde in the presence of pieric acid, 1907, A., i, 382.

iodation of phenol in a borax solution, and the production of ψ -iodosoiodobenzene, 1907, A., i, 406.

conversion of methyl alcohol into formaldehyde and the preparation of formalin, 1907, A., i, 892, 1008; 1908, A., i, 77, 761.

constitution of sodium hyposulphite and formaldehydesulphoxylate, 1908,

A., i, 132.

oxidation of ethyl, propyl, isobutyl, and amyl alcohols by a contact process, 1908, A., i, 306. contact oxidation of hydrocarbons,

contact oxidation of hydrocarbons, 1908, A., i, 520.

contact oxidation of ethyl ether, 1908, A., i, 753.

method of obtaining resins from turpentine and the preparation from them of lacs, varnishes, etc., 1908, A., i, 815.

contact oxidation of ammonia and organic bases, 1908, A., ii, 582.

synthesis of ethylene from carbon monoxide and hydrogen by contact with nickel and palladium, 1909, A., i, 77.

contact pyrogenetic oxidation of hydrogen and carbon monoxide by air,

1909, A., i, 127.

Orloff, Egor Ivanovitsch, general conditions of contact oxidations accompanied by autoheating of the contact

layer, 1909, A., i, 127. the composition of boiled linseed oil and the distribution of oxygen in dried layers of oil. I. and II., 1910, A., i, 810; 1912, A., i, 158.

kinetics of chemical reactions of combination, deoxidation, and oxidation, 1912, A., ii, 243.

Egor Ivanovitsch. See also Orloff. Michael I. Konowaloff.

Orloff, Nikolai A., solubility of gypsum in presence of metallic chlorides, 1903, A., ii, 211.

basic salts of quadrivalent uranium.

1903, A., ii, 732.

new salts of tervalent cobalt and of quadrivalent uranium, 1904, A., i,

analysis of platinum metals, 1906, A., ii, 632.

preparation of pure cerium compounds, 1906, A., ii, 675.

some reactions of mercuric iodide, 1907, A., ii, 89.

adsorption compound formed by iodine with basic praseodymium acetate, 1907, A., ii, 90.

preparation of pure praseodymium compounds, 1907, A., ii, 171.

composition and some properties of the normal uranyl chromate, 1907, A., ii, 476.

preparation of green neodymium chromate and pure cerium salts from monazite residues, 1907, A., ii, 549.

new neodymium salt, 1907, A., ii,

action of osmium peroxide on soluble metallic iodides, 1907, A., ii, 970. gold chromate, 1908, A., ii, 48.

detection of ruthenium in platinum

alloys, 1908, A., ii, 231. analyses of silicates from the neigh-

bourhood of Pyatigorsk, Caucasia, 1912, A., ii, 950.

Orloff, N. N., synthesis of safranine with a naphthalene nucleus (3:6diamino-5-phenyl-2-methylnaphthaphenazonium chloride), 1910, A., i, 783.

synthesis of safranines. III., 1911, A., i, 89.

Orloff, N. N. See also Wladimir Georg Schaposchnikoff.

Ormerod, Ernest, note on the preparation of ethyl acetonedicarboxylate, 1906, P., 205.

Ormerod, Ernest, the interaction of nitroformazyl, carbon disulphide. potassium hydroxide; a contribution to the chemistry of the thiodiazolones and the xanthates, 1906, P., 206.

Ormerod, Ernest. See also Henry Edward Armstrong, and Percy Faraday

Frankland.

Ormond, J. K. See H. H. Hagan. Orndorff, William Ridgely, and John A. Black, tetrachlorophenolphthalein and some of its derivatives, 1909, A., i.

389.

Orndorff, William Ridgely, and Thomas G. Delbridge, tetrachlorogallein and some of its derivatives, 1909, A., i, 733; 1911, A., i, 737.

Orndorff, William Ridgely, and David Shepard Pratt, two phthaloximes and some of their derivatives, 1912, A., i,

190.

Orndorff, William Ridgeley, and Burton Justice Ray, 2:4:6-trisbenzeneazoresorcinol, 1907, A., i, 800.

and trisazo-derivatives of resorcinol, 1910, A., i, 597.

Orndorff, William Ridgeley, and John Edgar Teeple, bilirubin, the red colouring matter of the bile, 1905, A.,

Ornstein, Georg, preparation and properties of 3-methylcinchonic and 2hydroxy-3-methylcinchonic acids, 1907, A., i, 443.

Ornstein, L., metabolism experiments with parenteral nutrition, 1912, A., ii, 956.

Ornstein, Leonard Salomon. See Philipp Kohnstamm.

Orofino, F. S. See Mario Levi-Malvano. Orth, Ph., viscosity of saccharine solutions, 1911, A., ii, 1036.

Orthey, Max, estimation of carbon in pig-iron and steel, 1908, A., ii, 131. estimation of sulphur in iron and steel, 1908, A., ii, 731.

estimation of manganese in iron and

manganese ores, 1908, A., ii, 898. Orthmann, August C. See Louis E. Levi.

Ortlieb, G. See J. Weirich.

Ortoleva, Giovanni, additive products of quinone with salts of pyridine and quinoline, 1903, A., i, 851.

action of iodine on benzaldehydephenylhydrazone in pyridine solution,

1904, A., i, 99.

new compound obtained by the action of iodine on benzaldehydephenylhydrazone in pyridine solution, 1906, A., i, 715; 1907, A., i, 729.

Ortoleva, Giovanni, and G. Vassallo, action of iodine on dehydroacetic acid in pyridine solution, 1904, A., i, 645.

Orton, Kennedy Joseph Previté, isomeric change in benzene derivatives; the conditions influencing the interchange of halogen and hydroxyl in benzenediazonium hydroxides, 1903, T., 796; P., 161.

isomeric change in benzene derivatives; the interchange of halogen and hydroxyl in benzenediazonium hydroxides, 1903, A., i, 297.

transformations of derivatives of stribromodiazobenzene, 1905, T., 99;

P., 12.

use of acetic anhydride in nitrating,

1907, A., i, 205.

Orton, Kennedy Joseph Previté, Joseph Edward Coates and (Miss) Frances Burdett, the influence of light on diazo-reactions, 1905, P., 168; discussion, P., 169; 1906, P., 308; 1907, T., 35.

Orton, Kennedy Joseph Previté, (Miss)
Muriel Gwendolen Edwards, and
Harold King, purification of acetic
acid, 1911, T., 1178; P., 120.

Orton, Kennedy Joseph Previté, William Charles Evans, and Emrys Morgan, action of hydroxylamine on o-benzo-quinonediazides (o-diazophenols): 3:5-dibromo-o-azoiminobenzoquinone (4:6-dibromo-2-hydroxyphenylazoimide); preliminary note, 1907, P., 167.

Orton, Kennedy Joseph Previté, and Reginald William Everatt, the reaction of diazonium salts with monoand di-hydric phenols and with naphthols, 1908, T., 1010; P., 118.

Orton, Kennedy Joseph Previté, and William Herbert Gray, estimation of nitric and nitrous acids in acetic acid solution; the stability of nitric acid in acetic acid solution, 1912, A., ii, 807.

Orton, Kennedy Joseph Previté, and (Miss) Marian Jones, hydrolysis of acetic anhydride, 1912, T., 1708; P., 221.

acetic anhydride; the pure material, its physical properties, and its reaction with bromine, 1912, T., 1720; P., 222.

Orton, Kennedy Joseph Previté, and William Jacob Jones, a crystalline bleaching powder, 1909, T., 751; P., 74.

primary interaction of chlorine and acetanilides, 1909, T., 1456; P., 196.

Orton, Kennedy Joseph Previté, and William Jacob Jones, chlorination and bromination of acylanilides; a direct process; preliminary note, 1909, P., 233.

chlorination and bromination of acylanilides. Part II. The action of the halogen acids on chloro- and bromo-acylaminobenzenes; preliminary note, 1909, P., 305.

estimation of the alkalinity of bleaching powder solutions, 1909, A., ii,

701.

Orton, Kennedy Joseph Previté, and Harold King, a method of chlorination; chlorination of anilines and phenols, 1911, T., 1185; P., 139.

the relation of the velocity of chlorination of aromatic compounds to constitution. Part I. Chlorination of anilides, 1911, T., 1369; P., 196.

Orton, Kennedy Joseph Previté, and (Miss) Constance Pearson, the wandering of bromine in the transformation of nitroaminobromobenzenes, 1908, T., 725; P., 62.

Orton, Kennedy Joseph Previté, and Walter William Reed, isomeric change in benzene derivatives; replacement of halogen by hydroxyl in chlorobromodiazobenzenes, 1907, T., 1554; P., 212.

Orton, Kennedy Joseph Previté, and (Miss) Alice Emily Smith, transformations of highly substituted nitroaminobenzenes, 1905, T., 389; P., 91.

Orton, Kennedy Joseph Previté. See also (Miss) Muriel Gwendolen Edwards, William Holdsworth Hurtley, William Jacob Jones, Harold King, Walter William Reed, and (Miss) Alice Emily Smith.

Ortvay, Rudolf, the dielectric constant of certain liquids at high pressures,

1911, A., ii, 961.

Oryng, Tadeusz, adsorption by animal charcoal and chemical reactions in aqueous solutions of potassium permanganate, 1912, A., ii, 1145.

Osa, A. S. de. See Carl Dietrich

Harries.

Osaka, Yūkichi, freezing point of dilute solutions of mixtures, 1903, A., ii, 8. equilibrium of the electrolytic dissocia-

tion of partially neutralised acids and bases, 1905, A., ii, 804.

distribution of iodine between two solvents, 1905, A., ii, 811.

reaction between silver nitrate and disodium hydrogen phosphate, 1905, A., ii, 820.

Ōsaka, Yūkichi, determination of solubility by means of Pulfrich's refractometer, 1907, A., ii, 934; 1909, A., ii, 560.

inversion of sucrose, 1908, A., i. 856. birotation of dextrose. II., 1909, A.,

i. 456.

solubility of ethyl ether in water, 1910, A., i, 649.

sodium potassium carbonates,

A., ii, 723.

Osaka, Yūkichi, and Ryuji Abe, solubility of strontium acetate and the transition point of its hydrates, 1911, A., i, 599.

Osaka, Yūkichi, and Jingoro Yamasaki, equilibrium between reciprocal salt

pairs, 1907, A., ii, 941.

Usaka, Yūkichi. See also Alfred Coehn. Osann, [Carl] Alfred, crystalline form of sodium formaldehydesulphoxylate (rongalit C.), 1905, A., i, 568.

in diabase enstatite-augite Tasmania, 1908, A., ii, 48.

Osann, Wilhelm. See Paul Pfeiffer. Osborne, N. S., E. C. McKelvy, and H. W. Bearce, density and thermal expansion of ethyl alcohol and its

mixtures with water, 1912, A., i, 232. Osborne, Raymond William. See Frank Austin Gooch, and Isaac King Phelps.

Osborne, Thomas Burr, specific rotation of the nucleic acid of the wheat

embryo, 1903, A., i, 542. Osborne, Thomas Burr, and Sumuel Hopkins Clapp, proteins of wheat. III., 1906, A., ii, 887.

a new decomposition, product of gliadin, 1907, A., i, 367.

hydrolysis of phaseolin, 1907, A., i, 455.

hydrolysis of excelsin, 1907, A., i, 666. hydrolysis of hordein, 1907, A., i,

hydrolysis of legumin from the pea,

1907, A., i, 806.

hydrolysis of glycinin, the globulin of the soy bean, and of the crystalline of the squash seed globulin (Cucurbita maxima), 1907, A., i, 990.

hydrolysis of the globulin from the almoud (amandin); hydrolysis of the proteins of maize; hydrolysis of gliadin from rye, 1908, A., i, 115.

Osborne, Thomas Burr, Edna L. Ferry, and Lafayette Benedict Mendel. feeding experiments with fat-free food mixtures, 1912, A., ii, 779.

Thomas Burr, and Ralph Davis Gilbert, yield of glutamic acid from various proteins, 1906, A., i, 324.

Osborne, Thomas Burr, and Herbert Hartley Guest, hydrolysis of casein, 1911, A., i, 589.

analysis of the products of hydrolysis of wheat gliadin, 1911, A., i, 697.

Osborne, Thomas Burr, and Isaac Foust Harris, nitrogen in proteins, 1903, A., i, 585.

the carbohydrate group in the protein

molecule, 1903, A., i, 586.

precipitation limits with ammonium sulphate of some vegetable proteins, 1903, A., i, 871; 1905, A., i, 555. specific rotation of some vegetable

proteins, 1903, A., i, 872.

globulin of the English walnut, the American black walnut, and the butternut, 1903, A., i, 872.

tryptophan reaction of various proteins, 1904, A., i, 125.

solubility of globulin (edestin) in salt

solutions, 1905, A., i, 846. proteins of wheat. I. The protein soluble in alcohol, 1905, A., ii, 194. proteins of wheat. II., 1906, A., ii, 887. proteins of the pea (Pisum salivum), 1907, A., ii, 715.

Osborne, Thomas Burr, and Frederick William Heyl, pyrimidine derivatives in nucleic acid, 1908, A., i, 376. hydrolysis of vignin, 1908, A., i, 744. hydrolysis of legumin from the vetch. 1908, A., i, 843.

hydrolysis of legumelin from the pea (Pisum sativum), 1908, A., i, 928.

hydrolysis of vicilin from the pea (Pisum sativum), 1908, A., i, 929. hydrolysis of chicken flesh, 1908, A., ii, 967.

hydrolysis of fish muscle, 1908, A., ii, 1055.

Thomas Burr, and David Breese Jones, hydrolysis of vitellin from the hen's egg, 1909, A., i,

hydrolysis of muscle of scallop (Pectens viradians), 1909, A., ii, 417.

hydrolysis of ox-muscle, 1909, A., ii, 748.

quantity of monoamino-acids the yielded by proteins when hydrolysed with acids, 1910, A., i, 447.

sources of loss in analysing the products of protein hydrolysis, 1910,

A., i, 598. analysis of proteins, 1910, A., ii, 763.

Osborne, Thomas Burr, David Breese Jones, and Charles Samuel Leavenworth. hydrolysis of crystallised albumin from the hen's egg, 1909, A., i, 446.

Osborne, Thomas Burr, Charles Samuel Leavenworth, and Charles Andrew Brautlecht, different forms of nitrogen in proteins, 1909, A., i, 72.

Osborne, Thomas Burr, and Leonard Merritt Liddle, analysis of edestin

and zein, 1910, A., i, 598.

the separation and estimation of aspartic and glutamic acids, 1910, A., ii, 1007.

Osborne, Thomas Burr, and Lafayette Benedict Mendel, ricin, 1904, A., ii, 198; 1905, A., ii, 188.

rôle of proteins in growth, 1912, A.,

ii. 271.

Osborne, Thomas Burr, Lafayette Benedict Mendel, and Edna L. Ferry, observations on growth during feeding with isolated articles of food, 1912, A., ii, 957.

the rôle of gliadin in nutrition, 1912,

A., ii, 1190.

borne, Thomas Burr, Lafayette Benedict Mendel, and Isaac Foust Harris, proteins of the castor bean; isolation of ricin, 1905, A., ii, 753.

Osborne, Thomas Burr. See also Francis

Gano Benedict.

Osborne, William Alexander, synthesis of homogentisic acid, 1903, A., i, 487.

the so-called antitoxic action of bivalent cations, 1905, A., ii, 746.

intracellular colloidal salts, 1906, A.,

ii, 241.

the Haldane-Smith method of estimating the oxygen tension of arterial

blood, 1907, A., ii, 793.

physiological climatology. I. Relation of loss of water from the skin and lungs to the external temperature in actual climatic conditions, 1911, A., ii, 124.

Osborne, William Alexander, and Edith Muntz, action of carbon dioxide on the respiration of fish, 1906, A., ii,

Osborne, William Alexander, and Samuel Zobel, the sugars of muscle, 1903, A., ii, 310.

Oser, Adam. See Carl Graebe. Osgood, R. B. See J. E. Goldthwait. Oshima, Kintaro, constituents of rush-

pith (tōshin), 1907, A., ii, 644. Oshima, Kintaro, and T. Tadokoro, carbohydrate group in yam mucin,

1912, A., ii, 381.

Osipoff, Iwan Pavlovitsch, and Georgi Vasiljevitsch Korschun, synthesis of ethyl 2:5-dimethylpyrrole-3-monocarboxylate, 1904, A., i, 264.

Osipoff, Iwan Pavlovitsch, and Sergei Alexandrovitsch Popoff, coefficient of distribution of hydrogen peroxide between water and ether, 1904, A., ii,

Osmond, Floris, and G. Cartaud, meteoric iron, 1904, A., ii, 135.

the permanence of crystallitic forms in crystals, 1904, A., ii, 648.

crystallography of iron, 1906, A., ii, 545.

Osmond, Floris, and Ch. Frémont, mechanical properties of iron in isolated crystals, 1905, A., ii, 638.

Osorovitz, N., dihydroxyfluoresceins of halogen-substituted phthalic acids,

1903, A., i, 489.

Ossendowsky, Antoni, extract of iris flowers as a sensitive indicator, 1904, A., ii, 202.

Ossmulsky, W. See Wojciech Sventoslavsky.

Ost, [Friedrich] Hermann [Theodor], isomaltose, 1905, A., i, 22.

transformation of dextrose into levulose; detection of lævulose, 1905, A., i, 684.

cellulose acetates, 1906, A., i, 560; 1911, A., i, 712.

viscosity of cellulose solutions, 1911,

A., i, 838. Ost, Hermann, and Th. Brodtkorb, decomposition of dextrose by dilute sulphuric acid, 1911, A., i, 951.

Ost, Hermann, and Tomio Katayama, comparative acetylation of cellulose, hydrocellulose, and alkalised cellulose, 1912, A., i, 680.

Ost, Hermann, and Friedrich Klein, formic acid in glacial acetic acid,

1908, A., ii, 903.

Ost, Hermann, and F. Westhoff, cellulose hydrates, 1909, A., i, 210.

Ost, Hermann, F. Westhoff, and L. Gessner, viscose from cellulose and from starch, 1911, A., i, 710.

Ost, Hermann, and L. Wilkening, conversion of cellulose into sugar, 1910,

A., i, 364.

Ost, Walter. See Otto Wallach. Osten, Hans. See Robert Behrend.

Oster, Heinrich, indophenines, 1904, A., i. 914.

Osterburg, Johannes. See Daniel Vorländer.

Osterhout, Winthrop John Vanleuven, toxicity of sodium chloride and its prevention by other salts, 1906, A., ii, 383.

protective action of sodium for plants, 1910, A., ii, 62.

Osterhout, Winthrop John Vanleuven, penetration of inorganic salts into living protoplasm, 1910, A., ii, 335.

Ostersetzer, Alfons. See Moritz Kohn. Osterwalder, Adolf, fruit wine yeasts,

1906, A., ii, 298.

the formation of volatile acids by yeasts after fermentation under aerobic conditions, 1912, A., ii, 475.

Osthelder, F. See Hermann von Tap-

peiner.

Ostrogovich, Adriano, correction [iminooxymethyltriazine], 1904, A., i, 832. new derivatives of guanylcarbamide,

1909, A., i, 461.

tautomerism of aliphatic ketones,

1909, A., i, 764.

modification of the reduction process for copper spirals used in organic combustions, 1909, A., ii, 1052.

action of amidines on cyanoguanidine,

1911, A., i, 332.

some new data on the preparation of biguanide, 1911, A., i, 429.

action of nitriles on cyanoguanidine,

1911, A., i, 507.

action of acetyl chloride on acetyl-

biuret, 1911, A., i, 1036. action of thioacetic acid ou cyanoguanidine (synthesis of thioliminomethyl-

triazine), 1912, A., i, 320. action of cyanuric chloride on magnesium organic compounds, 1912, A., i,

662.

Ostrogovich, Adriano, and M. Mihailescu, N-aminonaphthalimide and its

derivatives, 1912, A., i, 311.

Ostrogovich, Adriano, and Theophil Silbermann, explanation of the formation of quinoneimine dyes from amines by oxidising and halogen fusions, 1907, A., i, 647.

action of halogens on aromatic amines and their use in the synthesis of certain dyes, 1908, A., i, 373.

oxidation of aniline by halogen acids, 1908, A., i, 373.

explanation of the formation of induline, 1908, A., i, 373.

Ostrogovich, Adriano. See also Theophil Silbermann.

Ostromisslensky, Iwan von, the two modifications of o-nitrotoluene, 1907, A., i, 120.

the benzene problem, 1907, A., i, 596. a new solvent for some proteins, 1907, A., i, 994.

relations between solvents and solutes,

1907, A., ii, 847.

organic solvent for some varieties of carbon, 1907, A., ii, 864.

Ostromisslensky, Iwan von, action of dichloroacetic acid on aniline and its homologues, 1908, A., i, 82, 888. products of the nitration of o-chloro-

nitrobenzene, 1908, A., i, 867.

structure of benzene. I. Polymorphic modifications of aromatic compounds. II. Homogeneity of the ortho- and of the meta-derivatives of benzene. III. The two chemically isomeric 2:4-dinitrophenols, 1908, A., i, 868.

action of glyoxylic acid and of diacetylglyoxylic acid on aniline and its homologues, 1908, A., i, 889.

optical isomerides, 1908, A., ii, 913. relation between colour and constitution, 1910, A., i, 161.

optical isomerism. II., 1910, A., ii,

247.

the nature of triboluminescence, 1910, A., ii, 1019.

triboluminescence of racemic compounds, 1910, A., ii, 1019.

the analysis of binary compounds by a method based on the law of mass action, 1911, A., ii, 195, 476.

very sensitive new colour reaction for ethylenic linkings and for tautomeric modifications, 1912, A., i, 1. nitroalkylates, 1912, A., i, 22.

structure of polymerised vinyl bromide and caoutehoue, 1912, A., i, 280.

regeneration of caoutchouc from its bromide; synthesis of butadienecaoutchouc, 1912, A., i, 284.

Ostromisslensky, Ivan von, and Pawel Alabéeff, mechanism of the elimination of halogens by aromatic amines, 1911, A., i, 534.

Ostromisslensky, Iwan von, and I. S. Babadschan, Rupp and Loose's indi-

cator, 1910, A., ii, 1106.

Ostromisslensky, Iwan von, and August Bergmann, isomerism of complex compounds. I. Asymmetric complex compounds of platinum, 1910, A., i, 887.

Ostromisslensky, Iwan von, and I. Burschanadze, pyrogenetic decomposition of naphtha in presence of a catalyst, 1910, A., i, 309.

Ostromisslensky, Iwan von, and A. Pamfiloff, mechanism of the formation of indigotin from anthranilic acid and polyhydroxy-compounds; new synthesis of indigotin, 1909, A., i, 838.

Ostromisslensky, Iwan von. See also

Th. Zerewitinoff.

0stwald, Walter, emulsions, 1910, Λ., ii, 194. Ostwald, Wilhelm, theory of solubility curves, 1903, A., ii, 280.

Faraday lecture: elements and compounds, 1904, T., 506; P., 78.

fundamental stoicheiometric laws and the atomic theory, 1909, A., ii, 989. universal chemical language, 1911, A., ii, 267.

Ostwald, Wilhelm. See also Hans Lan-

dolt.

Ostwald, [Carl Wilhelm] Wolfgang, swelling of \$\beta\$-gelatin, 1905, A., i, 848. influence of acids and alkalis on the

swelling of gelatin, 1905, A., i, 954. toxicity of sea water for fresh-water animals, 1905, A., ii, 272; 1906, A.,

ii. 112.

swelling of gelatin in salt solutions,

1906, A., i, 469.

systematic classification of colloids,

1907, A., ii, 939.

oxidising ferments in the mature reproductive cells of amphibia and their function as stimuli to develop-

ment, 1907, A., ii, 976. the relations between adsorption and toxicity of salt solutions on freshwater animals (Gammarus), 1907,

A., ii, 981.

influence of electrolytes on the coagulation-temperature of egg-albumin,

1908, A., i, 375.

nature of the combination of gases in blood and its constituents; preliminary notice, 1908, A., ii, 509.

system of colloids, 1908, A., ii, 820. colloidal chemistry of caoutchouc. I. and II. Theory of vulcanisation, 1910, A., ii, 272, 697; 1912, A., i, 706.

the adsorption of electrolytes by sols,

1911, A., ii, 374.

the colour and degree of dispersity of colloidal solutions, 1911, A., ii, 868.

the nature of solvates and the relationships between adsorption and dis-

sociation, 1911, A., ii, 1068. theory of the critical opalescence,

1912, A., ii, 18.

[classification of colloids], 1912, A., ii,

colloidal chemistry of indicators, 1912, A., ii, 439.

Ostwald, Wolfgang, and A. Dernoscheck, relationships between adsorption and toxicity, 1910, A., ii, 592.

Ostwald, Wolfgang, and Friedrich Goppelsroeder, time-law of the capillary rise of liquids and the relationship of velocity to the chemical constitution, 1908, A., ii, 263.

Ostwald, Wolfgang. See also Martin Henry Fischer, and Petr Petrovič von Weimarn.

O'Sullivan, Hugh Henry. See Percy

Faraday Frankland.

O'Sullivan, James, a comparison of the products of the hydrolysis of potato starch with those obtained from cereal starches, 1904, T., 616; P., 65. Oswald, Adolf, iodised decomposition

products of proteins, 1903, A., i,

the iodine-binding group in protein, 1903, A., i, 450.

protein in urine, 1904, A., ii, 358.

simple clinical method of estimating the different proteins in urine, 1904, A., ii, 795.

the combination of iodine in iodothyreoglobulin, and some observations on iodothyrin, 1909, A., i, 123.

introduction of iodine into the benzene

ring, 1909, A., i, 143.

preparation of 1909, A., i, 303. 3:5-di-iodotyrosine,

iodo-2-methylindole, 1909, A., i, 512. action of trypsin on 3:5-di-iodo-ltyrosine, 1909, A., i, 860.

protein-cleavage by dilute mineral acids, 1909, A., i, 979.

the behaviour of 3:5-di-iodo-l-tyrosine and 3:5-di-iodo-r-tyrosine in the animal organism, 1909, A., ii, 1041.

a simple method for the preparation of glucosamine hydrochloride from ovomucoid, 1910, A., i, 716.

the union of iodine in iodothyreoglobulin, 1910, A., i, 792.

degradation of di-iodotyrosine in the animal organism, 1910, A., ii, 433.

preparation of 3:5-di-iodotyrosine from iodoprotein, 1911, A., i, 203.

preparation of 3:5-di-iodotyrosine from iodoproteins. II. The obtaining of the same from iodoglidin, 1911, A., i, 372.

hydrolysis of sodium "iodeigon,"

1911, A., i, 697.

preparation of \$\beta\$-iodoindole, 1911, A., 1, 747.

remarks on Henze's paper on the history of iodogorgonic acid, 1911, A., i, 842.

3:5-di-iodotyrosine from iodised protein. III. From iodocasein, 1911, A., i. 1050.

3:5-di-iodotyrosine from iodoprotein. IV. Gorgonin and spongin, 1912,

di-iodotyrosine; a correction, 1912, A., i, 261.

Oswald, Marcel, decomposition of silver nitrite by heat, 1911, A., ii, 281.

a simple relation between the expansion coefficient of liquids and temperature, 1912, A., ii, 230.

Otin, C. Nicolescu, electrochemical behaviour of manganese, 1909, A., ii. 703.

electrolytic estimation of manganese. 1909, A., ii, 703.

reduction of nitrobenzene to aniline, 1910, A., i, 727.

preparation of lithium persulphate, 1911, A., ii, 1088.

the fusion of cuprous oxide with silica,

1912, A., ii, 351.

Otolski, Stefan, and Edmund Biernacki, the phosphatides in the organs of rabbits killed by injection of the tubercle bacillus, 1912, A., ii, 792.

Otolski, S. W., the lecithin of bone-marrow, 1907, A., i, 666.

Otori, Jiro, decomposition of pseudomucin by concentrated boiling acids, 1904, A., i, 1067; 1905, A., i, 104. oxidation of pseudomucin and

casein with calcium permanganate,

1905, A., i, 104.

picrolonates derived from substances [amines] of physiological importance, 1905, A., i. 126.

Otori, Jiro. See also Friedrich Kutscher. Otsuka, Ichiro. See Takaoki Sasaki.

Otsuki, Chiri. See Julius Precht. Ott, Alfons. See Franz Müller, and

Heinrich Wolff.

Ott, Erwin, symmetric and asymmetric acid dichlorides, 1912, A., i, 828. action of metals on alkyldichloro-

amines, 1912, A., i, 948. Ott, Erwin. See also Hermann Staud-

Ott, Friedrich, electrolytic reduction of columbic acid, 1912, A., ii, 771.

Ott, Hans, conversion of Schiff's bases into hydrazones, semicarbazones, and oximes, 1905, A., i, 376.

See Karl Andreas Hof-Ott, Karl.

Ottelli, Giuseppe, detection of mercury in cheese and flesh from animals which have been inoculated against rinder-

pest, 1903, A., ii, 183.

Otten, H., and T. C. Galloway, jun., relation of the pancreas to blood diastases in dogs, 1910, A., ii, 786.

Ottenberg, Reuter, and David J. Kaliski, blood tests before transfusion, 1912, A., ii, 362.

Ottenberg, Reuter. See also Peter Rona. Ottens, Johann. See August Michaelis. Ottmann, Adolf. See Stanislaus von Kostanecki.

Otto, Andreas, detection of dextrose in urine, 1908, A., ii, 739.

Otto, Anton, [analysis of dognacskaite], 1905, A., ii, 464.

Otto, Erich. See Emil Fischer.

Otto, Ernst, behaviour of salt solutions in the stomach, 1905, A., ii, 403.

Otto, Gustav, the action of monoatomic alcohols on trout and their brood, 1912, A., ii, 1082.

Ctto, Johannes, estimation of [combined] oxalic acid in the needles of Coniferæ, 1912, A., ii, 500.

Richard, manurial experiments with calcium cyanamide and garden plants, 1905, A., ii, 196.

manurial experiments with calcium cyanamide and sodium nitrate on

oats, 1907, A., ii, 809.

manurial experiments with two commercial forms of calcium cyanamide. sodium nitrate, and ammonium sulphate applied to mangolds, 1909, A., ii, 88.

Otto, Richard, and W. D. Kooper, the changes taking place in the composition of fruits which ripen after being gathered, 1910, A., ii, 233,

effect of poisonous solutions containing alkaloids on soils and plants, 1910, A., ii, 993.

investigation of nitrogen assimilation by foliage leaves, 1911, A., ii, 524.

Otto, Rudolf, preparation of secondary 4-dimethylamino-1-phenyl-2:3-dimethyl-5-pyrazolone citrate, 1911, A., i, 926.

Ottolenghi, Donato, ergosterol, 1906, A., ii, 202.

new colour reaction of the cholesterols, 1906, A., ii, 311.

action of acids, bases, and certain salts on bactericidal sera, 1912, A., ii, 974.

Ottow, Wilhelm Martin, euphorbone, 1903, A., i, 641.

Ouvrard, Léon [Victor René], calcium chloroborates, 1905, A., ii, 635. calcium bromoborates, 1906, A., ii,

compound of the haloids and borates of strontium or barium, 1906, A., ii,

borostannates of the alkaline earths; reproduction of nordenskiöldite, 1906, A., ii, 669.

Overman, Eliza. See Maxwell Adams. Overton, [Charles] Ernst, action of salts on muscle and nerve, 1905, A., ii, 46.

Overton, [Charles] Ernst. See also Ivar

Ovitz, F. K. See Horace Chamberlain

Porter.

Owen, A. G. W., and Charles Scott Sherrington, strychnine reversal, 1912,

Owen, E. A., the passage of homogeneous Röntgen rays through gases, 1912,

A., ii, 516.

Owen, Fayette T. See John Livingston

Rutgers Morgan.

Owen, Gwilym, and A. Ll. Hughes, condensation nuclei produced by cooling gases to low temperatures, 1907, A., ii, 843.

molecular aggregations produced in gases by sudden cooling, 1908, A.,

ii, 565.

Owen, Gwilym, and Harold Pealing, condensation nuclei produced by the action of light on iodine vapour, 1911, A., ii, 353.

Owen, (Miss) Gertrude Emily. See

Alexander Findlay.

Owen, Irving L. See Jacob Goodale

Lipman.

Owen, Morris, magneto-chemical investigations; thermo-magnetic properties of the elements, 1912, A., ii, 227, 425.

Owen, W. L., a recently discovered bacterial decomposition of sucrose,

1912, A., ii, 375.

Oxley, A. E., the magnetic susceptibilities of certain compounds, 1911, A., ii, 251.

magnetic examination of the function of the water molecule in certain dilute solutions, 1912, A., ii, 325.

Ozorovitz, N. See Theophil Silbermann.

P.

Paal, Carl [Ludwig], products of the condensation of saligenin with aromatic bases, 1903, A., i, 340.

colloidal sodium chloride, 1906, A., ii,

the partial catalytic hydrogenation of substances containing more than one double bond, 1912, A., i, 703.

Paal, Carl, and Conrad Amberger, colloidal metals of the platinum group, 1904, A., ii, 180; 1905, A., ii, 397; 1907, A., ii, 360.

palladium, 1905, A., ii, 397.

palladium hydride, 1905, A., ii, 397. rendering active of hydrogen by colloidal palladium, 1905, A., ii, 397, 533.

Paal, Carl, and Conrad Amberger, osmium, 1907, A., ii, 404.

catalytic actions of colloidal metals of the platinum group. I., 1907, A., ii, 559.

Paal, Carl, and Emil Dencks, synthesis of pyridazine derivatives. I., 1903,

A., i, 289.

Paal, Carl, and August Ganghofer, estimation of nitric acid with "nitron," 1909, A., ii, 759.

estimation of potassium nitrate in meat by means of nitron, 1910, A.,

ii, 453.

Paal, Carl, and Leo van Gember, sec .aminoacetals, 1908, A., i, 511.

Paal, Carl, and Josef Gerum, catalytic actions of colloidal metals of the platinum group. II., 1907, A., ii,

catalytic actions of colloidal metals of the platinum group. III. Reduction catalysis with colloidal palladium and platinum, 1908, A., i, 599.

liquid hydrosol of palladium hydride,

1908, A., ii, 392.

palladium hydride, 1908, A., ii, 392. catalytic actions of colloidal metals of the platinum group. VI. Reduction catalysis with colloidal palladium, 1909, A., i, 381.
Paal, Carl, and Wilhelm Hartmann,

catalytic actions of colloidal metals of the platinum group. VII. The reduction of ethylene, 1909, A., i, 545.

catalytic action of colloidal metals of the platinum group. VIII. Progressive reduction of phenylpropiolic acid, 1909, A., i, 926.

[catalytic action of colloidal palladium on the union of hydrogen and oxygen], 1909, A., ii, 990.

gas-volumetric estimation of hydrogen by catalytic absorption, 1910, A., ii, 237.

Paal, Carl, and Franz Hörnstein, synthesis with d-gluconic acid, 1906, A., i, 400, 802.

Paal, Carl, and Christian Hohenegger, the adsorption of acetylene by colloidal palladium, 1910, A., i, 806. the adsorption of acetylene by palladium black, 1910, A., i, 807.

Paal, Carl, and Arthur Karl, the influence of foreign substances on the activity of catalysts, 1911, A., ii, 479.

Paal, Carl, and Max Kinscher, synthesis of aa-diaryl substituted arabitol, 1912, A., i, 31.

Paal, Carl, and Carl Koch, pyridazine derivatives. III. Ethyl dimethylpyridazinecarboxylate, 1903, A., i, 722.

3:6-dimethylpyridazine, 1905, A., i. 91.

colloidal selenium, 1905, A., ii, 158. the brown and blue modifications of colloidal tellurium, 1905, A., ii,

Paal, Carl, and Gustav Kühn, organosols and gels of sodium chloride, 1906, A., ii, 749.

organosols and gels of sodium bromide,

1906, A., ii, 749.

pyridazine synthesis. pyridazine derivatives, 1908, A., i, 57. V. Diphenyl-

colloidal sodium chloride, 1908, A., ii,

colloidal sodium bromide and iodide, 1908, A., ii, 179.

Paal, Carl, and Wilhelm Leuze, red and blue modifications of colloidal copper, 1906, A., ii, 356.

colloidal copper oxide, 1906, A., ii,

358.

Paal, Carl, and Gustav Mehrtens, gravimetric estimation of potassium nitrate

in meat, 1906, A., ii, 898.

Paal, Carl, and Karl Roth, catalytic actions of colloidal metals of the platinum group. IV. Reduction catalysis with colloidal palladium, 1908, A., i, 599.

catalytic actions of colloidal metals of the platinum group. V., 1909, A.,

i, 358.

Carl, and Heinrich Schulze, chloroand bromo-diphenacyls, 1903, A., i, 707.

iododiphenacyls, 1903, A., i, 708. cyanodiphenacyl, 1903, A., i, 709. action of silver acetate on halogen-

diphenacyls, 1903, A., i, 709. of s-tribenzoyleyelotrisynthesis methylenes, 1903, A., i, 710.

Paal, Carl, and Jean Ubber, pyridazine derivatives. II., 1903, A., i, 290. Paal, Carl, and Franz Voss, colloidal

silver salts, 1904, A., ii, 816. Paal, Carl, and Erich Weidenkaff, action

of magnesium phenyl bromide on glycine ethyl ester, 1905, A., i, 436. Grignard's reaction with amino-acids, 1906, A., i, 236.

unsymmetrical diphenylethylene oxide and diphenylethylene gylcol, 1906,

A., i, 583.

synthetical experiments with d-galactonic acid, 1906, A., i, 802.

Paal, Carl, and Erich Weidenkaff, application of the Grignard reaction to ethyl aspartate, 1907, A., i, 131.

Paal, Carl, and Kurt Zahn, aa-diphenylglycerol, 1907, A., i, 522.

colloidal potassium chloride, 1909, A., ii, 235.

colloidal potassium bromide iodide, 1909, A., ii, 235.

Paal, Carl, and Georg Zitelmann, action of phenylcarbimide on amino-acids, 1904, A., i, 100.

Paal, Carl. See also Aladar Skita. Pachon, V., and Emile Perrot, the

cardio-vascular action of green coffee compared with that of corresponding doses of caffeine, 1910, A., ii, 735.

Pachon, V. See also H. Busquet. Pacini, Domenico, polarity of discharge, 1907, A., ii, 425.

penetrating radiation, 1909, A., ii, 285. the disintegration products of radium and thorium in the atmosphere,

1910, A., ii, 374. Packard, Wales Harrison, resistance to lack of oxygen and a method of increasing it, 1906, A., ii, 95.

effect of carbohydrates on resistance to lack of oxygen, 1907, A., ii, 279. resistance to lack of oxygen, 1908,

A., ii, 402.

Pacottet, Paul. See Géza Austerweil. Paddison, William Perceval. See Henry Edward Armstrong.

Padé, Léon, estimation of sulphurous acid in gelatins and other foods, 1908,

A., ii, 893.

Paderi, Cesare, biological properties of glycuronic acid. I. Amount of glycuronic acid contained in the organism, 1911, A., ii, 629.

influence of sodium chloride on the excretion of bromides, 1911, A., ii,

Padoa, Maurizio, solid solutions and isomorphism, 1903, A., ii, 715.

equilibrium between chlorocamphor and bromocamphor, 1904, A., i, 756.

velocity of cystallisation of isomorphous mixtures, 1904, A., ii, 390; 1908, A., ii, 89.

supposed radioactivity of hydrogen

peroxide, 1905, A., ii, 624. products of hydrogenation of pyrrole by means of reduced nickel, 1906, A., i, 530.

catalytic actions of finely-divided metals on nitrogen compounds, 1907, A., i, 636.

nature of iodide of starch, 1908, A., i, 249.

Padoa, Maurizio, phototropy of certain phenylhydrazones, 1909, A., i, 676. attempts at asymmetric synthesis by means of circularly-polarised light.

1910, A., ii, 6.

decacyclene and its alleged property of dissolving graphite, 1911, A., i, 362.

Padoa, Maurizio, and F. Bovini, relation between constitution and phototropy, 1912, A., i, 223.

Padoa, Maurizio, and Livio Cambi, conditions of precipitation of metallic

sulphides, 1907, A., ii, 86.

Padoi, Maurizio, and Achille Carughi, transformation of quinoline into 2methylindole, 1906, A., i, 765.

Padoa, Maurizio, and Camilla Chiaves, catalytic action of finely-divided metals on nitrogen compounds,

1908, A., i, 104.

Padoa, Maurizio, and Ugo Fabris, catalytic action of finely-divided metals on nitrogen compounds, 1907, A., i, 722.

equilibrium of hydrogenation, 1908,

A., i, 255, 776.

Padoa, Maurizio, and Domenico Galeati, diminution in the velocity of crystallisation caused by foreign substances, 1904, A., ii, 714.

Padoa, Maurizio, and Ferdinando Graziani, new phototropic substances, 1909, A., i, 964; 1910, A., i, 135.

relations between constitution and phototropy, 1910, A., i, 509, 778.

Padoa, Maurizio, and Luigi Mervini, influence of impurities on the lower limits of crystallisation, 1909, A., ii, 799; 1911, A., ii, 474.

Padoa, Maurizio, and Ugo Ponti, reduction of the furan nucleus, 1907,

A., i, 146.

Padoa, Maurizio, and Luigi Santi, preparation and phototropy of some osazones, 1910, A., i, 779; 1911, A., i, 693.

influence of auxochromes on photo-

tropy, 1911, A., i, 1029.

relations between phototropy and constitution, 1912, A., ii, 879.

Padoa, Maurizio, and Biagio Savare, nature of iodide of starch, 1905, A., i, 416.

Padoa, Maurizio, and Gino Scagliarini, catalytic action of finely-divided metals on compounds containing nitrogen, 1908, A., i, 828.

Padoa, Maurizio, and G. Tabellini, temperature-coefficients of phototropic transformations, 1912, A., ii, 879. Padoa, Maurizio, and Carlo Tibaldi, formation of mixed crystals of mercuric chloride and iodide, 1903, A., ii, 728.

Padoa, Maurizio. See also Lavoro Amaduzzi, Giuseppe Bruni, Oreste Carrasco, and Riccardo Ciusa.

Padova, Robert, condensation with anthranol, 1906, A., i, 741.

reactions of 9:10-dihydroanthracene and of anthranol, 1909, A., i, 167. reactions of anthranol, 1909, A., i, 655.

Padova, Robert. See also Albin Haller.
Padtberg, J. H., the importance of the skin as a depôt of chlorine, 1910, A., ii. 791.

Padua e Castro, J. M. de, new mineral [from Brazil], 1911, A., ii, 735.

Paepe, Désiré de, reciprocal solubility of sodium carbonate and sodium hydrogen carbonate in water, 1911, A., ii, 489; 1912, A., ii, 156.

velocity of decomposition of ammonium tetrathionate at different tempera-

tures, 1912, A., ii, 747.

Päpke, Julius. See Carl Adam Bischoff. Paessler, [Ernst] Johannes, analysis of tanning materials, 1905, A., ii, 492. estimation of lactic acid in lactates, 1908, A., ii, 438.

Paessler, Johannes, and Heinrich Arnoldi, estimation of sulphuric acid in

leather, 1909, A., ii, 181.

Paganini, Pietro, detection of sawdust in flour and bread, 1905, A., ii, 360.
 Page, Frederick James Montague, obitu-

ary notice of, 1908, T., 2277.

Page, Harold James, hydroxymethylphosphinic acid and some homologues, 1912, T., 423; P., 38; discussion, P., 39.

Page, Harold James, and Samuel Smiles, the intramolecular rearrangement of the haloids of phenazothionium, 1910, T., 1112; P., 133.

Page, Theodore Henry. See Herbert Edward Burgess.

Page, T. W., krypton and the auroral spectrum, 1912, A., ii, 505.

Pagenstecher, A., the occurrence of lipases in tissues, 1909, A., ii, 686.

Pagniello, Alfredo. See Arnaldo Piutti.
Pahl, Carl Niclas, pyrophosphates of barium, strontium, and lead, 1906, A., ii, 87.

Paillot, René, action of radium bromide on the electric resistance of bismuth,

1904, A., ii, 155.

Paine, H. H., coagulation of colloidal copper; rate of coagulation, 1912, A., ii, 337.

Paine, H. H. See also William Cecil Dampier Whetham.

Paine, H. S., destruction of invertase by acids and alkalis, 1910, A., i, 601.

Paine, H. S. See also Claude S. Hud-

Paine, Sydney Gross, the permeability of the yeast cell, 1912, A., ii, 77.

Paine, Sydney Gross. See also John

Golding, and Arthur Harden.

Painter, C. F. See J. E. Goldthwait. Paira, Adolphe. See Georges Freyss. Pairault, E. A. See Henri Pellet. Paisley, John W. See Hermann Ende-

manu

Pajetta, Raffaello, iodine numbers of oils,

1905, A., ii, 774.

solubility of certain benzoates in water: strontium benzoate, 1906, A., i, 952.

estimation of potassium [by Tarugi's method], 1906, A., ii, 804; 1907,

A., ii, 814.

behaviour of potassium persulphate with certain salt solutions, 1906, A., ii, 850.

Pakalneet, A. See Mieczyslaw Centnerszwer.

Pal, J., the action of choline and neurine, 1912, A., ii, 74.

Palache, Charles, olivine in serpentine from Chester, Massachusetts, 1908, A., ii, 116.

mineralogy of Franklin Furnace, New

Jersey, 1910, A., ii, 219.

Palache, Charles, and Frank Roy Fraprie, babingtonite from Somerville, Massachusetts, 1903, A., ii, 491.

Massachusetts, 1903, A., ii, 491.

Palache, Charles, and Herbert Eugene
Merwin, alomosite, a new lead
silicate from Mexico, 1909, A., ii,
676.

connellite and chalcophyllite from Bisbee, Arizona, 1910, A., ii, 47.

Palache, Charles, and Charles Hyde Warren, kröhnkite, natrochalcite (a new mineral), and other sulphates from Chile, 1908, A., ii, 1047.

parisite, etc., from granite-pegmatite at Quincy, Massachusetts, 1911,

A., ii, 614.

Paladino, Raffaele, a-m-tolyloxy-\(\beta\)furylacrylic acid, 1904, A., i, 180.
chemical composition of chestnut
flour, and study of two sugars con-

tained therein, 1906, A., ii, 624. genesis of fat from albuminous substances (lipogenetic enzymes), 1907,

A., ii, 371.

Paladino, Raffaele, physical and chemical properties of the fat of the common chestnut, 1907, A., ii, 905.

spectroscopic and chemical behaviour of the pigment secretion of Aplysia

punctata, 1908, A., ii, 53. black cephalopod inks, 1909, A., ii,

252

the fats of hens' eggs, 1909, A., ii, 498. comparison of the hæmoglobin of certain molluscs with that of vertebrates, 1910, A., ii, 50.

the chemical composition of the fig (Ficus carica), 1910, A., ii, 441. liver pigments of invertebrates, 1910,

A., ii, 977.

the differences in the composition of the brain substance in normal and starving animals, 1912, A., ii, 273.

changes in the physico-chemical properties of the urine and serum of dogs after thyroidectomy, 1912, A., ii, 855.

Palazzo, Francesco Carlo, action of hydroxylamine on ethyl dimethylpyronedicarboxylate, 1904, A., i, 762; 1906, A., i, 701.

action of bromine on ethyl dimethylpyronedicarboxylate, 1905, A.,i, 458. remarkable additive reaction of ful-

minic acid, 1907, A., i, 489. polymerisation of fulminic acid, 1909, A., i, 776.

condensation of azoimide with fulminic acid. I., 1910, A., i, 342.

the constitution of the hydroxamic

acids, 1911, A., i, 428. stereoisomerism of trichloroacetaldoxime, 1912, A., i, 946.

Palazzo, Francesco Carlo, and A. Caldarella, nitrogen derivatives of acetylcarbinol, 1905, A., i, 937.

Palazzo, Francesco Carlo, and Eduardo Carapelle, action of hydroxylamine on ethyl diacetylmalonate, 1905, A., i, 858.

constitution of cyanic acid, 1907, A., i, 195.

Palazzo, Francesco Carlo, and F. Fazio, chloraloxime, 1911, A., i, 421.

Palazzo, Francesco Carlo, and Raffaele Liverani, syntheses of pyrazolones from a derivative of γ-pyrone, 1911, A., i, 920.

Palazzo, Francesco Carlo, and F. Maggiacomo, constitution of phosphorous

acid, 1908, A., ii, 488.

Palazzo, Francesco Carlo, and G. Marogna, some acyl derivatives of 2and 3-aminopyridines, 1912, A., i, 1016. Palazzo, Francesco Carlo, and E. Oliveri-Mandala, oxalo-monohydroxamic acid,

1911, A., i, 428.

Palazzo, Francesco Carlo, and P. Onorato, 3:5-diacetyl-2:6-dimethylpyrone and the constitution of the synthetical y-pyrone compounds, 1905, A., i, 459.

Palazzo, Francesco Carlo, and N. Salvo, action of hydroxylamine on ethyl acetylmalonate, 1905, A., i, 858.

Palazzo, Francesco Carlo, and Giuseppe Scelsi, constitution of certain cyanogen compounds, 1908, A., i, 718.

the tautomerism of isatin, 1911, A., i,

Palazzo, Francesco Carlo, and Antonio Tamburello, derivatives of fulminic

acid, 1907, A., i, 298.
Palazzo, Francesco Carlo, and Astorre Tamburini, syntheses of derivatives of 1:8-naphthyridine from a-aminopyridine, 1911, A., i, 327.

Palazzo, Francesco Carlo. See also

Alberto Peratoner.

Palitsch, Dragomir, an allotropic form

of silver, 1911, A., ii, 724.

Palitzsch, Sven, the hydrogen ion concentration of sea-water, 1912, A., ii, 39.

the application of methyl-red to the colorimetric measurement of hydrogen ion concentrations, 1912, A., ii,

Palitzsch, Sven. See also Sören Peter

Lauritz Sörensen.

Palladin, Alexander, a simple estimation of trypsin and the law of trypsin fermentation, 1910, A., ii, 912.

Wladimir I., normal and Palladin, intramolecular respiration of Chlorothecium saccharophilum, 1904, A.,

different origin of the carbon dioxide given off by plants during respira-

tion, 1905, A., ii, 751.

formation of different respiration enzymes depending on the stage of development of the plants, 1906, A., ii, 481.

work of respiration enzymes of plants under different conditions, 1906,

A., ii, 570. rôle of the reductase in alcoholic fermentation, 1908, A., i, 589.

the respiratory pigments of plants, 1908, A., ii, 416.

the prochromogen of the respiration chromogen of plants, 1909, A., ii, 511.

theory of the respiration of plants. I. and II., 1909, A., ii, 511.

Palladin, Wladimir I., synergin, the prochromogen of the respiration pigment of wheat germs, 1910, A., i. 760.

action of poisons on the respiration of plants; theoretical part, 1910, A., ii.

function of respiratory pigments in the oxidation processes of plants and

animals, 1912, A., ii, 570.

Palladin, Wladimir I., W. G. Aleksandroff, Nicolaus N. Iwanoff, and A. N. Levitsky, influence of various oxidising agents on the work of pro-

teolytic enzymes in dead plants, 1912, A., ii, 800.

Palladin, Wladimir I., Elise Hübbenet, and Marie Korsakoff, the action of methylene-blue on the respiration and alcoholic fermentation of living and killed plants, 1911, A., ii, 919.

Palladin, Wladimir I., and Nicolaus N. Iwanoff, formation and assimilation of ammonia in dead plants,

1912, A., ii, 672.

the interdependence of protein degradation in plants, and their respiratory processes. II. The action of carbohydrates, phosphates, and oxidising reagents on the formation and assimilation of ammonia in killed plants, 1912, A., ii, 863.

Palladin, Wladimir I., and S. Kostytscheff, anaerobic respiration, alcoholic fermentation, and formation of acetone in seedlings, 1906, A., ii, 696.

anaerobic respiration of seed plants without alcohol production, 1907.

A., ii, 385.
Palladin, Wladimir I., and G. Kraule, the interdependence of protein degradation in plants, and their respiratory processes. I. The action of the oxygen of the air on the work of the proteoclastic ferment in killed plants, 1912, A., ii, 477.

Palladin, Wladimir I., and Y. A. Kraule, influence of atmosphere oxygen on the work of proteolytic enzymes in dead plants, 1912, A., ii,

Palladin, Wladimir I., and E. Stanewitsch, the dependence of plant respiration on the presence of lipoids, 1910, A., ii, 799.

Palladino, Pietro, contribution to the study of capillarity, 1909, A., ii, 553. chance identity of numbers with atomic

weights and approximate agreement with Mendeléeff's series, 1909, A., ii, 562

Palladino, Pietro, chemical compounds in space, 1912, A., ii, 36.

Palm, Björn. See Hans von Euler.

Palm, O. H. See Charles Frederic Mabery.

Palma, Stefano di, compound obtained by treating carbamide with formaldehyde, 1912, A., i, 610.

action of heat on d-lupanine, 1912, A., i, 805.

Palmaer, Wilhelm, preparation of tetramethylammonium, 1903, A., i, 12.

absolute potential of the calomel electrode, 1903, A., ii, 707; 1907, A., ii, 424.

the law of the independent migration of ions, 1906, A., ii, 650.

model and experiment to demonstrate changes of concentration during electrolysis, 1906, A., ii, 650.

electrolytic potentials and the periodic system, 1912, A., ii, 1128.

See also

Palmaer, Wilhelm. Ericson-Aurén.

Palmberg, Bertil. See Wilhelm Manchot. Palme, H. See Thor Execrantz.

Palmén, John. See Carl Dietrich Harries. Palmer, Chase, arizonite: ferric metatitanate, 1909, A., ii, 1026.

the geo-chemical interpretation of water analyses, 1912, A., ii, 97.

Palmer, Charles Middlebrook, chrysocolla: a remarkable case of hydration, 1903, A., ii, 657.

Palmer, Erik Schjöth. See Treat Bald-

win Johnson.

Palmer, Frederick William Morton, hydrochloric acid and cancer, 1906,

A., ii, 786.

Palmer, Howard Earle, application of potassium ferricyanide in alkaline solution to the estimation of arsenic, antimony, and tin, 1910, A., ii, 546.

application of potassium ferricyanide in alkaline solution to the estimation of vanadium and chromium, 1910, A., ii, 902.

Palmer, Howard Earle. See also Philip Embury Browning, and Isaac King

Phelps.

Palmer, R. C., and Herman Schlundt, dielectric constants of some liquid hydrides, 1911, A., ii, 458.

Palmer, (Sir) Walter, (Bart.), obituary notice of, 1911, T., 1667.

Palomaa, Matti Herman, preparation of ether esters, 1909, A., i, 359.

ether-like compounds. I. Ether alcohols of the type R O CH₂ CH₂ OH, 1909, A., i, 869.

Palomaa, Matti Herman, physicochemical methods of measurement. I. Transparent thermostat for a wide range of temperature, 1911, A., ii, 464.

simplified gravimetric analysis, 1911,

A., ii, 531.

Palomaa, Matti Herman, and Sulo Kilpi, the preparation of β-alkyloxy-compounds, 1911, A., i, 176.

Palozzi, Antoinetto. See Cesare Serono. Pamfil, Georges. See Georges Baume.

Pamfil, G. P., qualitative analysis of metals without employment of hydrogen sulphide or ammonium sulphide, 1911, A., ii, 1030.

Pamfiloff, A. See Iwan von Ostromiss-

lensky.

Pampanini, G. See Mario Amadori, and Giuseppe A. Barbieri.

Panajotow, Georg, separation of antimony and tin, 1909, A., ii, 523.

Panaotovic, Jovan P., spectroscopic detection of small quantities of chlorine, bromine, and iodine, 1903, A., ii, 177.

Panayeff, Joseph von. See Rudolph Fittig. Panchaud, Adalbert, [volumetric] essay of ciuchona barks, 1906, A., ii, 909. Panchaud, Léon. See Fritz Ullmann.

Pander, Robert. See August Michaelis.
Panek, Kazimir, bacteriological and chemical study of the fermentation of red beet, known as "barszez." 1905.

A., ii, 472.

Panek, Kazimir. See also Stanislaus Bondzynski, and Leo Popielski.

Paneth, Fritz, intramolecular change of quinidine (conchinine) and of cinchonidine by sulphuric acid, 1911, A., i, 560.

Panichi, Ugo, deposit of alunite in the liparite of Torniella in the province of Grosseto, 1911, A., ii, 210.

minerals from the deposits of Tiriolo (Catanzaro), 1912, A., ii, 57.

minerals accompanying the ferriferous deposit of the Buca della Vena near Stazzema, Apuan Alps, 1912, A., ii, 172.

crystallographic determination of some new compounds, 1912, A., ii, 551.

Paniker, Ramni, and Edmund Stiasny, the acid character of gallotannic acid, 1911, T., 1819; P., 213.

Panisset, Lucien. See Charles Porcher.
Pannain, Ernesto, estimation of persulphates, 1904, A., ii, 638.

electrolysis of imides, 1905, A., i, 755. certain alloys of silver, 1908, A., ii, 495. Pannain, Ernesto, rapid analysis of copper-plating baths, 1908, A., ii.

electrolysis of santonin and of its derivatives, 1909, A., i, 32.

variations in the structure of silver coinage alloys during working, 1909, A., ii, 731.

solubility of silver and of its alloys in mixtures of acids, 1909, A., ii, 886.

volumetric estimation of silver by Gay-Lussac's method, 1909, A, ii,

variations of the physical properties of metallic alloys subjected to me-chanical and thermal action. I. Specific gravity, 1910, A., ii, 829. Pannain, Ernesto. See also Federico

Giolitti, Emanuele Paternò, and Celso Ulpiani.

Pannertz, P., burette arrangement, 1907, A., ii, 128.

Pannwitz, Paul. See Hugo Kauffmann. Panoff, K., velocity of formation of the acetates of some closed-chain alcohols, 1903, A., ii, 357.

Panormoff, Alexei A., method of separating albumins from the white of birds' eggs, 1904, A., i, 274.

determination of specific rotation by Kanonnikoff's method, 1904, A., ii,

specific rotations of some proteins and their derivatives, 1904, A., ii, 153.

properties of columbin, an albumin from the white of pigeons' eggs, 1906, A., i, 223.

properties of albumins found in the white of ducks' eggs, 1906, A., i,

224.

Pantanelli, Enrico, influence of colloids on the secretion and action of invertase, 1906, A., ii, 477.

pro-invertase and reversibility of the invertase in mucor, 1906, A., ii,

revertase in fungi, 1907, A., ii, 983. cascola (falling) of the flowers of

Frappato vines, 1909, A., ii, 513. a proteolytic enzyme in the must of over-ripe grapes, 1912, A., ii, 82.

Pantanelli, Enrico, and G. Faure, enzymic condensation of sugars, 1910, A., i, 450.

Pantanelli, Enrico, and M. Sella, selective absorption of ions by roots, 1910,

A., ii, 149.

Pantanelli, Enrico. See also Arrigo Mazzucchelli, and Ernst Winterstein.

Panzer, Theodor, Latschinoff's cholo-camphoric acid, 1906, A., i, 775.

Panzer, Theodor, the "protagon" of the kidneys, 1906, A., ii, 783.

doubly-refracting substances from pathological organs, 1908, A., ii,

detection of vegetable poisons in decomposed animal bodies, 1908, A., ii, 997.

energetic oxidation of cholic acid by nitric acid, 1909, A., i, 586.

biochemistry of protozoa, 1911, A., ii, 813.

the chemical composition of tubercle bacilli, 1912, A., ii, 587.

Paolini, Vincenzo, thiophen, 1907, A., i,

new oxalhydroxamic acid, 1907, A., i. 832.

formation of ketoasarone, 1910, A., i, 394.

estimation of iodine in organic substances, 1910, A., ii, 68.

the isomeric tanacetyl alcohols, 1911, A., i, 730.

some derivatives of d-tanacetyl alcohol, 1911, A., i, 730.

Poulenc's sodium glycerophosphate and a free glycerophosphoric acid, 1911, A., i. 774.

dehydration of the glycols of anethole and isosafrole, 1911, A., i, 779.

commercial sodium glycerophosphates, 1912, A., i, 826.

Paolini, Vincenzo, and Bianca Divizia, the isomeric tanacetyl alcohols, 1912. A., i, 635.

Paolini, Vincenzo. See also Luigi Balbiano, and Giulio Nardelli.

Papasotiriou, J., action of bacteria on pepsin, 1906, A., ii, 691.

Pape, K. See E. Bierling Pape, Max. See August Michaelis.

Pappadà, Nicola, existence of colloidal tungstic acid; interaction of hydrochloric acid and sodium tungstate, 1903, A., ii, 23.

coagulation of colloidal silicic acid, 1904, A., ii, 120; 1905, A., ii, 387. nature of coagulation, 1906, A., ii,

catalysis of hydrogen peroxide, 1907. A., ii, 754.

nature of colloidal solutions in relation to the properties of metallic solutions, 1907, A., ii, 754.

electrical nature of colloidal solutions, 1908, A., ii, 1024.

theory of coagulation, 1909, A., ii,

coagulation of copper ferrocyanide, 1911, A., ii, 971.

Pappadà, Nicola, the coagulation and gelatinisation of silicic acid, 1911. A., ii, 1077.

coagulation of ferric hydroxide, 1912,

A., ii, 53.

coagulation of Prussian blue, 1912, A., ii, 143.

colloidal silver, 1912, A., ii, 157.

colloidal gold and platinum, 1912, A., ii, 169.

the formation of colloidal solutions, 1912, A., ii, 439.

electric charges on colloidal particles, 1912, A., ii, 542.

Pappadà, Nicola, and C. Sadowski, gelatinisation of silicic acid, 1910, A.,

ii, 593. Pappenhusen, Theodor. See Abderhalden.

Paradies, Th., derivatives of anilino-acetonitrile, 1904, A., i, 153.

Parastschuk, Simeon W. See Iwan P. Pawloff.

Parck, Knut, a-phenylmono- and -dibenzylethylamines, 1912, A., i, 759.

Parenti, Carlo, bread fermentation, 1903, A., ii, 746.

Parhon, Marie, respiration of bees during spring, summer, autumn, and winter, 1910, A., ii, 513.

Pari, Giulio Andrea, the influence of nitrogen-free sources of energy on the rate of protein decomposition by the organism, 1908, A., ii, 961.

the influence of the thyroid gland on the rate of decomposition, 1908, A.,

ii, 962.

Pari, Giulio Andrea. See also Sigmund Fränkel.

Paris. Giulio, lactic acid in wine, 1908, A., ii, 543.

composition of the sand from the eruption of Vesuvius, April 1906; 1909, A., ii, 155.

manurial experiments on cereals with calcium nitrate, 1909, A., ii, 515. grape stones, 1912, A., ii, 286.

Paris, Giulio, and T. Marsiglia, reduction of nitrates during alcoholic fermentation, 1909, A., ii, 82.

Paris, Louis, fused alumina in the amorphous state, and reproduction of blue colour of sapphires, 1909, A., ii, 47.

Paris, Louis. See also Jules Auclair. Pariselle, Henri, allylcarbinol: passage to the furfuran series, 1909, A., i, 282.

some derivatives of abb-trihydroxybutane, 1909, A., i, 691.

ethyl ether of allylcarbinol, 1910, A., i, 353.

Pariselle, Henri, new synthesis of natural and racemic erythritol, 1910, A., i, 463.

αβδ-trihydroxybutane: its conversion into furan derivatives and erythritol, 1911, A., i, 940.

Δ^a-penten-δ-ol, 1912, A., i, 331.

Pariselle, Henri. See also Robert Les-

Pariset, hydrolysis of hepatic glycogen produced by injection of amylase into the portal vein, 1905, A., ii, 265.

Parke, Davis & Co., preparation of acetyl hydrogen peroxide, 1905, A., i, 317.

Parker, Albert. See John Norman Pring.

Parker, George Howard, reversal of ciliary movement in metazoa, 1905, A., ii, 183.

reversal of the effective stroke of cilia, 1905, A., ii, 542.

Parker, George Howard, and C. R. Metcalf, reactions of earthworms to salts, 1906, A., ii, 784.

Parker, Harry George, the centrifuge in quantitative analysis, 1909, A.; ii, 610.

Parker, H. O. See James Bert Garner. Parker, James Gordon, and John Reginald Blockey, estimation of dextrose in leather, 1912, A., ii, 498.

Parker, Lionel Edmund Longworth. See Marcus Seymour Pembrey.

Parkes, John Wilfrid. See Hamilton McCombie.

Parkin, John, the carbohydrates of the foliage leaf of the snowdrop (Galanthus nivalis) and their bearing on the first sugar of photosynthesis, 1911, A., ii, 1127.

Parkinson, John, the effect of inhalation of oxygen on the pulse in health, 1912, A., ii, 362. Parlati, L. See Marussia Bakunin.

[properties, Giovanni, Parmeggiani, detection, and estimation of] "saccharin," 1908, A., i, 267.

Parnas, Jakob, kephalin, 1910, A., i, 4. enzymatic acceleration of Cannizzaro's aldehyde tranformation by tissue extracts. I., 1910, A., ii, 980.

the fate of the stereoisomerides of lactic acid in the organism of the normal rabbit, 1912, A., ii, 188.

Parnas, Jakob, and Julius Baer, the synthesis and degradation of sugars in the animal organism, 1912, A., ii,

Parnas, Jakob. See also Richard Willstätter.

870

Parone, Ernesto, ethereal oil of gardenia, 1903, A., i, 47.

action of nascent acetylene on benzene in presence of aluminium chloride, 1904, A., i, 26.

sodium derivatives of n-propylene gly-

col, 1905, A., i, 731.

Parow, Edmund, influence of acid, steam pressure, and time on the production of dextrose and dextrin in the inversion of potato starch by mineral acids, 1905, A., i, 684.

Parow, Edmund, and Franz Neumann, evaluation of commercial starch, 1908,

A., ii, 543.

Samuel Wilson, estimation of total carbon in coal and soil, 1904, A., ii, 445.

constants and variables of the Parr calorimeter, 1907, A., ii, 928.

Parr's method of estimating the heat of combustion of coal, 1908, A., ii, 533. sodium peroxide in certain quantitative processes, 1908, A., ii, 628.

weight of carbon dioxide with a table of calculated results, 1909, A., ii, 234.

Wilson, and C. H. Samuel McClure, photometric estimation of sulphur in coal, 1904, A., ii, 773.

Parr, Samuel Wilson, W. F. Wheeler, and Ruth Berolzheimer, comparison of methods for the estimation sulphur in coal, 1910, A., ii, 544.

Parrain, propylguaiacol, 1907, A., i, 43. Parravano, Nicola, anhydrous tung-states, 1909, A., ii, 811.

ternary system : silver-tin-lead, 1911,

A., ii, 281; 1912, A., ii, 759. ternary alloys of iron, nickel, and manganese, 1912, A., ii, 1175.

pyroxenes of the province of Rome, 1912, A., ii, 1182.

Parravano, Nicola, and Gennaro Calcagni, acid function of lead hydr-

oxide, 1907, A., ii, 870. polyphosphates, 1908, A., ii, 838.

Parravano, Nicola, and Pietro de Cesaris, arsenides of tin, 1911, A., ii, 613. arsenic-antimony alloys, 1912, A., ii,

system Sb₂S₃-SnS, 1912, A., ii, 771. cuprous sulphantimonites, 1912, A., ii, 942.

Parravano, Nicola, and Mario Fornaini, hydrates of sodium sulphide, 1907, A., ii, 951.

Parravano, Nicola, and Carlo Marini, hypophosphoric acid, 1906, A., ii, 744, 848.

Parravano, Nicola, and Aldo Mieli, acid phosphates, 1908, A., ii, 837.

Parravano, Nicola, and Alessandro Pasta. compounds of dichromates of bivalent metals with organic bases, 1907, A., i, 961.

chromates, 1908, A., ii, 294.
Parravano, Nicola, and G. Sirovich, phenomena of crystallisation in ternary systems. I., II., and III. Isomorphous ternary mixtures with a miscibility gap, 1911, A., ii, 704.

phenomena of crystallisation in ternary IV. Certain cases of systems. solubility gaps, 1911, A., ii, 705.

the thermal analysis of quaternary systems, 1911, A., ii, 973, 1078;

1912, A., ii, 30.

crystallisation in ternary systems. V. Ternary systems with a gap of miscibility in the liquid and also in the solid state, 1912, A., ii, 836.

the quaternary alloys of lead, bismuth, cadmium, and tin, 1912, A., ii, 846.

Parravano, Nicola, and Giuseppi Tommasi, salts of phenylthioglycollic [thiolphenylacetic] acid, 1909, A., i, 719.

Parravano, Nicola, and Ettore Viviani, ternary alloys of copper, antimony, and bismuth, 1910, A., ii, 779, 852, 956, 1068.

Parravano, Nicola. See also Italo Bellucci.

Parrozzani, Alfredo, effect of increasing amounts of phosphatic manures on the amounts of organic phosphorus and nitrogen compounds, and on the relation between phosphorus and nitrogen in maize grain, 1909, A., ii,

calcium salts of citric acid and their hydrolytic changes, 1910, A., ii, 396.

the content in organic phosphorus and the relationship between amide nitrogen and the other nitrogenous forms (excluding protein nitrogen) in ripe seeds, 1910, A., ii, 438.

Parrozzani, Alfredo. See also Francesco

Scurti, and Celso Ulpiani.

Parry, (Miss) Ethel. See Hamilton McCombie.

Parry, William, ethyl a-hydroxyisobutyrate, 1909, P., 305. synthesis of pinacones. Part I., 1911,

T., 1169; P., 141.

Parsons, (the Hon. Sir) Charles Algernon, [behaviour of] carbon at high temperatures and pressures, 1907, A., ii, 762.

Parsons, (the Hon. Sir) Charles Algernon, and S. S. Cook, the compression of liquids at high pressures, 1911, A., ii, 699.

Parsons, (the Hon. Sir) Charles Algernon, and Alan Archibald Campbell Swinton, conversion of diamond into coke in high vacuum by cathode rays, 1908. A., ii, 275.

Parsons, Charles Lathrop, identification and composition of malt liquors,

1903, A., ii, 246.

distribution of hydrogen sulphide to laboratory classes, 1903, A., ii, 359. revision of the atomic weight of gluci-

num, 1904, A., ii, 658. equilibrium in the system GlO:SO:

H₂O, 1905, A., ii, 34.

complexity of glucinum, 1905, A., ii,

atomic weights of carbon and glucinum, 1905, A., ii, 710.

solution in a dissolved solid, 1908, A.,

Parsons, Charles Lathrop, and Stuart K. Barnes, separation and estimation of

glucinum, 1907, A., ii, 52. Parsons, Charles Lathrop, and H. P. Corliss, equilibrium in the system : potassium iodide, iodine, and aqueous

alcohol, 1910, A., ii, 1061. Parsons, Charles Lathrop, and H. P. Corson, solubility of barium nitrate and barium hydroxide in the presence of each other, 1910, A., ii, 1065.

Parsons, Charles Lathrop, and W. W. Evans, diffusion phenomena of the alums, 1910, A., ii, 1069.

Parsons, Charles Lathrop, and C. L. Perkins, solubility of strontium nitrate and strontium hydroxide in the presence of each other, 1910, A., ii, 1064.

Parsons, Charles Lathrop, and William O. Robinson, equilibrium in the system : glucinum oxide, oxalic anhydride, and

water, 1906, A., i, 479.
Parsons, Charles Lathrop, William O. Robinson, and Carl T. Fuller, soluble basic sulphates of glucinium, 1908, A., ii, 105.

Parsons, Charles Lathrop, and George J. Sargent, some organic compounds of

glucinum, 1909, A., i, 873.

Parsons, Charles Lathrop, and Morris N. Stewart, retention of arsenic by iron in the Marsh-Berzelius method, 1903, A., ii, 103.

Parsons, Charles Lathrop, and C. F. Whittemore, equilibrium in the system: potassium iodide, iodine, and water, 1912, A., ii, 31.

Partheil, Alfred, estimation of lactic acid in the volatile acids of wine, 1903, A., ii, 189.

Partheil, Alfred, red leads and their examination, 1908, A., ii, 69, 227. cyclopropane, 1909, A., i, 143.

analysis of red lead, 1909, A., ii, 268. Partheil, Alfred, and Fritz Ferié, fats,

1904, A., i, 4.

Partheil, Alfred, and A. Gronover, npropylphosphine, 1903, A., i, 801. action of triethylphosphine on ethylene chlorohydrin, 1903, A., i, 801.

Partheil, Alfred, and Wilhelm Hübner, occurrence and estimation of organic acids in wine, 1903, A., ii, 765.

Partheil, Alfred, and J. A. Rose, gravimetric estimation of boric acid by extraction with ether, 1904, A., ii, 842. Parthey, M. See Roland Scholl.

Partington, James Riddick, ionic equilibrium in solutions of electrolytes, 1910, T., 1158; P., 114.

a new dilution law; preliminary note, 1910, P., 8.

cholesterol and fatty acids, 1911, T., 313; P., 14.

the determination of the dissociation pressures of hydrated salts by a dynamical method, 1911, T. 466; P., 12, 45.

the temperature-coefficient of the electrical conductivity of hydrogen chloride in alcoholic solution, 1911, T., 1937; P., 247.

a simple demonstration of Gibbs' phase

rule, 1911, P., 13.

Partington, James Riddick. Robert Tuylor Hardman, and Arthur Lapworth.

Partridge, C. L. See Walter Jones. Partzsch, A., theory of the photo-electric current in gases, 1912, A., ii, 317.

Pascal, Paul, some complex iron salts in which the iron is masked, 1908, A., ii, 193.

a new series of ammonio-ferric salts in which the iron is masked, 1908, A., ii. 193.

reducing power of ferropyrophosphates, 1908, A., ii, 500.

relation between magnetic and chemical properties of complex ferric salts, 1908, A., ii, 756.

magnetic susceptibility of solutions, 1908, A., ii, 927.

magnetic properties of the oxygenated metallic radicles, 1908, A., ii, 1013. magnetic properties of simple sub-

stances, 1909, A., ii, 116.

magnetic properties of several easily liquefied gases, 1909, A., ii, 294. chemical and magnetic study of complex compounds, 1909, A., ii, 487.

Pascal, Paul, chromyl subchloride, 1909, A., ii, 582.

magnetic properties of carbon and organie compounds, 1909, A., ii, 788. magnetic function of oxygen in organic

compounds, 1909, A., ii, 859.

use of the magnetic field as a means of determining constitution in organic chemistry, 1910, A., ii, 100, 179; 1911, A., ii, 91, 183, 251, 252, 464, 850, 1058; 1912, A., ii, 229, 326, 734.

measurement of magnetic susceptibility of solids, 1910, A., ii, 483.

magnetic analysis of certain chromophoric groups, 1910, A., ii, 580.

magneto-chemical researches on the atomic structure of the halogens, 1911, A., ii, 367.

magnetic properties of fluorine, 1911,

A., ii, 464.

a method of optical control for magnetochemical analyses, 1911, A., ii, 679.

thermal analysis of hexachloroethane and of its binary mixtures, 1912, A., i, 330.

isomorphism in organo-metallic compounds. I. Derivatives of quadrivalent metals, 1912, A., i, 524.

isomorphism in organo-metallic compounds. II. Derivatives of tervalent elements, 1912, A., i, 739.

magneto-chemical researches, 1912, A., ii, 426.

Pascal, Paul, and Léon Normand, decomposition of azines by heat, 1912, A., i, 145, 147.

Paschen, [Louis Carl Heinrich] Friedrich, penetrating rays of radium, 1904, A., ii, 461.

cathode rays of radium, 1904, A., ii,

y-rays of radium, 1904, A., ii, 798. infra-red line spectra. I. (Normal wave-lengths up to 27,000 Angström units), 1909, A., ii, 3.

ultra-red line spectra. II. Spectra of thallium, aluminium, zinc, cadmium, magnesium, and calcium, 1909, A., ii, 630.

systems of series in the spectra of zinc, cadmium, and mercury, 1910, A., ii, 3; 1911, A., ii, 833.

ultra-red line spectra. III. Accurate measurement of wave-lengths greater than 27,000 A.-U., 1910, A., ii, 1014.

Paschke, Fritz. See Edgar Wedekind. Paschsky, N. P., calculation of specific heats of simple solutions, 1911, A., ii, 851.

Paschsky, N. P. See also Nicolai Antonovitsch Pushin.

Pascucci, Olinto, composition of the stroma of the blood-disks and hæmolysis, 1905, A., ii, 729.

action of ricin on lecithin, 1906, A., ii, 96.

Pasmanik. Jechonon. See H. Cantoni.

and Robert Chodat. Pasquali, Adalberto. See Icilio Guare-

schi. Pasquero, V., and A. Cappa, presence of furfuraldehyde as an indication of

adulteration in some fermented alcoholic beverages, 1912, A., ii, 103.

Pasquero, V. See also Francesco Marino-

Passalacqua, T. See E. Oliveri-Mandalà. Passerini, Napoleone, distribution of manganese in the different parts of Lupinus albus, 1906, A., ii, 117.

simple modification of a Soxhlet condenser for recovering the solvent,

1906, A., ii, 842.

a new calcimeter, 1906, A., ii, 902. carbohydrate contained in elm galls, 1907, A., i, 750.

causes of the formation of aldehyde in wines and the amounts in some Tuscan wines, 1907, A., ii, 44.

composition of the ash and lapilli from the eruption of Vesuvius, April, 1906; 1909, A., ii, 155.

colorimetric method for the estimation of phosphoric acid, 1911, A., ii,

Max, estimation of citrate-Passon, soluble phosphoric acid, 1903, A., ii, 240.

simplification of phosphate analyses, 1903, A., ii, 330.

feeding with calcium phosphate, 1905, A., ii, 414.

Pasta, Alessandro. See Nicola Parravano.

Pasternack, Richard. See Paul Rabe. Pastrovich, Peter, auto-hydrolysis of crude animal fats, 1904, A., i, 644. fat of the seeds of Canarium commune, 1907. A., ii, 806.

Pastrovich, Peter, and Ferdinand Ulzer, influence of different proteins on fats,

1903, A., ii, 249.

Pastureau, J., presence of acetylmethyl carbinol in certain commercia.

vinegars, 1905, A., i, 559. formation of acetol [acetylcarbinol] and pyruvic acid by direct oxidation of acetone, 1905, A., i, 572. tetrabromo-derivative of methyl ethyl

ketone, 1907, A., i, 113.

Pastureau, J., peroxide of methyl ethyl

ketone, 1907, A., i, 185.

formation of methylacetol (acetylmethylcarbinol) in the acid fermentation of wines, 1908, A., ii. 136. bromo-ketones, 1909, A., i, 207.

oxidation of ketones and diketones by hydrogen peroxide in presence of

acid, 1909, A., i, 208.

Pasztor, B., the rapid electrolytic precipitation of tin, 1910, A., ii, 459.

Patch, Richard Harkness. See Latham Clarke.

Patein, Gustave [Constant], removal of mercury from saccharine liquors after treatment with mercuric nitrate, 1903, A., ii, 338.

albumins soluble in acetic acid and Bence-Jones' albumosuria, 1904, A.,

i, 954.

reaction of cryogenine, 1904, A., ii,

an albumin [in urine] soluble in acetic

acid, 1904, A., ii, 599. corrections to be applied in the estimation of lactose in cows' milk and human milk, 1905, A., ii, 122.

detection and estimation of antipyrine in pyramidone, 1905, A., ii, 658.

dextrose in hydrocele fluid, 1906, A., ii, 294.

proteins of blood serum, 1906, A., ii,

unification of the methods of estimating lactose in milk, 1906, A., ii, 904.

globulin precipitated from human blood serum by acetic acid, 1907, A., i, 570.

the influence of the reaction of bloodplasma on the formation of fibrin, 1908, A., ii, 605.

Patein, Gustave, and L. Daval, variations in the amount of casein contained in human milk, 1905, A., ii, 738.

Patein, Gustave, and Ch. Michel, albumosuria, 1904, A., ii, 501.

Patein, Gustave, and R. Weitz, proteins of ascitic fluids; remarks on Rivalta's reaction, 1912, A., ii, 786.

Pater, C. J. See William Jay Hale.

Paternò, Emanuele, origins of stereochemistry, 1908, A., ii, 77.

organic syntheses by means of sunlight, 1909, A., i, 240.

Paterno, Emanuele, and Tito Benelli, nitro-derivatives of glycerol ether, 1909, A., i, 755.

Paternò, Emanuele, and Generoso Chieffi, organic syntheses by means of sunlight. II., 1909, A., i, 393.

Paternò, Emanuele, and Generoso Chieffi, organic syntheses by means of sunlight. IV. Action of paraffins and homologues of benzene on ketones and aldehydes, 1910, A., i. 41.

organic synthesis by means of sun-V. Behaviour of acids and light. ethers [including esters] with benzo-

phenone, 1911, A., i, 65.

Paterno, Emanuele, and Masaniello Cingolani, new process for disinfecting drinking waters, 1907, 713.

derivatives of epichlorohydrin, 1908,

A., i, 308.

Paternò, Emanuele, and Gino Forli-Forti. organic syntheses by means of sun-VI. The product of the re-between benzophenone and light. action benzyl acetate, 1911, A., i, 66.

Paternò, Emanuele, and Concetto Maselli, organic syntheses by means of sunlight. VII. Photo-synthesis of a new alkaloid from acetophenone and am-

monia, 1912, A., i, 295.

Paterno, Emanuele, and Arrigo Mazzucchelli, colloidal properties of calcium fluoride. I. and II., 1904, A., ii, 169.

blue colour of sulphur and of certain of its compounds, 1907, A., ii,

emission spectra of certain elements at high temperatures, 1909, A.,

Paterno, Emanuele, and Aldo Mieli, mixtures of trimethylcarbinol and water, 1907, A., i, 815.

densities of solutions of trimethylcarbinol and phenol, 1908, A., i,

Paternò, Emanuele, and Ernesto Pannain, electrolytic preparation of potassium cyanate, 1904, A., i, 856.

Paternò, Emanuele, and Rosario Spallino, constitution of dioxyethylene, 1907, A., i, 274.

hexyl and octyl fluorides, 1907, A., i, 813.

Paternò, Emanuele, and Filippo Traetta-Mosca, organic syntheses by means of sunlight. III. Phenyl isoamyl ketone and physical constants of compounds of amylene with benzaldehyde and ketones, 1909, A., i, 487.

Paternò, Ezio, hydrogen polysulphides

and cryoscopy, 1909, A., ii, 118.

Paterson, John Hamilton, a modified form of the Landsberger boilingapparatus, 1912, A., ii, point 534.

Paterson, John Hamilton, the analysis | Patten, Harrison Eastman, the phenoof vinegar, 1912, A., ii, 608.

Paton, Diarmid Noël, adrenaline glycosuria, 1903, A., ii, 443.

effect of adrenaline on excretion of sugar and nitrogen in birds, 1905, A., ii, 106.

Folin's theory of protein metabolism, 1905, A., ii, 734.

the rate of elimination of chloroform, 1908, A., ii, 970.

creatine excretion in birds, 1910, A., ii, 328.

Paton, Diarmid Noël, and Edward Provan Cathcart, mode of production of lactose in the mammary gland, 1911, A., ii, 415.

Paton, Diarmid Noël, and Alexander Goodall, hæmolysis in the spleen,

1903, A., ii, 498.

physiology of the thymus, 1904, A., ii,

355.

Paton, Diarmid Noël, and Dorothy Elizabeth Lindsay, the rate of elimination of chloroform, 1908, A., ii, 970.

Paton, Diarmid Noël, and William Campbell Mackie, the liver in relation to creatine metabolism in the bird, 1912, A., ii, 854.

Paton, Diarmid Noël, and A. Watson, the actions of pituitrin, adrenaline, and barium on the circulation of the bird, 1912, A., ii, 789.

Paton, Diarmid Noël. See also William Blackley Drummond, and Alexander

Patriciu, N. See Dragomir Hurmuzescu. Patrick, W. A. See Ebenezer Henry Archibald.

Patta, Aldo, behaviour of hypophosphites in the organism, 1910, A., ii, 432.

Patta, Aldo, and Piero Caccia, p-aminophenylarsine tetraiodide, 1911, A., i,

Patta, Aldo. See also Efisio Mameli. Patten, Andrew J., cystine, 1903, A., i,

Patten, Andrew J., and Edwin Bret Hart, nature of the principal phosphorus compound in wheat bran, 1904, A., ii, 509.

Patten, Andrew J., and Charles S. Robinson, neutral ammonium citrate

solution, 1912, A., ii, 1094.

Patten, Andrew J. See also Whitman Howard Jordan, Albrecht Kossel, and Walter G. Sackett.

Patten, Harrison Eastman, influence of the solvent in electrolytic conduction, 1903, A., ii, 57.

mena of adhesion and of solution [in connexion with the precipitation of magnesium and manganous hydroxides and barium sulphate, 1903, A., ii, 272.

action on metals of solutions of hydrochloric acid in various solvents,

1903, A., ii, 417.

[non-]existence of perchromic acid, 1903, A., ii, 431.

deposition of zinc from zinc chloride dissolved in acetone, 1904, A., ii,

deposition of aluminium from ethyl bromide solution, 1905, A., ii, 36.

action of crushed quartz on nitrate solutions, 1910, A., ii, 950.

effect of soluble salts on the adsorption of phosphates by soils, 1911, A., ii,

Patten, Harrison Eastman, and William Roy Mott, decomposition curves of lithium chloride in alcohols and the electro-deposition of lithium, 1904, A., ii, 379.

criticism of Clarke's new law in thermochemistry, 1905, A., ii, 11.

decomposition curves of lithium chloride in pyridine and in acetone; the effect of water, 1908, A., ii,

Patten, Harrison Eastman. See also

Frank Kenneth Cameron.

Patten, John Birt, and Percy Goldthwaite Stiles, influence of neutral salts on salivary digestion, 1906, A., ii,

Patterson, George Washington, the detection of mercury in explosives, 1911, A., ii, 442.

Patterson, Hubert Sutton, Richard Stafford Cripps, and Robert Whytlaw-Gray, critical constants and orthobasic densities of xenon, 1912, A., ii, 843.

Patterson, J., spontaneous ionisation in air at different temperatures and pressures, 1903, A., ii, 194.

Patterson, S. W., calcium metabolism, 1908, A., ii, 205. Patterson, Thomas Stewart, the compari-

son of the rotation-value of methyl, ethyl, and n-propyl tartrates at different temperatures, 1904, T., 765; P., 114.

the influence of solvents on the rotation of optically active compounds. Part V. The optical activity of certain tartrates in aqueous solution, 1904, T., 1116; P., 142.

Patterson, Thomas Stewart, the influence of solvents on the rotation of optically active compounds. Part VI. The relationship between solutionvolume and rotation of the alkyl and potassium alkyl tartrates in aqueous solution, 1904, T., 1153; P., 162.

the influence of solvents on the rotation of optically active compounds. Part VIII. Ethyl tartrate in chloroform, 1905, T., 313; P., 78.

preparation of anhydrides of chloroacetic acids, 1905, A., i, 168.

supposed relationship between molecular size and rotatory power in solutions, 1906, A., ii, 61.

theory of optical activity, 1906, A., ii,

715.

the influence of solvents on the rotation of optically active compounds. Part XIII. Ethyl tartrate in aromatic nitro-derivatives; influence of temperature-change on rotation in solution, 1908, T., 1836; P., 216.

rotatory power in solutions, 1908, A.,

ii, 77.

a simple form of release for Victor Meyer's vapour-density apparatus. 1908, A., ii, 156.

simple notation for indicating the configuration of the sugars and allied substances, 1909, A., i, 208.

binary mixtures and concentrated solutions; remarks on Dolezalek's

paper, 1910, A., ii, 107.

an attempt to harmonise the relation between temperature and rotation for light of all refrangibilities, of certain active substances, both in the homogeneous state and in solution, 1912, P., 324.

Patterson. Thomas Stewart, and Duncan Geddes Anderson, the influence of solvents on the rotation of optically active compounds. Part XVIII. The effect of inorganic salts on the rotation of ethyl tartrate in aqueous solution and in the homogeneous condition, 1912, T., 1833; P., 224.

Patterson, Thomas Stewart, and Alfred Davidson, the methyl, ethyl, and isobutyl esters of di-trichloroacetyltartaric acid, and the existence of minima in their temperature-rotation curves,

1912, T., 374; P., 43.

Patterson, Thomas Stewart, and Alexander Fleck, cyclohexane, its separation from, and its estimation in, mixtures containing benzene, 1910, T., 1773; P., 207.

Patterson, Thomas Stewart, and William Collins Forsyth, the velocity of interaction of iodic and sulphurous acids in various media, 1911, P., 320; 1912, T., 40.

Patterson, Thomas Stewart, and John Frew, menthyl benzenesulphonate and naphthalene-\$-sulphonate.

1906, T., 332; P., 19.

Patterson, Thomas Stewart, Andrew Henderson, and Frank Walter Fairlie. the influence of solvents on the rotation of optically active compounds. l'art X. Effect of the configuration and degree of saturation of the solvent, 1907, T., 1838; P., 236.

Patterson, Thomas Stewart, and John Kaye, studies in optical superposition, 1906, T., 1884; P., 274; 1907, T., 705; P., 89.

Patterson, Thomas Stewart, and David Paterson McDonald, the influence of solvents on the rotation of optically active compounds. Part XII. Ethyl tartrate in aromatic halogen derivatives, 1908, T., 936; P., 125.

the influence of solvents on the rotation of optically active compounds. Part XIV. Ethyl tartrate in benzaldehyde and in quinoline, 1909, T.,

321; P., 36.

Patterson, Thomas Stewart, and Andrew McMillan, the influence of solvents on the rotation of optically active compounds. Part IX. A new general method for studying intramolecular changes, 1907, T., 504; P., 60.

the polarimetric study of intramolecular rearrangement in inactive substances, 1908, T., 1041; P.,

135.

a new method for studying intramolecular change, 1908, A., ii, 266.

rate of transformation of syn- into anti-oximes, 1911, A., i, 648.

the action of chloral on ethyl tartrate and on ethyl malate, 1912, T., 788; P., 101.

Patterson, Thomas Stewart, and Harvey Hugh Montgomerie, the influence of solvents on the rotation of optically active compounds. Part XV. Mixed solvents, 1909, T., 1128; P., 151.

the influence of neutral solvents on velocity of reaction. Parts I. and II. Transformation of anissynaldoxime in various solvents, 1911, P., 276; 1912, T., 26, 2100; P., 240.

Patterson, Thomas Stewart, and (Miss) Elizabeth Findlay Stevenson, the influence of solvents on the rotation of optically active compounds. Parts XVI. and XVII. The relationship between the chemical constitution and the influence of a solvent, 1910, T., 2110; P., 236; 1912, T., 241; P., 8.

Patterson, Thomas Stewart, and Francis Taylor, studies in optical superposition, 1904, P., 252; 1905, T.,

33.

the influence of solvents on the rotation of optically active compounds. Part VII. Solution-volume and rotation of menthol and menthyl tartrates, 1905, T., 122; P., 15.

Patterson, Thomas Stewart, and David Thomson, the influence of solvents on the rotation of optically active compounds. Part XI. Ethyl tartrate in aliphatic halogen derivatives, 1907, P., 263; 1908, T.,

specific rotations in solution, 1907, A.,

ii. 322.

Patterson, Thomas Stewart. See also Julius Berend Cohen.

Patterson, W. Hamilton, Spitzbergen

coal, 1912, A., ii, 651.

Pattinson, Hugh Salvin, estimation of sulphur in pyrites by Lunge's method, 1905, A., ii, 199.

Pattinson, Hugh Salvin, and George C. Redpath, estimation of zine in blendes other natural and artificial products, 1905, A., ii, 356.

Pattinson, John, and John Thomas Dunn, some sources of error in sulphur esti-

mations, 1905, A., ii, 199.

Paturel, G., estimation of dry wine extracts, 1909, A., ii, 836.

Patzewitch, Raphael. See Eugen Khotinsky.

Patzig, Egbert. See Jakob Meisenheimer.

See Georg Locke-Paucke, Martin.

mann. Paul, David McLaren. See Willu Marchwald, and Thomas Purdie.

Paul, H., injurious effect of calcium carbonate on bog moss, 1906, A., ii,

Paul, Ludwig, a new base from p-phenylenediamine, 1904, A., i, 530.

diazoamino-compounds of naphtholsulphonic acids, 1904, A., i. 537.

a new so-called L-reaction, 1904, A., i, 925.

Paul, Ludwig, some new dyes, 1904, A., i, 925.

relations between the safranines, mauveines, indulines, indazines, naphthyl-red, naphthyl-blue, rosindulines, and magdala-red, 1904, A., i, 945.

the fluorazones, a new group of dyes produced from aminoazo-dves by fusion with resorcinol, 1904, A., i.

954.

constitution of guaiacolmonosulphonic acids and of a mononitroguaiacol, 1906, A., i, 843.

3- or 6-guaiacolsulphonic acid, 1907,

A., i, 43.

formation of new polyazo-dyes according to hitherto unknown law, 1907, A., i, 363.

nul, Theodor, chemistry of silver therapy, 1912, A., ii 788. Paul,

Paul, Theodor, Gustav Birstein, and Anton Reuss, the kinetics of the killing of bacteria in oxygen of varying concentrations and at different temperatures, 1910, A., ii, 642.

the kinetics of toxic action of dissolved I. The influence of substances. concentration, 1910, A., ii, 1098.

the kinetics of toxic action of dissolved II. The influence of substances. neutral salts and temperature on the disinfection rate of acids, 1910, A., ii, 1099.

Paul, Walter. See Alexander Tschirch. Paulesco, N. C., action of alkali salts on living substance, 1904, A., ii,

action of salts of the alkaline earths on living substance, 1904, A., ii, 683.

Pauli, E. See Karl Bädeker.

Pauli, Hermann. See Theodor Curtius. Pauli, Wolfgang, physical changes in the condition of colloids. II. Behaviour of proteins towards electrolytes, 1903, A., i, 299.

physical changes in the condition of colloids. III. Non-reversible precipitation of albumin by electrolytes,

1904, A., i, 356.

physical alterations of colloids. IV. Precipitation of albumin by means of salts of heavy metals, 1905, A., i, 496.

the electrical charge of protein and its significance, 1906, A., i, 545.

physical conditions of colloids. The electrical charge of proteins, 1906, A., ii, 180.

Pauli, Wolfgang, physical changes in the conditions of colloids. VI. The coagulation of acid albumin by heat, 1907, A., i, 803.

ionisation, hydration, and optical rotation of white of egg, 1910, A.,

i, 905.

the physical chemistry of the Bence-Jones protein, 1912, A., i, 58.

relationship of electrical, mechanical, and chemical changes in muscle, 1912, A., ii, 960.

Pauli. Wolfgang, and Leo Flecker, changes in the physical conditions of XIII. The relationship of albumin to inorganic colloids and to the salts of the heavy metals, 1912, A., i, 668.

Pauli, Wolfgang, and Hans Handovsky, changes in the physical state of colloids. VI. Compounds of salt ions with amphoteric protein, 1908,

A., i, 707.

the changes in physical conditions of the colloids. VIII. Studies on acid albumin, 1909, A., i, 618.

changes in the physical conditions of colloids. IX., 1910, A., i, 344.

Pauli, Wolfgang, and Max Samee, influence of proteins on the solubility of electrolytes, 1909, A., i, 537.

Pauli, Wolfgang, and Richard Wagner, the internal friction of albumin solu-

tions, 1910, A., ii, 830.

Pauli, Wilhelm Eduard, ultra-violet and ultra-red phosphorescence, 1911, A., ii, 351.

phosphorescence of selenium compounds, 1912, A., ii, 714.

Wilhelm Eduard. Pauli, See also Philipp Lenard.

Paulus, J. See Augustin Bistrzycki. Pauly, Anton, microscopical characters

of sarcolite, 1906, A., ii, 457. a new mineral of the zeolite group,

1906, A., ii, 773. Pauly, Friedrich. See Otto Wallach.

Pauly, Hermann, adrenaline, 1904, A., i, 128, 540.

constitution of histidine. I., 1904, A., i, 1068.

action of diazonium compounds on iminazoles, 1905, A., i, 494.

conversion of piperonal into the cyclic carbonate of protocatechualdehyde, 1907, A., i, 709.

preparation of the cyclic carbonate of protocatechuic acid, 1908, A., i,

new syntheses of adrenaline and allied compounds, 1909, A., i, 154.

Pauly, Hermann, constitution of "dichloropiperonal," 1909, A., i, 165. derivatives of histidine, 1910, A., i,

derivatives of iminazole [glyoxaline] and histidine containing iodine, 1910, A., i, 638.

introduction of iodine into protein

derivatives, 1912, A., i, 324.

Pauly, Hermann, and Thomas J. R. Alexander, "dichloropiperonal," 1909, A., i, 590.

Pauly, Hermann, and Arthur Binz, silk and wool as dye producers, 1905,

A., i, 75.

Pauly, Hermann, Richard (Freiherr) von Buttlar, and Karl Lockemann, phenolic aldehydes. I. Reactivity of the aldehyde group in phenolic aldehydes, 1911, A., i, 785.

Pauly, Hermann, and Karl Gundermann. decomposition products of albumin which combine with iodine, 1909, A.,

Pauly, Hermann, and Alex. Hültenschmidt, pyrrolidine-3-carboxylic acid, 1904, A., i, 87.

tetramethylpyrroline-3-carboxylic

acid, 1904, A., i, 88.

Pauly, Hermann, and Karl Lockemann 2:3-dihydroxybenzaldehyde; o-protocatechualdehyde, 1910, A., i, 561.

Pauly, Hermann, and Karl Neukam, cyclic carbonic esters of vinylcatechol, 1907, A., i, 916.

derivatives of ethyl catechol, 1909, A., i, 96.

Pauly, Hermann, and O. K. Richter, condensation of benzaldehyde with cyclic acetone bases, 1908, A., i, 285. Pauly, Hermann, Konrad Schübel, and

Karl Lockemann, phenolic aldehydes. II. Reactivity of the phenolic group in phenolic aldehydes, 1911, A., i, 787.

Pauly, Hermann, and Viktor Traumann, preparation of the salts of the mercury derivatives of fluorescein, 1909, A., i,

Pauly, Hermann, and Wilhelm Walter, peri-naphthalideacetic acid, 1911, A., i. 986.

Pauly, Hermann, and John Weir, partial ester formation of benzoylaspartic acid, 1910, A., i, 255.

Pavesi, Vittorio, constituents of the ethereal oil of Amorpha fruticosa, 1904, A., i, 904.

alkaloid from Papaver dubium, 1905, A., i, 368.

comparative studies on three species of Papaver, 1906, A., ii, 483,

Pavesi, Vittorio, aporeine and other alkaloids of Papaver dubium. II., 1907, A., i, 870.

Pavlinova, A. See Alexandr W. Spe-

ransky.

Pavy, Frederick William, Thomas Gregor Brodie, and Raymond Louis Siau, phloridzin glycosuria, 1903, A., ii, 501.

Pavy, Frederick William, and Hubert William Bywaters, formation of glycogen by yeast, 1908, A., ii, 56. influence of environment on enzymic

action, 1910, A., ii, 1098.

Pavy, Frederick William, and William Godden, carbohydrate metabolism and glycosuria, 1911, A., ii, 1001.

inhibition of post-mortem production of sugar in the liver and of certain forms of glycosuria by the intravenous injection of dilute solutions of sodium carbonate, 1912, A., ii, 68.

Pavy, Frederick William, and Raymond Louis Siau, the sugar in the blood after liver ablation, 1903, A., ii, 494.

Paweck, Heinrich, preparation of radium from pitchblende, 1908, A., ii, 917.

Pawlewski, Bronislaw von, reaction between oximes and thionyl chloride and on some physical constants of camphoronitrile, 1903, A., i, 405. new synthesis of α-phenylbenzimino-

azole, 1903, A., i, 661.

synthesis of 4-hydroxy-2-phenylquinazoline, 1903, A., i, 721. condensation of oximes with thio-

carbimides, 1904, A., i, 237.

stability of anthranilic acid and some of its derivatives, 1904, A., i, 316.

synthesis of derivatives of ketoquinazoline, 1905, A., i, 246; 1906, A.,

derivatives of anthranilic acid, 1905,

A., i, 437.

characteristic reaction of anthranilic acid, 1908, A., i, 638. colour and constitution, 1911, A., i,

480. isomeric Schiff's bases, 1912, A., i,

182. Pawlewski, Bronislaw von. See also

Charles Routt.

Pawlicki, P. See Max Scholtz.

Pawloff, Iwan P., and Simeon W. Parastschuk, the proteolytic and rennetlike action of different digestive juices, 1904, A., ii, 748.

Pawloff, P. N., conditions of growth of crystals of different forms in a fluid

medium, 1906, A., ii, 552.

Pawloff, P. N., relation of melting point to the surface of the granules of a solid substance, 1908, A., ii, 927.

dependence of the melting point of a solid substance on its surface energy.

1909, A., ii, 19, 295.

vapour pressure of the granules of solid substances, 1909, A., ii, 800. relations between the surface modifications of solid crystalline substances; nature of liquid crystals, 1909, A.,

ii, 800. melting point of granules of salol, 1910, A., i, 740.

formation, equilibrium, and alterations of crystals in an isothermal medium, 1910, A., ii, 488.

influence of the surface of a solid phase on the latent heat and on the melting point, 1910, A., ii, 1033.

methods of investigation of capillarychemical problems, 1910, A., ii,

1043.

general phase rule and its application to systems of capillary chemistry, 1911, A., ii, 27.

deduction of the general phase theorem for adsorption systems, 1911, A., ii,

the "precipitation coefficient" of P. P. von Weimarn, 1911, A., ii, 261.

condensed disperse systems, 1911, A., ii, 263.

Pawloff, Wladimir E., and Dmitrij G. Gerasimoff, determination by an iodometric method of the degree of hydrolytic decomposition of salts, 1904, A., ii, 546.

Pawloff, Wladimir E., and S. D. Schein, reaction of silver nitrate and iodine; standardisation of solutions by satura. tion; iodometry by means of silver

nitrate, 1907, A., ii, 906.

Pawlowsky, N., action of magnesium p-(or o-)tolyl bromide on s-dibromomethyl ether; preparation and properties of xylyl ether, 1911, A., i,

Pay, Albrecht de. See Hugo Kauffmann. Pay, Erwin de. See Hugo Kauffmann. Payne, George Arthur. See Cecil Revis. Peachey, Stanley John. See William

Jackson Pope.

Peakes, Ralph Ware. See Charles Loring Jackson.

Pealing, Harold. See Gwilym Owen. Peano, Edoardo, composition of the skins of olives and a new compound contained in them 1903, A., ii, 173.

Pearce, Francis, and Charles Couchet. reduction phenomena produced by the action of alternating currents, 1904, A., ii, 231.

Pearce, Francis. See also Louis Duparc. Pearce, J. Newton, and Otis M. Weigle, velocity coefficients of the reaction between ethyl iodide and silver nitrate in ethyl and methyl alcohols and mixtures of these solvents, 1912, A., ii, 925.

Pearce, J. Newton. See also Harry Clary Jones.

Pearce, Richard, [roscoelite from Western Australia], 1903, A., ii, 380.

Pearce, R. G. See John James Rickard Macleod.

Pearce, Richard M., and Arthur B. Eisenbrey, the mechanism of the depressor action of dog's urine, with some observations on the antagonistic action of adrenaline, 1910, A., ii, 530.

Pearson, (Miss) Constance. See Kennedy

Joseph Previté Orton.

Pearson, W. A., estimation of alcohol in concentrated ethyl nitrite, 1908, A., ii, 436.

Peč, Franz. See Jaroslav Formánek.

Péchard, E., some products of reduction of copper salts by hydroxylamine, 1903, A., ii, 293.

Pechell, Horace James, estimation of urea by the hypobromite process,

1903, A., ii, 192.

Pécheux, Hector, zinc-aluminium alloys, 1904, A., ii, 404.

lead-aluminium alloys, 1904, A., ii, 404.

a property of tin-aluminium alloys, 1904, A., ii, 487.

bismuth-aluminium and magnesiumaluminium alloys, 1904, A., ii, 564. aluminium-magnesium and aluminiumantimony alloys, 1904, A., ii, 618.

properties of tin-aluminium, bismuthand aluminium, magnesiumaluminium alloys, 1905, A., ii, 526. decomposition of an aqueous solution

of copper sulphate by aluminium

alloys, 1906, A., ii, 286.

determination of the melting points of lead-aluminium and bismuthaluminium alloys by means of thermoelectric pyrometers, 1906, A., ii, 758.

thermoelectricity of nickel (influence of foreign metals), 1907, A., ii, 842. influence of foreign substances on the thermoelectric properties and the resistivity of aluminium, A., ii, 294.

Pécheux, Hector, electrical properties (thermoelectricity and resistivity) of copper-aluminium alloys, 1909, A., ii, 482.

attempt to determine certain atomic weights, 1912, A., ii, 644.

Pechmann, Hans (Freiherr) von, and Wilhelm Bauer, derivatives of osotetrazine and of osotriazole, 1909, A., i,

Pechmann, Hans von. Wilhelm Bauer. and Julius Obermiller, synthesis of benzene derivatives from ethyl gluta-

conate, 1904, A., i, 592.

Pechmann, Hans von, and William Hobson Mills, chlorocoumalinic acid and its conversion into pyridine derivatives, 1904, A., i, 1041.

action of hydrazine hydrate on methyl bromocoumalinate, 1904, A., i, 1042.

Pechmann, Hans von, and Nevil Vincent Sidgwick, acetonedipropionic acid and its derivatives, 1904, A., i, 971.

Peck, Frederick Burritt [augite from Easton, Pennsylvanial, 1903, A., ii.

Peck. Harley Taylor. See Treat Baldwin Johnson.

Peck, S. S., influence of molasses on nitrification in cane soils, 1912, A., ii. 595.

nitric nitrogen in mixed fertilisers. 1912, A., ii, 683.

Peckham, Stephen Farnum, technical analysis of cements, 1905, A., ii, 204

Peckolt, Theodor, medicinal and useful plants of Brazil, 1904, A., ii, 142, 764; 1905, A., ii, 113; 1906, A., ii, 484, 701, 794; 1907, A., ii, 387.

Pécoul, Adrien. See Albert Lévy. Peddle, Cyril James, and William Stephen Turner, molecular association in water, 1911, T., 685; P., 8.

Pedersen, Carl. See Sören Peter Lauritz Sörensen.

Pedersen, P. O., surface tension of liquids investigated by the method of jet vibration, 1908, A, ii, 158.

Pederson, Harald, analysis of materials containing copper, nickel, and cobalt, 1911, A., ii, 771.

Pedrazzini, Francesco, detection of arsenic, phosphorus, and antimony in the medical diagnosis of poisoning from these substances, 1911, A., ii, 438.

Pedrina, Silvio. See Giovanni Pellini. Peebles, A. Roy. See Arthur Robertson

Cushny.

Pegna, Raffaello. See Angelo Angeli. Pegoraro, Leonildo. See Giovanni Pellini.

Pegram, George Braxton, and Harold W. Webb, heat development due radioactivity of thorium oxide, 1909, A., ii, 111.

Pégurier, Gaston, volumetric estimation of pyramidone and antipyrine in the presence of each other, 1905, A., ii,

Pégurier, Gaston. See also A. Astruc. Peirce, George. See Hermann Leuchs, and Arthur Solomon Loevenhart.

Pekelharing, Cornelis Adrianus, creatinine excretion in man under the influence of muscular tonus, 1911, A., ii, 1115.

the influence of certain inorganic salts on the action of pancreatic lipase,

1912, A., ii, 1188.

Pekelharing, Cornelis Adrianus, and C. J. C. van Hoogenhuyze, the formation of creatine in muscle in tonus and rigor, 1910, A., ii,

excretion of parenterally adthe ministered creatine in mammals,

1910, A., ii, 1091.

Pekelharing, Cornelis Adrianus, C. J. C. van Hoogenhuyze, and H. Verploegh, excretion of creatinine in man, 1906, A., ii, 40.

Pekelharing, Cornelis Adrianus, and Willem Huiskamp, nature of fibrin-

ferment, 1903, A., ii, 661.

Pekelharing, Cornelis Adrianus, and Wilhelm Eduard Ringer, the electrical transport of pepsin, 1911, A., i,

Peklo, Javoslaw, occurrence of starch in sugar-beet roots, 1911, A., ii, 763.

Pélabon, Henri [Joseph Léonard Ferdinand], action of hydrogen on silver sulphide in presence of antimony trisulphide and of arsenic trisulphide, 1903, A., ii, 290.

action of hydrogen on the arsenic sulphides in the presence of antimony, and on antimony trisulphide in the presence of arsenic, 1903,

A., ii, 422.

fusibility of mixtures of antimony and silver sulphides, 1903, A., ii,

fusibility of mixtures of sulphur and bismuth, 1904, A., ii, 42.

fusibility of mixtures of bismuth monosulphide and silver sulphide; and of bismuth monosulphide and antimony sulphide, 1904, A., ii, 42.

Pélabon, Henri [Joseph Léonard Ferdinand], mixtures of antimony trisulphide and antimony, 1904, A.,

mixtures of certain sulphides and selenides with corresponding metals,

1904, A., ii, 569.

fusibility of mixtures of antimony sulphide with cuprous sulphide and mercuric sulphide, 1905, A., ii.

mixtures of antimony and tellurium and of antimony and selenium; cryoscopic constant of antimony, 1906, A., ii, 173.

tin sulphides, selenides, and tellurides.

1906, A., ii, 454.

silver sulphide, selenide, and telluride, 1906, A., ii, 667.

lead selenide, 1907, A., ii, 547.

thallium sulphides, selenides, tellurides, 1907, A., ii, 688.

compounds formed by silver selenide with the selenides of arsenic, antimony, and bismuth, 1908, A., ii,

tellurides of arsenic and bismuth; cryoscopic constant of tellurium, 1908, A., ii, 687.

fusibility of mixtures of gold and tellurium, 1909, A., ii, 584.

fusibility of mixtures of sulphur, selenium, and tellurium with metals, 1909, A., ii, 805.

action of hydrogen on sulphur or selenium in presence of another element, 1910, A., ii, 119.

electrical resistance of antimony selenides, 1911, A., ii, 575.

metallography of selenium-antimony systems, 1911, A., ii, 899. selenium cells, 1912, A., ii, 622.

Pélabon, Henri. See also Constant. Pelacani, Luciano, the zeolites of Montresta (Sardinia), 1908, A., ii, 864.

Pelet-Jolivet, Louis, dissociation by adsorbing substances of the compounds formed by basic and acidic dyes, 1908, A., ii, 18.

capillary ascension of colouring matters, 1909, A., ii, 979.

Pelet-Jolivet, Louis, and Nils Anderson, influence of acids and bases on the absorption of acidic and basic dyes by wool, 1908, A., ii, 89.

fixation of different derivatives of the same colouring matter and explanation of dyeing, 1908,

combination of silica with methyleneblue, 1909, A., i, 526.

Pelet Jolivet, Louis, and Virginio Garuti, volumetric estimation of methylene-blue, 1904, A., ii, 794.

iodometric estimation of basic colours. 1908, A., ii, 441.

volumetric estimation of dyes, 1908, A., ii, 441.

Pelet-Jolivet, Louis, and Ernest Gillièron, action of a solution of iodine in potassium iodide on some basic dyes, 1907, A., i, 787.

Pelet-Jolivet, Louis, and Louis Grand, hydrosulphides and thiohydrosulphides of dye bases, 1908, A., i, 226.

Théodore Louis, and Pelet-Jolivet. Henny, combination of pieric acid and 8-naphthol, 1909, A., i, 468.

Pelet-Jolivet, Louis, and Paul Jomini, limits of combustibility, 1903, A., ii. 130.

combustion in gaseous mixtures other than air, 1903, A., ii, 283.

Pelet-Jolivet, Louis, and Charles Mazzoli, the decolorising properties of amorphous carbon, 1909, A., ii, 999.

Pelet-Jolivet, Louis, and William Redard, diazoaminomagenta and diazoaminorosaniline, 1904, A., i, 638.

Pelet-Jolivet, Louis, and Hans Siegrist. polyiodo-derivatives, 1909, A., i, 527

the influence of electrolytes in different concentrations on the dyeing process, 1909, A., ii, 979.

the adsorption of methylene-blue and crystal-ponceau by carbon in its dependence on the temperature, 1911, A., ii, 374.

Pelet-Jolivet, Louis, and Alfred Wild, study of colouring matters in solution, 1908, A., ii, 1025.

Peli, Arrigo. See Ciro Ravenna.

Pelikan, Anton, zeolites [zeophyllite and natrolite] from Gross-Priesen, Bohemia, 1904, A., ii, 349.

Pellacani, Paul, and Folli, so-called antitoxic power of animal tissues towards strychnine, 1908, A., ii, 1062.

Pellas, Eugène, and Julien Legrand, purification of water by the simultaneous action of permanganates and the electric current, 1906, A., ii, 606.

Pellat, Henri, constitution of the atom, 1907, A., ii, 249.

constitution of the atom and Coulomb's law, 1907, A., ii, 427.

direct determination of the absolute value of the electric charge on a univalent electrolytic ion; diameter of an atom, 1907, A., ii, 427. multivalent atoms, 1907, A., ii, 428.

Pellat, Henri, variation of the mass of the electrons in the interior of the atom, 1907, A., ii, 943.

Pellegrino, M. See Giuseppe Kernot. Pellet, Henri [Jean Baptiste], analysis

of coal, 1904, A., ii, 778.

analysis of refined molasses containing reducing sugars, 1905, A., ii,

estimation of phosphoric acid in food-

stuffs, 1905, A., ii, 353. estimation of sucrose in presence of lævulose and dextrose, 1905, A., ii,

copper solutions [for sugar estimations], 1906, A., ii, 585.

new source of error in the estimation of sugar in beet, 1906, A., ii, 586.

estimation of sugars and starch in chocolates, 1906, A., ii, 586.

sources of error in the "citrate pro-cess" for the estimation of phosphoric acid in mineral phosphates, 1906, A., ii, 801.

occurrence of salicylic acid in toma-

toes, 1907, A., ii, 139.

reducing substances and their estimation in sugars and sugar products, 1907, A., ii, 309.

estimation of phosphoric acid as ammonium phosphomolybdate, 1907, A., ii, 395; 1909, A., ii, 182.

wine analysis; estimation of sugars, reducing substances, and dextrins, 1907, A., ii, 406. ignition of barium sulphate, 1907, A.,

ii, 580, 811.

normal tubes for saccharimeters, 1908, A., ii, 235.

estimation of mineral matters in vegetable substances, 1909, A., ii, 755; 1910, A., ii, 72.

estimation of sulphur dioxide and sulphuric acid in the gases of sulphur furnaces, 1910, A., ii, 69.

precipitation of reducing sugar by lead acetate and the estimation of reducing sugars, 1910, A., ii, 462.

a source of error in the detection and estimation of salicylic acid, 1910, A., ii, 906.

physico-chemical estimation of the ash of wine, 1910, A., ii, 1005.

determination of the rotatory power of some organic substances in presence of lead reagents; inconvenience of distilled water containing carbon dioxide, 1911, A., ii, 775.

Pellet, Henri [Jean Baptiste], estimation of nitric nitrogen in gun cotton, nitroglycerol, and similar products, 1911, A., ii, 930.

estimation of arsenic as ammonium arsenomolybdate, 1912, A., ii, 203.

Pellet, Henri, and Albert Arnaud, estimation of moisture and volatile matters in coals, 1907, A., ii, 51.

Pellet, Henri, and Ch. Fribourg, sodium nitrate containing perchlorate, 1905, A., ii, 115.

occurrence of alumina in plants, 1905, A., ii, 860.

estimation of titanic acid in soils and ashes of plants, 1905, A., ii, 862.

influence of the presence of titanium on the estimation of aluminium in presence of iron and phosphoric acid, 1906, A., ii, 54.

solubility of sucrose in water in presence of invert sugar, 1907, A., i, 185. viscosity of solutions of sucrose and invert sugar, 1907, A., i, 388.

Pellet, Henri, and G. Meunier, quantity of non-fermentable sugar in sugar cane molasses, 1904, A., i, 225.

Pellet, Henri, and Léon Pellet, direct estimation of sugar in beet by Pellet's water process; influence of air on the results, 1905, A., ii, 210. estimation of reducing substances in

beet-juice, 1905, A., ii, 290. estimation of sucrose in presence of

lævulose and dextrose, 1905, A., ii, 558. influence of the lead precipitate on

the polarisation of sugar, 1906, A., ii, 400,

quantity of plus-sugar calculated as anhydrous raffinose contained in beetroot, 1907, A., ii, 501.

Pellet, Henri, Léon Pellet, and E. A. Pairault, removal of dextrose from cane and other molasses by fermentation, 1906, A., ii, 383.

Pellet, Henri, and Raoul Roche, analyses of soils and slimes of the Nile, 1907, A., ii, 649.

Pellet, Léon, estimation of lævulose and dextrose, 1907, A., ii, 912.

Pellet, Léon. See also Henri Pellet.
Pellini, Giovanni, quantitative separation of selenium from tellurium,

1903, A., ii, 752. radioactivity and atomic weight of tellurium, 1904, A., ii, 26.

estimation of tellurium by electrolysis, 1904, A., ii, 147, 775.

isomorphism of tellurium and selenium, 1906, A., ii, 609.

Pellini, Giovanni, mercury peroxide, 1907, A., ii, 954.

selenium and iodine, 1909, A., ii, 568.

isomorphism between tellurium and sulphur, 1909, A., ii, 726.

mixed crystals of sulphur and tellurium, 1909, A., ii, 805.

isomorphism of sulphates, selenates, and tellurates, 1909, A., ii, 1002.

nature of the so-called double salts formed by caffeine with alkali salts, 1910, A., i, 416.

the supposed complexity of tellurium,

1912, A., ii, 343.

Pellini, Giovanni, and Mario Amadori, existence in solution of compounds of caffeine and sodium benzoate, 1910, A., i, 416.

behaviour of certain ureides and purine substances towards sodium benzoate solutions, 1910, A., i, 525.

existence of complexes between purine substances and sodium salicylate, 1912, A., i, 320.

Pellini, Giovanni, Carlo Aureggi, and Renzo Sacerdoti, compounds of selenium and of tellurium with mercury, 1909, A., ii, 1014.

Pellini, Giovanni, and Domenico Loi, refractive powers of hydrocarbons with heterocyclic chains, 1903, A., ii, 121.

Pellini, Giovanni, and Domenico Meneghini, true peroxide of nickel, 1909, A., ii, 50.

formation of true peroxides of iron, 1909, A., ii, 486.

Pellini, Giovanni, and Silvio Pedrina, selenium and iodine, 1908, A., ii, 833.

Pellini, Giovanni, and Leonildo Pegoraro, basicity of hydrofluoric acid, 1907, A., ii, 860.

Pellini, Giovanni, and Emanuele Quercigh, sodium tellurides, 1910, A., ii, 1062.

the tellurides of silver, 1910, A., ii, 1063.

gold tellurides, 1911, A., ii, 45.

Pellini, Giovanni, and Egidio Spelta, estimation of selenium, 1904, A., ii, 83.

Pellini, Giovanni, and Mario Vaccari, chemical actions of radium, 1904, A., ii, 692.

Pellini, Giovanni, and Giovanni Vio, isomorphism of selenium and tellurium, 1906, A., ii, 663.

Pellizza, Arturo, apparatus for the continuous extraction of liquids, 1904, A., ii, 287.

Pellizza, Arturo. See also Zaccaria Treves. Pellizzari, Guido, action of evanogen haloids on phenylhydrazine, 1907, A., i, 873; 1911, A., i, 338.

1-amino-1:3:4-triazole, 1909, A., i, 534. triazole and its derivatives, 1911, A., i, 1035.

1-phenyl-5-methyl-1:2:4-triazole and cyanophenylacetamidine, 1911, A., i,

Pellizzari, Guido, L. Accame, and A. Laria-Botte, derivatives of hydrazodicarbonamide and of urazole, 1911, A., i, 336.

Pellizzari, Guido, and Carlo Cantoni, diaminoguanidine, 1905, A., i, 174.

action of cyanogen bromide on hydrazine, 1905, A., i, 576.

some derivatives of alloxan, 1911, A., i, 337.

Pellizzari, Guido, and Angelo Repetto, action of cyanogen bromide on hydrazine; N-aminoguanazole (guanazine). III., 1908, A., i, 65.

Pellizzari, Guido, and F. Roncagliolo, action of cyanogen bromide on hydraz-

ine. II., 1907, A., i, 833.

Pellizzari, Guido, and Angelo Soldi, aliphatic derivatives of 1:2:4-triazole, 1905, A., i, 672.

Pelloux, Alberto, mineralogy of Sardinia. II., 1908, A., ii, 863.

Pelly, Russell George, composition of bassia fats, 1912, A., ii, 379.

Pelly, Russell George. See also Ernest Goulding.

Peltner, Erich, rubidium peroxide hydrate and rubidium percarbonate, 1909, A., ii, 574.

Peltner, Erich. See also Richard Wolffenstein.

Peltrisot, detection of rice starch in wheat flour, 1908, A., ii, 236. Peltz, Walter. See Ludwig Claisen.

Pelz, Erich, production of nitrite by

bacteria, 1911, A., ii, 139. Pember, F. R. See Burt Laws Hartwell. Pembrey, Marcus Seymour, respiratory

nating animals, 1903, A., ii, 305. Cheyne-Stokes respiration, 1908, A., ii,

exchange and temperature in hiber-

Pembrey, Marcus Seymour, and Richard William Allen, Cheyne-Stokes respiration, 1905, A., ii, 263.

Pembrey, Marcus Seymour, Arthur Philip Beddard, and Herbert Stanley French, Cheyne-Stokes breathing, 1906, A., ii,

Pembrey, Marcus Seymour, and Frank Cook, influence of oxygen on respiration, 1908, A., ii, 706.

Pembrey, Marcus Seymour, and Lionel Edmund Longworth Parker, composition and energy-value of the food of the soldier, 1908, A., ii, 306.

Pembrey, Marcus Seymour, and Edmund Ivens Spriggs, influence of fasting and feeding on metabolism, 1904, A., ii,

624.

Pembrey, Marcus Seymour. See also Arthur Philip Beddard, Herbert Stanley French, Ernest Laurence Kennaway, and N. Mutch.

Pemsel, Hermann. See Ludwig Knorr. Pemsel. Wilhelm. See Eugen Bamberger.

Penau, H., estimation of mustard oil in mustard preparations, 1912, A., ii,

Pence, C. M., the bromine and iodometric methods for the estimation of resorcinol, 1912, A., ii, 696.

Pence, Forrest K., estimation of hydrated silicie acid in clay, 1912, A., ii, 204.

Penfield, Samuel Lewis, and Walter Bradley, filter tubes for Minor collection of precipitates, 1906, A., ii,

Penfield, Samuel Lewis, and William Ebenezer Ford, stibiotantalite, 1906,

A., ii, 681.

Penfield, Samuel Lewis, and George Samuel Jamieson, tychite, a new mineral; its artificial production and relation to northupite, 1905, A., ii, 723.

Penfield, Samuel Lewis, and Frederick Clark Stanley, chemical composition of amphibole, 1907, A., ii, 102.

Penfold, William James, variability in the gas-forming power of intestinal bacteria, 1912, A., ii, 191.

Penfold, William James. See also Arthur Harden.

Penndorf, Otto. See Wilhelm Wislicenus.

Pennington, (Miss) Mary Engle, bacterial growth and chemical changes in milk kept at low temperatures, 1908, A., ii, 409.

chemical and bacteriological study of fresh eggs, 1910, A., ii, 224.

Pennington, (Miss) Mary Engle, and Arden D. Greenlee, application of the Folin method to the determination of the ammoniacal nitrogen in meat, 1910, A., ii, 449.

Pennington, (Miss) Mary Engle, and Joseph S. Hepburn, studies on chicken I. Occurrence and permanence of lipase in the fat of the common fowl (Gallus domesticus), 1912, A., ii, 275.

Pennington, (Miss) Mary Engle, also Edgar Fahs Smith.

Pennock. John D., and Darwin Abbot Morton, rapid estimation of sulphur in coal and coke, 1904, A., ii, 206.

Pépin, Camille, preparation and distinctive properties of empyreumatic oil of juniper (Oleum cadi), 1906, A., ii, 633.

reactions of empyreumatic oil of juniper (Oleum cadi), 1906, A., ii, 807.

Pérard, Joseph, action of magnesium phenyl bromide on dialkylaminobenzovlbenzoic esters, 1906, A., i,

action of magnesium phenyl bromide on the second methyl ester of p-dimethylamino-o-benzovlbenzoic acid,

1908, A., i, 422.

Peratoner, Alberto [Antonio], y-hydroxypyrone and some of its derivatives. I. Non-nitrogenous derivatives, 1905, A., i, 806.

synthesis of pyromeconic acid, 1912,

A., i, 291.

Peratoner, Alberto, Antonino d'Angelo, Eduardo Carapelle, and Antonio Tamburello, 4-oxypyrone and some of its derivatives, 1912, A., i, 299.

Alberto, and Emanuele Peratoner. Azzarello, etherification of 4-pyridones with diazo-derivatives of aliphatic hydrocarbons, 1906, A., i, 381.

action of diazo-derivatives of aliphatic hydrocarbons on cyanogen and its derivatives. I. and II. Cyanogen,

1907, A., i, 979.

Peratoner, Alberto, and Vincenzo Castellana, constitution of hydroxycomenic acid (dihydroxypyronecarboxylic acid), 1905, A., i, 806.

Peratoner, Alberto, and Francesco Carlo Palazzo, constitution of comenic

acid, 1905, A., i, 806.

action of diazo-derivatives of aliphatic compounds on cyanogen and its derivatives. IV. and V. Hydrocyanic acid, 1907, A., i, 1018.

Peratoner, Alberto, and Rosario Spallino, alkyl ethers of pyromeconic acids,

1905, A., i, 806.

Peratoner, Alberto, and Antonio Tamburello, identity of Stenhouse's larixinic acid and maltol, 1904, A., i, 61.

a supposed oxime of meconic acid,

1904, A., i, 172.

constitution of maltol, 1905, A., i, 807. pyridones from pyromeconic acid and maltol, 1905, A., i, 807.

Perciabosco, Filippo, and V. Rosso, direct absorption of nitrites by plants, 1909, A., ii, 603.

Perciabosco, Filippo. See also Francesco Canzoneri, and Francesco Scurti.

Percival, A. L., phosphorus in animal tissues, 1903, A., ii, 164.

Perdrix, Léon, reversible conversion of paraformaldehyde into formaldehyde, and sterilisation with formaldehyde at high temperatures, 1907, A., i, 13.

Perdue, W. L., and George Augustus Hulett, cadmium sulphate and the atomic weight of cadmium, 1911, A., ii, 397.

exact electrolytic method for estimating metals, 1911, A., ii, 433.

Perin, J., origin of organic chlorine compounds, 1904, A., ii, 59.

Perjatel, F. See Ludwig Moser. Perkel, Lasar. See Eduard Buchner.

Perkin, Arthur George, cyanomaclurin, 1904, P., 170; 1905, T., 715; P.,

note on the catechins, 1904, P., 171. a constituent of Java indigo, 1904, P., 172.

the estimation of acetyl groups, 1904, P., 171; 1905, T., 107.

the constituents of gambier and acacia catechus. II., 1905, T., 398; P., 89. purpurogallin, 1905, P., 211; 1912,

T., 803; P., 94. some oxidation products of the hydroxybenzoic acids. Parts II. and III.,

1906, T., 251; P., 41; 1911, T.,

1442; P., 194.

a reaction of ellagic and flavellagic acids, 1906, P., 114.

an oxidation product of indigotin, 1906, P., 198.

indigo-yellow, 1906, P., 199.

constituents of natural indigo. Part II., 1907, T., 435; P., 62.

methyl ethers of some hydroxyanthraquinones, 1907, T., 2066; P., 288.

the occurrence of isatin in some samples of Java indigo, 1907, P., 30. note on morindin, 1908, P., 149.

indoxylic acid, 1909, T., 847; P., 126. the colouring matters of the flowers of Hibiscus sabdariffa and Thespasia lampas, 1909, T., 1855; P., 248.

the colouring matter of cotton flowers, Gossypium herbaceum. Part II.. 1909, T., 2181; P., 291.

the reduction of indirubin, 1909, P.,

indigo products from northern Nigeria, 1909, A., ii, 513.

Perkin, Arthur George, a natural substantive dyestuff, 1910, T., 220; P., 23.

the identity of osyritin, myrticolorin, violaquercitrin and rutin, 1910, T., 1776; P., 213.

myricetin. Part III., 1911, T., 1721; P., 225.

the colouring matters of the flowers of the Cedrela toona, 1912, T., 1538; P., 198.

ethylation in the flavone group, 1912,

P., 328.

Perkin, Arthur George, and William
Popplewell Bloxam, some constituents of natural indigo.
Part I.,
1907, T., 279; P., 30.

indican. Part I., 1907, T., 1715; P.,

116, 218.

Perkin, Arthur George, and John James Hummel, the colouring principle of the flowers of the Butea fundosa, 1904,

T., 1459; P., 169.

Perkin, Arthur George, and Maximilian Nierenstein, some oxidation products of the hydroxybenzoic acids and the constitution of ellagic acid, 1905, T., 1412; P., 185.

Perkin, Arthur George, and Frederick Mollwo Perkin, formation of purpurogallin by the electrolytic oxidation of pyrogallol, 1903, P., 58.

studies on the electrolytic oxidation of phenols. Part I., 1904, T., 243;

P., 18.

the electrolytic oxidation of some hydroxybenzoic acids, 1905, P., 212; 1908, T., 1186; P., 149.

Perkin, Arthur George, and Samuel Phipps, notes on some natural colouring matters, 1903, P., 284; 1904, T., 56.

Perkin, Arthur George, and Alec Bowring Steven, purpurogallin. I., 1903, T., 192.

a product of the action of isoamyl nitrite on pyrogallol, 1906, T., 802; P.,

Perkin, Arthur George, and Frederick Thomas, indican. Part II., 1909, T., 793; P., 125.

Perkin, Arthur George, and Charles Richard Wilson, a reaction of some phenolic colouring matters. Part II., 1903, T., 129.

Perkin, Arthur George. See also William Popplewell Bloxam, George Herbert Frank, Arthur George Green, John James Hummel, Tokuhei Kametaka, and Frederick Thomas. Perkin, Frederick Mollwo, simple qualitative test for bromides and iodides, and a test for hydrogen carbonates, 1903, A., ii, 177.

reduction of oxides, sulphides, etc., by metallic calcium, 1907, A., ii,

952.

note on the formation of lead ethoxide, 1908, P., 179.

electrolytic analysis, 1908, A., ii,

electro-analysis of mercury compounds with a gold cathode, 1910, A., ii, 75.

Perkin, Frederick Mollwo, and William
Earl Hughes, electro-deposition of
metals, 1910, A., ii, 898.

Perkin, Frederick Mollwo, and Lionel Pratt, action of alcohols on metallic calcium, 1907, P., 304; 1909, T.,

159; P., 18.

action of metallic calcium and calcium hydride on metallic oxides, sulphides, and halogen salts, 1908, A., ii, 379.

Perkin, Frederick Mollwo, and William Clarence Prebble, electrolytic analysis of gold, 1904, A., ii, 370.

electrolytic analysis of cobalt and nickel, 1905, A., ii, 207.

Perkin, Frederick Mollwo. See also Stevenson Binning, (Miss) Mary Cunningham, Alberto Fontana, John Archibald Goode, Thomas Weatherill Harrison, Herbert Drake Law, Leslie O'Dowd, and Arthur George Perkin.

Perkin, (Sir) William Henry, the action of nitric acid on methyl dimethylacetoacetate, 1903, T., 1217.

simplification of Zeisel's method of methoxyl and ethoxyl determinations, 1903, T., 1367; P., 239.

densities, magnetic rotations, and refractive powers of 1:1-dimethylhexahydrobenzene,1:1-dimethyl-Δ³-tetrahydrobenzene, and 3-hydroxy-1:1-dimethylhexahydrobenzene, 1905, T., 1491.

densities, magnetic rotations, and refractive powers of laurolene, dihydrolaurolene, isolaurolene, and dihydroisolaurolene, 1906, T., 33.

an improved apparatus for measuring magnetic rotations and obtaining a sodium light, 1906, T., 608; P., 100; discussion, P., 101.

densities, magnetic rotations, and refractive powers of d-Δ^{3:8(0)}·p-menthadiene, ethyl dl-Δ¹-tetrahydro-p-toluate, dl-Δ^{3:8(0)}·p-menthadiene, terpineol, and dipentene, 1906, T., 849.

Perkin, (Sir) William Henry, congratulatory address to, 1906, P., 247.

the magnetic rotation of hexatriene, CH2:CH CH:CH:CH2 and its relationship to benzene and other aromatic compounds; also its refractive power, 1907, T., 806; P., 110; discussion, P., 111.

gift of bust of, to Society, 1907. P.,

53.

obituary notice of, 1908, T., 2214.

Perkin, William Henry, jun., sulpho-campholic acid and the isomeric aand B-camphylic acids, 1903, T., 835. degradation of brazilin, 1903, A., i,

430.

8-ketohexahydrobenzoic acid, T., 416; P., 51.

experiments on the synthesis of the Part I. Synthesis of terpenes. terpin, i-terpineol, and dipentene, 1904, T., 654; P., 86.

the action of ethyl dibromopropanetetracarboxylate on the disodium derivative of ethyl propanetetracarboxylate; a correction, 1905, T., 358; P., 90.

Wislicenus memorial lecture, 1905, T.,

501; P., 17.

synthesis of tertiary menthol and of inactive menthene, 1905, P., 255.

experiments on the synthesis of the terpenes. Part VII. A synthesis of tertiary menthol (p-menthanol-4) and of inactive menthene (A3-pmenthene), 1906, T., 832.

some experiments on the oxidising action of hydrogen peroxide; pre-

liminary note, 1907, P., 166. experiments on the synthesis of the terpenes. Part XIV. Synthesis of d- and l- Δ^5 -m-menthenol(8), dl- Δ^4 m-menthenol(8), and their derivatives, 1910, T., 2129; P., 249.

experiments on the synthesis of the terpenes. Part X (continued). Synthesis of sylvestrene (d-carvestrene); preliminary note, 1910, P.,

experiments on the synthesis of the terpenes. Part XVIII. Synthesis of \$\Delta^5-o-menthenol(8), \$\Delta^6-o-men-\$ thenol(8), and the corresponding menthadienes, 1911, T., 727; P.,

experiments on the synthesis of the terpenes. Part XIX. Synthesis of cis- and trans-Δ³-o-menthenol(8), Δ4-o-menthenol(8), and the corresponding menthadienes, 1911 T., 741; P., 95.

Perkin, William Henry, jun., produetion and polymerisation of butadiene. isoprene, and their homologues, 1912, A., i, 636.

Perkin, William Henry, jun., and Samuel Shrowder Pickles, the reduction of isophthalic acid, 1905,

T., 293; P., 75.

experiments on the synthesis of the terpenes. Part II. Synthesis of Δ^3 -p-menthenol(8), $\Delta^{3:8(9)}$ -p-menthadiene, p-menthanol(8), \(\Delta^{8(9)} - pmenthene, and p-menthane, 1905. T., 639; P., 130.

experiments on the synthesis of the terpenes. Part III. Synthesis of aliphatic compounds similar in constitution to terpineol and dipentene,

1905, T., 655; P., 131.

Perkin, William Henry, jun., and William Jackson Pope, 1-methylcyclohexylidene-4-acetic acid, 1906, P., 107.

experiments on the synthesis of 1-methylcyclohexylidene-4-acetic

acid, CHMe CH₂·CH₂·CH₂ C:CH-Part I., 1908, T., 1075, ·CO.H. P., 145.

optically active derivatives of 1methylcyclohexylidene-4-acetic acid, 1911, T., 1510; P., 212.

Perkin, William Henry, jun., William Jackson Pope, and Otto Wallach, optically active substances containing no asymmetric atom; 1-methylcyclohexylidene-4-acetic acid, 1909, T., 1789; P., 83, 230; discussion, P., 84.

Perkin, William Henry, jun., Walter Morrell Roberts, and Robert Robinson, some derivatives of o-veratraldehyde; preliminary note, 1911, P., 57. 1:2-diketohydrindene, 1912, T., 232;

P., 4.

Perkin, William Henry, jun., and Robert Robinson, ethyl piperonylacetate, 1905, P., 287.

brazilin and hæmatoxylin. Part VIII.

1906, P., 160.

some derivatives of benzophenone; synthesis of substances occurring in coto-bark; preliminary notice, 1906, P., 305.

brazilin and hæmatoxylin. Part VII. Synthesis of derivatives of hydrindine closely allied to brazilin and hæmatoxylin, 1907, T., 1073.

some derivatives of \(\gamma\)-pyranol allied to certain derivatives of brazilein and hæmatein; preliminary communication, 1907, P., 149.

William Henry, jun., and Perkin, Robert Robinson, synthesis of brazilinic acid and the lactones of dihydrobrazilinic and dihydrohæmatoxylinic

acids, 1907, P., 291.

btazilin and hæmatoxylin. Part VIII. Synthesis of brazilinic acid, the ractones of dihydrobrazilinic and ldihydrohæmatoxylinic acids, anhydrobrazilie acid, etc.; the constitution of brazilin, hæmatoxylin, and their derivatives, 1908, T., 489; P., 54.

brazilin, hæmatoxylin, and their de-Part X. The constiturivatives. Part X. The constitu-tion of trimethylbrazilone, of aand B-anhydrotrimethylbrazilone, and of the corresponding hæmatoxylin derivatives, 1909, T., 381;

P., 31.

strychnine, berberine, and allied alkaloids, 1910, T., 305; P., 24.

synthesis and resolution of gnoscopine (dl-narcotine), 1911, T., 775; P., 46, 101, 131.

harmine and harmaline. 1912, T., 1775; P., 217.

experiments on the synthesis of brazilin and hæmatoxylin and their derivatives; preliminary note, 1912,

the constitution of harmine; preliminary note, 1912, P., 153.

the synthesis of isoharman; prelimin-

ary note, 1912, P., 154.

Perkin, William Henry, jun., Robert Robinson, and Frederick Thomas, synthesis of cotarnic acid, 1909, T., 1977; P., 262.

Perkin, William Henry, jun., Robert Robinson, and Maurice Russell Turner, the synthesis and constitution of certain pyranol salts related to brazilein and hæmatein, 1908, T., 1085; P., 148.

Perkin, William Henry, jun., and Emanuel Schiess, derivatives of Bresorcylic acid and of protocatechuic acid, 1903, P., 14; 1904,

Perkin, William Henry, jun., and John Lionel Simonsen, the replacement of hydroxyl by bromine, 1905, T., 855; P., 188.

the synthetical formation of bridged rings. Part II. Some derivatives of dicyclobutane, 1905, P., 256.

the action of tribromopropane on the sodium derivative of ethyl malonate. Part I., 1906, P., 133; 1907, T., 816.

Perkin, William Henry, jun., and John Lionel Simonsen, the action of tribromopropane on the sodium derivative of ethyl malonate. Part II. Formation of Δαζ-heptadi-ineneδ-carboxylic acid (ψ-m-toluic acid), (CH:C·CH₂)₂C(CO₂H)₂, 1907, T.,

experiments on the synthesis of the Part XI. Synthesis of terpenes. 4-isopropylidenecyclohexanone and its derivatives, 1907, T., 1736; P., 197.

cyclobutane-1:3-dicarboxylic acid and some of its derivatives, 1909, T., 1166; P., 178.

note on the condensation of acetone and hippuric acid, 1909, P., 164.

Perkin, William Henry, jun., and (Miss) Alice Emily Smith, the synthesis of aa-dimethylglutaric acid, of Bhydroxy-aa-dimethylglutaric acid, and of the cis- and trans-modifications of aa-dimethylglutaconic acid, 1903, T., 8.

the synthesis of aay-trimethylglutaric acid, of the cis- and trans-modifications of β-hydroxy-aay-trimethylglutaric acid, and of aay-trimethylglutaconic acid, 1903, T., 771; P.,

163.

the cis- and trans-modifications of aay-trimethylglutaconic acid, 1904,

T., 155; P., 10. Perkin, William Henry, jun., and George Tattersall, glutaconic acid and the conversion of glutaric acid into trimethylenedicarboxylic acid, 1905, T., 361; P., 90.

experiments on the synthesis of the terpenes. Part VI. Derivatives of m-cymene, 1905, T., 1083; P.,

synthesis of carvestrene; preliminary

note, 1906, P., 268.

experiments on the synthesis of the terpenes. Part X. Synthesis of carvestrene and its derivatives,

1907, T., 480; P., 66. kin, William Henry, jun., and Jocelyn Field Thorpe, the synthesis Perkin, of camphoric acid. Part III. Synthesis of isolauronolic acid, 1903,

aa-dimethylbutane-aβδ-tricarboxylic acid, γ-keto-ββ-dimethylpentamethylene-a-carboxylic acid, and the synthesis of inactive a-campholactone, of inactive a-campholytic acid, and of \$-campholytic acid (isolauronolic acid), 1904, T., 128.

Perkin, William Henry, jun., and Jocelyn Field Thorpe, experiments on the synthesis of camphoric acid. Part IV. The action of sodium and methyl iodide on ethyl dimethyl butanetricarboxylate, CO₂Et·CH₂·CH₄·CO₂Et)·CMe₂·CH₂·CO₂Et, 1906, T., 778.

experiments on the synthesis of camphoric acid. Part V. A synthesis of camphoric acid, 1906, T.,

795.

Perkin, William Henry, jun., and Otto Wallach, 1-acetyl-Δ¹-cyclopentene as an oxidation product of Δ¹-cyclohexeneacetic acid, 1909, A., i, 154.

 Δ^3 -p-menthenol(8) and $\Delta^{3:8(\bullet)}$ -p-menthadiene, 1910, T., 1427; P.,

194.

Perkin, William Henry, jun., Charles Weizmann, Norman Allen Creeth, Victor John Harding, Walter Norman Haworth, Jonathan Naylor, and Henry Llewellyn Smith, some derivatives of catechol, pyrogallol, benzophenone, and of substances allied to the natural colouring matters, 1906, T., 1649; P., 269.

Perkin, William Henry, jun. See also Oskar Baudisch, Norman Bland, Julius Bredt, Tsan Quo Chon, (Miss) Mary Elizabeth Dobson, Paul Engels, Kenneth Fischer, Henry Dent Gardner, Thomas Edward Gardner, William Goodwin, Thomas William Diggle Gregory, Victor John Harding, Walter Norman Haworth, Edward Hope, Ernest Griffiths Jones, Francis William Kay, Frederick Russell Lankshear, Bernard Dunstan Wilkinson Luff, James Wallace McDavid, Köchi Matsubara, Andrew Norman Meldrum, and Edward Russhon Needham.

Perkins, Claude Clair, gravimetric estimation of free bromine and chlorine, combined iodine, and oxidising reagents by means of metallic

silver, 1910, A., ii, 542.

use of silver in the estimation of molybdenum, vanadium, selenium, and tellurium, 1910, A., ii, 659.

Perkins, Claude Clair. See also Frank

Austin Gooch.

Perkins, C. L. See Charles Lathrop Parsons.

Perkins, P. B., determination of the molecular weight of radium emanation by the comparison of its rate of diffusion with that of mercury vapour, 1908, A., ii, 552. Perkins, William Hughes, and Albert Theodore King, the precipitation of lead thiosulphate and its behaviour on boiling with water, 1912, P., 315.
Perl, Alfred. See Gustav Schultz.

Perley, G. A., experiments on solarisa-

tion, 1909, A., ii, 952.

Perman, Edgar Philip, vapour pressure of aqueous ammonia solution, 1903, T., 1168; P., 204.

the determination of molecular weight by lowering of vapour pressure, 1905, T., 194; P., 23; discussion, P., 23.

vapour pressure by air-bubbling, 1905,

A., ii, 146.

direct synthesis of ammonia, 1905, A., ii, 814.

new form of absorption tube, 1906, A., ii, 390.

chemical reaction between salts in the solid state, 1907, A., ii, 538.

the direct action of radium on copper and gold, 1908, T., 1775; P., 214.

the direct action of radium on ammonia, 1911, T., 132, P., 7.

chemical action induced by cathode rays and canal rays, 1911, T., 833; P., 94.

Perman, Edgar Philip, and John Hughes
Davies, some physical constants of
ammonia; a study of the effect of
change of temperature and pressure
on an easily condensable gas, 1906,
A., ii, 743.

molecular weight of 8-naphthol in solution in solid naphthalene, 1907,

T., 1114; P., 162.

Perman, Edgar Philip, and Richard Henry Greaves, the decomposition of ozone by heat, 1908, A., ii, 480.

Perman, Edgar Philip. See also John

Hughes Davies.

Permin, Carl, an automatic pipette, 1911, A., ii, 221.

Perna, Elmara, action of dipropylamine on the isomeric nitrohalogen-benzenes, 1903, A., i, 406.

Perndanner, Heinrich Felix. See Rudolf Wegscheider.

Perold, Abraham Izaak. See Daniel Vorländer.

Péron, G., pæonol produced by decomposition of a glucoside, 1911, A., ii, 426.

Péron, G. See also R. Bernier.

Peroni, Bernardino, detection and estimation of emetine, 1907, A. ii, 658.

Perotti, Renato, employment of calcium cyanamide as manure, 1905, A., ii, 196. Perotti, Renato, use of peat for the transformation of calcium cyanamide into ammoniacal compounds, 1905, A., ii, 278.

modification of the method for isolating nitrifying micro-organisms,

1905, A., ii, 341.

estimation of cyanamide and its applications, 1905, A., ii, 870.

oligonitrophilous and mesonitrophilous bacteria in the soil of the Roman Campagna, 1906, A., ii, 190.

spontaneous formation of dicyanodiamide in manures containing calcium cyanamide, 1906, A., ii, 304. employment of thiocyanates as man-

ures, 1907, A., ii, 48.

bacterial decomposition of "sulpho-

cyanide," 1907, A., ii, 191.

physiological behaviour of dicyanodiamide with regard to its value as manure, 1907, A., ii, 295.

microbiochemical formation of ammonia in soils, 1908, A., ii, 124.

natural factors in the dissolution of tricalcium phosphate in soil, 1908, A., ii, 527.

nitrogenous nutrition of plants by means of amino-compounds, 1909, A., ii, 515.

physiological action and manurial value of the salts of dicyanodiamide, 1909, A., ii, 606.

biochemical resolution of phosphoric acid in soils, 1910, A., ii, 1105.

Perrédès, P. E. F., modification of Dunstan and Short's extraction apparatus, 1910, A., ii, 196.

Perrier, Albert, formation and rôle of fatty substances in fungi, 1905, A., ii. 475.

oxidation of acetaldehyde by lower vegetation, 1910, A., ii, 799.

Perrier, Albert, and Heike Kamerlingh Onnes, magnetic researches. V. The initial susceptibility of nickel at very low temperatures, 1912, A., ii, 425.

Perrier, Albert. See also Pierre Mazé, and Heike Kamerlingh Onnes.

Perrier, Gustave, benzoylfluorene, 1904, A., i, 66.

benzoylacenaphthene, 1904, A., i, 804. presence of formaldehyde in certain food-stuffs, 1906, A., ii, 906.

estimation of fats in pork and other products containing water, 1909, A., ii, 628.

Perrier, Gustave, and H. Caille, formation of mixtures of isomerides of constant melting point in Friedel and Crafts' reaction, 1908, A., i, 349.

Perrier, Gustave, and H. Caille, derivatives of phenyl β-naphthyl ketone, 1908, A., i, 656.

Perrier, Gustave, and L. Farcy, influence of chlorides on the estimation of nitrates in water, 1909, A., ii, 344.

Perrier, Gustave, and A. Fouchet, volatile oil of Rhus cotinus ("young fustic"), 1910, A., i, 54.

Perrier, Gustave, and Eugène Prost, an isomeride of trichloroacetone, 1905, A., i, 171.

Perrin, Félix. See Auguste Lumière. Perrin, G., detection of inositol in nat-

ural wines, 1909, A., ii, 624.

Perrin, Jean, conditions determining the sign and magnitude of "contact" electrification, 1904, A., ii, 8.

contact electrification and colloidal solutions, 1905, A., ii, 138.

the Bose-Guillaume phenomenon and contact electrification, 1908, A., ii, 754.

the size of molecules and charge of the electron, 1908, A., ii, 927.

Brownian movement and the real existence of molecules, 1910, A., ii,

determinations of the size of molecules, 1911, A., ii, 480.

molecular magnitudes, 1911, A., ii, 594.

Perrin, R. See Augustin Bistrzycki.
Perrot, Émile, and Maurice Leprince,
Adenium hongkel, the ordeal poison of
the French Soudan, 1910, A., ii, 151.

Perrot, Emile, and Eugène Tassilly, "bourgou" (Panicum stagninum); a sacchariferous grass, 1908, A., ii, 726.

Perrot, Émile. See also V. Pachon.
Perrot, François Louis, thermal conductivity of crystalline bismuth, 1903, A., ii, 466; 1905, A., ii, 10.

Perrot, François Louis. See also Georges Baume, and Adrien, Jaquerod.

Perruchon, L. See Edouard Urbain. Perry, Frank. See Bernard Farnborough Howard.

Pers, Robert, equilibrium between chloropentamminocobalt chloride and aquopentamminocobalt chloride in aqueous solution, 1911, A., ii, 1094.

Pertusi, C. See Stefano Camilla. Perutz, Conrad. See Carl Graebe.

Pescheck, Ernst, modification of Foerster's fat extraction apparatus, 1906, A., ii, 813.

[Kjeldahl] ammonia distillations with or without cooling arrangement, 1907, A., ii, 50. Pescheck, Ernst, the action of some non-protein nitrogenous compounds on nitrogenous metabolism of the carnivora with special reference to ammonium acetate, 1911, A., ii, 1002.

the influence of ammonium salts and acetates on the nitrogenous metabolism of carnivora, 1912, A., ii, 1067.

Peschudow, Wassilij. See Carl Adam Bischoff.

Pesci, Leone, organo-mercury compounds of benzoic acid, 1903, A., i, 220.

hydroxide and salts of mercuriethylenediamine, 1909, A., i, 217.

new organic mercury compounds, 1909, A., i, 348.

Pescitelli, Luigi. See Ezio Comanducci. Peset, J., electrolytic estimation of bismuth, 1908, A., ii, 780.

detection of phosphorus, 1909, A., ii, 265.

detection of aniline, 1909, A., ii, 274.

Peski, A. J. van, jun., saponification of phenylisonitroacetonitrile to the amide by means of hydrogen peroxide, 1909, A., i. 647.

Peskind, S., action of acids and acid salts on blood corpuscles and other cells, 1903, A., ii, 31, 306.

ether-laking, 1904, A., ii, 747.

Pessler, Ernst, filter funnel and funnel strainer, 1909, A., ii, 35.

Pestalozza, Ugo. See Riccardo Ciusa, and Lungi Mascarelli.

Pesthy, Stefan von, fat digestion, 1911, A., ii, 742.

Pesthy, Stefan von. See also Paul Hari.

Petavel, John Ernest. See Robert Salmon Hutton.

Peteny, Armin. See Gustav Schultz.

Peter, Alfred Meredith, chemical method for determining the quality of lime-stone, 1903, A., ii, 333.

Peter, Walter. See Carl Graebe.

Peter, Willi, aliphatic compounds of polyvalent iodine. II. Derivatives of di-iodofumaric acid with polyvalent iodine, 1909, A., i, 879.

Peter, Willi. See also Johannes Thiele.

Peterke, C See O. Lüttig.

Petermann, Arthur, argricultural value of Martin [Siemens] slag, 1903, A., ii, 97.

Petermann, Karl. See Édouard Bourgeois.

Peters, Amos William, chemical studies of the cell and its medium. I. Liquid culture media, 1907, A. ii, 121.

Peters, Amos William, chemical studies on the cell and its medium. II. Chemico-biological relations in liquid culture media, 1907, A., ii, 384.

the cell and its medium. III. Inorganic salts of the protozoan cell and its medium, 1908, A., ii, 209.

chemical and physiological properties of a solution of hydrochloric acid and sodium chloride, 1908, A., ii, 411.

the adsorption of diastase and catalase by colloidal protein and by normal lead phosphate, 1909, A., i, 124.

preparation of nucleic acid, 1912, A.,

i, 58.

sources of error and the electrolytic standardisation of the conditions of the iodide method of copper analysis, 1912, A., ii, 492.

critical study of sugar analysis by copper reduction methods, 1912,

A., ii, 871.

Peters, Amos William, and Opal Burres, the diastatic enzyme of paramecium in relation to the killing concentration of copper sulphate, 1909, A., ii, 422.

Peters, Amos William, and Henry Albright Mattill, diastatic enzyme of

meat, 1909, A., ii, 503.

Peters, Amos William, and H. W. Stewart, adsorption and partial purification of catalase from the liver, 1909, A., ii, 501.

Peters, Charles Adams, the reactions in a system of nickel or platinum, mercury, and sodium chloride, 1911, A., ii, 1095.

the electrolysis of sodium chloride with the mercury cathode, 1911, A., ii, 1136.

Peters, Ernst R. C. See W. Percy Wilkinson.

Peters, Franz, electrolytic inactivity of ferric oxide, 1908, A., ii, 387.

Peters, Friedrich, pharmacological examination of corydalis alkaloids, 1904, A., ii, 632.

Peters, Fritz, and Hugo Simonis, 4-methylcoumarin, 1908, A., i, 339.

Peters, G. See Karl Auwers.

Peters, L. See Lorenz Hiltner.

Peters, R., estimation of alcohol in fusel oil, 1905, A., ii, 768.

Peters, Rudolph A., chemical nature of specific oxygen capacity in hæmoglobin, 1912, A., i, 519.

Peters, Walter (Rostock), trimethylenetrisulphone and -disulphonesulphide,

1905, A., i, 625.

Peters, Walter (Rostock), behaviour of aromatic sulphinic acids towards mercuric salts, 1905, A., i, 640.

reactions at low temperatures. I Cyanides, 1906, A., i, 817.

change of 2-isonitroso-1-ketohydrindene into homophthalamic acid, 1907, A., i, 221.

mercury salts of isatin and of 1:3diketohydrindene, 1907, A., i, 239.

reactions at low temperatures. II. Sulphides and carbamates, 1907, A., i, 396.

valency question, 1907, A., ii, 944. a zirconium mercury double salt, 1908, A., i, 1032.

residual affinity and additivity, 1908, A., ii, 937; 1910, A., ii, 114.

Peters, Walter (Rostock). See also Rudolph Fittig.

Peters Walter (Zürich). See Alfred Werner.

Peters, Wilhelm, and Georg Frerichs, the fatty oil of lemon pips, and limonin, 1903, A., i, 309.

Petersen, Emil, potassium vanadiocyanide, 1903, A., i, 612.

cyano-derivatives of vanadium, 1904, A., i, 302.

calculations in volumetric analysis, 1906, A., ii, 194.

reactivity of certain acids in alcoholic solutions, 1906, A., ii, 657.

Petersen, Irnfried. See Carl Dietrich Harries.

Petersen, Julius [Christian], estimation of sulphur by hydrogen peroxide, 1903, A., ii, 690.

reduction of oleic acid to stearic acid by electrolysis, 1905, A., i, 678.

qualitative detection of silica, 1905, A., ii, 62.

electrolysis of the alkali salts of organic acids. IV., 1906, A., i, 331. qualitative detection of gold and platinum in inorganic analysis,

1906, A., ii, 583. the filtrate from the precipitate with hydrogen sulphide [in qualitative analysis], 1910, A., ii, 654.

electrolysis of the sodium salts of organic acids. V., 1912, A., i, 409. Petersen, Otto V. C. E., use of aniline

Petersen, Otto V. C. E., use of aniline dyes as reagents for bile pigments in urine, 1912, A., ii, 107.

Peterson, A. See Ossian Aschan.

Peterson, Andrew P. See George Bell Frankforter.

Peterson, J. B. See F. W. Gill.
Peterson, Peter P., stereoisomeric chloro-imino-ketones, 1911, A., i, 879.

Peterson, Peter P., effect of heat and oxidation on the phosphorus of the soil, 1912, A., ii, 595.

Peterson, Peter P. See also Julius Stieglitz.

Peterson, W. H. See Edwin Bret Hart. Petit, Auguste, fixation of phosphoric acid by organic matter of the soil, 1911, A., ii, 649.

non-fixation of phosphoric acid by an acid forest soil, 1912, A., ii, 1206.

Petit, G. See H. Dominici. Petit, Joseph. See André Brochet.

Petit, Paul [Emile], influence of acidity on enzymes, 1904, A., i, 541.

action of heat and acidity on amylase, 1904, A., i, 702, 839.

liquefying and saccharifying actions on starch, 1906, A., i, 67.

Petit, Paul, and Charles Mayer, reactions of guaiacum resin, 1905, A., i, 655.

Petitti, Vincenzo. See Marussia Bakunin.

Petkow, Nicolaus, preparation of teraconic acid, 1903, A., i, 147.

Petraschevsky, Ludmila, respiration coefficient of the unicellular alga, Chlorothecium saccharophilum, 1904, A., ii, 760.

Petrenko, Georgii I., catalytic phenomena in the preparation of persulphuric acid, 1905, A., ii, 23.

silver-aluminium alloys, 1905, A., ii, 635.

silver-zinc alloys, 1906, A., ii, 284. alloys of silver with thallium, bismuth, and antimony, 1906, A., ii,

alloys of silver with the metals of the iron group (iron, cobalt, and nickel), 1907, A., ii, 346.

alloys of silver with lead and tin,

1907, A., ii, 346.

Petrenko, Georgii I., and Alexander
Semenovitsch Fedoroff, alloys of silver and cadmium, 1911, A., ii, 281.

the compounds of silver and cadmium, 1911, A., ii, 800.

Petrenko-Kritschenko, Pavel Iw., influence of cyclic linking on reactivity, 1907, A.; i, 220.

carbonyl group in the nascent state, 1910, A., i, 177.

steric hindrance, 1911, A., i, 725.

the condensation of acetonedicarboxylic ester with aldehydes, ammonia and amines, 1912, A., i, 128.

Petrenko-Kritschenko, Pavel Ivo., and Leonid Dementeyeff, tetrahydropyrone compounds, 1908, A., i, 560. Petrenko-Kritschenko, Pavel Iw., and Feodor Dolgopoloff, characterisation of aromatic aldehydes and ketones, 1905, A., i, 354.

Petrenko-Kritschenko, Pavel Iw., and Eugen Eltschaninoff, characterisation of cyclic ketones, 1903, A., i, 440.

Petrenko-Kritschenko, Pavel Iv., Eugen Eltschaninoff, Eugen Kestner, and Feodor Dolgopoloff, ketone and aldehyde reactions, 1905, A., i, 742.

Petrenko Kritschenko, Pavel Iw.,
Zacharias Hirschberg, Abraham
Lilienblüm, and Boris Malachoff,
condensation of esters of acconedicarboxylic acid with aldehydes by
means of ammonia and amines, 1909,
A., i, 959.

Petrenko-Kritschenko, Pavel Iw., and Wasili Kantscheff, velocity of formation of oximes, 1906, A., ii, 341.

Petrenko-Kritschenko, Pavel Iw., and Eugen Kestner, reaction of ketones with potassium hydrogen sulphite, 1903, A., ii, 719.

Petrenko-Kritschenko, Pavel Iw., and Alexander Konschin, influence of the medium on the speed of reaction of certain ketones with phenylhydrazine, 1903, A., ii, 719.

readiness of formation of cyclic com-

pounds, 1906, A., i, 57.

Petrenko-Kritschenko, Pavel Inc., Max Lewin, and Felix Mentschikowsky, condensation of ethyl acetonedicarboxylate with aldehydes under the influence of ammonia and amines. II., 1907, A., i, 708.

Petrenko-Kritschenko, Pavel Iw., and Wjatscheslaff Petroff, condensation of acetonedicarboxylic esters with alder hydes under the influence of ammonia and amines. III., 1908, A., i, 564.

Petrenko-Kritschenko, Pavel Iw., and Johann Schöttle, condensation of esters of acetonedicarboxylic acid with aldehydes by means of ammonia and amines, 1909, A., i, 605.

condensation of esters of acetonedicarboxylic acid with aldehydes by means of ammonia and amines. VI. Tautomerism of ethyl 2:6-diphenyl-4-pyridone-8:5-dicarboxylate, 1910, A., i, 188.

action of ammonia on benzoyldehydracetic acid, 1911, A., i, 1020.

action of methylamine and aniline on benzoyldehydracetic acid; [mutual replacement of ammonia and amines in pyridone derivatives], 1912, A., i, 128. Petrenko Kritschenko, Pavel Iw., and Feedor Stamoglu, abnormal salts of pyridone and lutidone, 1903, A., i, 197.

Petrenko-Kritschenko, Pavel Iw., and Nikolaus Zoneff, condensation of acetonedicarboxylic esters with benzaldehyde in the presence of ammonia, 1906, A., i, 452.

Petri, Josef, some new effects produced by radium bromide on a photographic

plate, 1905, A., ii, 431.

Petri, L., the tannin substances of the roots in the genus Vitis in relation to the disease caused by phylloxera, 1911, A., ii, 325.

Petrie, George Ford, leucocytes and bacteriolysis, 1904, A., ii, 61.

relationship of the pseudo-diphtheria and the diphtheria bacillus, 1905, A., ii, 341.

Petrie, James Mathew, mineral oil from the torbanite of New South Wales, 1905, A., i, 849.

Petrie, James Mathew. See also H. G. Chapman.

Petrikaln, A. See Mieczyslaw Cent-

Petroff, I., naphthenic acid, 1911, A. i, 974.

Petroff, S. See Sebastian Tanatar.

Petroff, Theodosius. See Alexander M. Saytzeff.

Petroff, Wjatscheslaff. See Pavel Iw. Petrenko-Kritschenko.

Petrone, E. See Giuseppe Kernot.

Petrowa, M., compounds of the aromatic series as cholagogues, 1911, A., ii, 1010.

Petruschewsky, Anna, influence of temperature on the work of the proteolytic enzyme and the zymase in killed yeast cells, 1907, A., i, 268.

Petry, Eugen, physico-chemical behaviour of liver cells, 1904, A., ii, 355.

action of the rennet ferment on casein, 1906, A., i, 469.

the chemistry of the cell granules; the composition of the eosinophile granules of the bone-marrow of the

horse, 1912, A, ii, 183.

Petterd, W. F., Tasmanian minerals,

1904, A., ii, 47.

Pettibone, Chauncey J. Vallette. See Emil Abderhalden.

Pettit, James Harvey, estimation of total alkalis in soils, 1903, A., ii, 512. soil analysis, 1910, A., ii, 65.

Pettit, James Harvey, and Ira Obed Schaub, estimation of organic carbon in soils, 1905, A., ii, 202.

Pettit, James Harvey. See also Alfred Koch.

Petzsch, Ernst. See Martin Kochmann. Pewsner, J.D. See Efim Semen London. Pewsner, M., influence of physostigmine, euphthalmine, and dionine on

the gastric secretion, 1907, A., ii, 106. Pexsters, Marcel, propyl-n-amylcarbinol,

1907, A., i, 376. Peyau, H. See Karl Fischer.

Pever. Heinrich. See Adolf Kaufmann. Pfaff, August, the amount of sulphur in electrolytic iron, 1909, A., ii, 891. electrolytic deposition of iron, 1910, A., ii, 414.

Pfaff, Friedrich Wigand, formation of dolomite, 1904, A., ii, 48. origin of dolomite, 1907, A., ii, 480.

Pfaffendorf, Wilhelm. See Karl Fries. and Theodor Zincke.

Pfannenstiel, Adolf. See Richard Willstätter.

Pfannl, Michael, course of the hydrolysis of proteins by aqueous or alcoholic hydrogen chloride, 1910, A., i, 289. interchange of alkyl groups in esters

of organic acids, 1910, A., i, 480. intramolecular change of quinidine (conchinine) by sulphuric acid, 1911,

A., i, 560.

interchange of primary, secondary, and tertiary alkyl groups in the esters of organic acids, 1911, A., i,

Pfannl, Michael, and Otto Dafert, terephthalyldicarbamide and terephthalyldinitrodicarbamide, 1912, A., i, 565.

Pfau, George Morton. See Treat Baldwin Johnson.

Pfaundler. Meinhard. See William Camerer.

Pfeffer, Otto. See Emil Fischer.

Pfeffermann, Ephraim. See Julius Tafel.

Pfeifer, S. See Herman Decker.

Pfeiffer, Hermann, action of light on mixtures of blood and eosin; action of fluorescent substances (eosin) on normal serum and red blood corpuscles, 1905, A., ii, 465.

Pfeiffer. Hermann. See also Alfred Einhorn

Pfeiffer; Otto, explosion pipette, 1904, A., ii, 637. estimation of benzene vapour in coal-

gas, 1904, A., ii, 786.

coal testing, 1905, A., ii, 767. improved apparatus for gas-analyses, 1907, A., ii, 194.

estimation of magnesium chloride in water, 1909, A., ii, 940.

reversible sulphuric acid tower for drying large volumes of gases, 1910, A., ii, 285.

Pfeiffer, Paul, action of carbamide and thiocarbamide on chromium chloride dihydrate, 1903, A., i, 612. composition of halogen salts, 1903, A.,

ii, 596.

constitution of the double salts of antimony pentachloride and chromium chloride, 1904, A., ii, 41.

stereochemistry of carbon compounds, especially of unsaturated systems.

1904, A., ii, 525.

hydrolysis of stannic chloride and stannic bromide, 1905, A., ii, 594. constitution of tripyridinechromium

trichloride, 1907, A., i, 872. diaquotetra-amminechromium salts.

1907, A., ii, 694.

theory of hydrolysis, 1907, A., ii, 937. stereochemistry of chromium. III., 1908, A., i, 79.

stereochemistry of chromium. The isomeric dibromo-salts, 1908, A., i, 79.

isomerism of chromium salts, 1908, A., ii, 594.

reaction differences of stereoisomeric ethylene haloids. I., 1912, A., i, 618. chemical theory of galvanic cells of the Daniell type, 1912, A., ii, 14.

Pfeiffer, Paul, and S. Basci, tetraamminechromium salts, 1905, A., i,

Pfeiffer, Paul, S. Basci, Theodor Gassmann, M. Haimann, and Armin Trieschmann, co-ordination-isomerism and polymerism among the chromium salts, 1906, A., ii, 614.

Pfeiffer, Paul, A. Fornet, Erwin Kramer, Fr. Matzke, and Iuser Spiro, rearrangements in light, 1912, A., i, 618.

Pfeiffer, Paul, B. Friedmann, Z. Goldberg, E. Pros. and V. Schwarzkopf, theory of the phenomena of halochromy. II.. 1911, A., i, 788.

Pfeiffer, Paul, B. Friedmann, Robert Lehnardt, H. Luftensteiner, Rudolf Prade, and Karl Schnurmann, the pyridine compounds of the tin haloids, 1911, A., i, 746.

Pfeiffer, Paul, B. Friedmann, and H. Rekate, theories of the constitution of double salts, 1910, A., i, 876.

Pfeiffer, Paul, Theodor Gassmann, and Hunold Pietsch, stereochemistry of chromium. VII. Mixed luteo-salts, 1908, A., i, 508.

Pfeiffer, Paul, Z. Goldberg, and J. Kuntner, lakes. I., 1911, A., i, 899. Pfeiffer, Paul, and M. Haimann, tri-

propylenediaminechromium salts, 1903, A., i, 464.

Pfeiffer, Paul, O. Halperin, E. Pros, and V. Schwarzkopf, theory of the pheno-I. Additive mena of halochromy. compounds of tin halogenides and carbonyl compounds, 1910, A., i, 852.

Pfeiffer, Paul, and Ida Heller, monomethyl-tin derivatives. III., 1905,

A., i, 123.

Pfeiffer, Paul, Ida Heller, and Hunold Pietsch, phenyl derivatives of elements of the phosphorus group, 1905, A., i, 164.

Pfeiffer, Paul, Peter Koch, Towie Gutmann Lando, and Armin Trieschmann, the stereochemistry of chromium. I.,

1905, A., i, 33.

Pfeiffer, Paul, and A. Langenberg, transformation of stereoisomeric ethylenic compounds. I., 1910, A., i, 810.

Paul, A. Langenberg, and Pfeiffer, (Miss) Bireneweig, betaines of pyridinium-maleic and pyridinium-acrylic acids and their salts, 1910, A., i, 878.

Pfeiffer, Paul, and Robert Lehnardt, monomethyl-tin compounds, 1903, A.,

i, 470, 802.

Paul, Robert Lehnardt, H. Pfeiffer, Luftensteiner, Rudolf Prade, Karl Schnurmann, and P. Truskier, the alkyl and aryl compounds of tin, 1910, A., i, 724.

Pfeiffer, Paul, and Kurt Matton, stilbeneo carboxylic acids, 1911, A., i, 448.

Pfeiffer, Paul, and J. von Modelski, behaviour of the amino-acids and polypeptides to neutral salts. 1912, A., i, 949.

Pfeiffer, Paul, and Wilhelm Möller, polymerisation of ethyl phenylpropiolate,

1907, A., i, 931.

Pfeiffer, Paul, and J. Monath, nitro-

stilbene, 1906, A., i, 413.

Pfeiffer, Paul, and Wilhelm Osann, tetrathiocyan dipyridinechromium salts, 1906, A., i, 602.

hydroxylopyridinechromium salts: additive salt formation with metallic hydroxides, 1907, A., i, 1072.

Pfeiffer, Paul, and Viktor Pimmer, compounds of copper salts with pyridine

and quinoline, 1906, A., i, 104.

Pfeiffer, Paul, Rudolf Prade, and H. Rekate, stannous alkyl derivatives,

I., 1911, A., i, 595.

Pfeiffer, Paul, Rudolf Prade, and Richard Stern, stereochemistry of chromium. V. Stercoisomeric aquo- and hydroxysalts, 1908, A., i. 506.

Pfeiffer, Paul, and Karl Schnurmann, preparation of alkyl and aryl tin compounds, 1904, A., i, 232.

Pfeiffer, Paul, and S. Sergiewskaja, paminostilbene, 1911, A., i, 438.

Pfeiffer, Paul, and M. Tapuach, hydrate isomerism with chromium salts, 1906, A., i, 532.

antimonichlorides of dichloro-salts,

1906, A., i, 628. Pfeiffer, Paul, M. Tapuach, and Wilhelm Osann, a new class of salt-forming metallic hydroxides, 1906, A., i, 531.

Pfeiffer, Paul, and M. Tilgner, dithiocyanototetra-amminechromium salts, 1907, A., i, 1017.

action of iodine on certain thiocyanates,

1908, A., i, 614.

Pfeiffer, Paul, and Armin Trieschmann, configuration of stereoisomeric chromium salts, 1906, A., i, 71.

Pfeiffer, Paul, Armin Trieschmann, Richard Stern, and Rudolf Prade, bisaquochromium salts, 1907, A., i, 895.

Pfeiffer, Paul, and P. Truskier, preparation of organo-lead and mercury com-

pounds, 1904, A., i, 544.

Pfeiffer, Paul, W. Vorster, and Richard Stern, stereochemistry of chromium. VI. Polynucleal chromium salts, 1908, A., i, 507.

Pfeiffer, Samuel. See Hans Rupe.

Pfeiffer, Theodor (Graz), behaviour of salt solutions in the stomach, 1905, A., ii, 837.

[Franz Wilhelm], Pfeiffer Theodor [Christian], estimation of nitrates in presence of nitrogenous organic matter, 1904, A., ii, 84.

Pfeiffer, Theodor, and Edwin Blanck, sensitiveness of lupines towards lime; behaviour of some other plants towards alkaline and acid media, 1911, A., ii, 761.

action of alumina and silicic acid on the utilisation of the phosphoric acid in soils by plants, 1911, A., ii,

764.

action of manganese on the growth of

plants, 1912, A., ii, 476.

acid secretion of roots and the solubility of soil nutrients in water containing carbon dioxide, 1912, A., ii, 596.

Pfeiffer, Theodor, Edwin Blanck, and Max Flügel, importance of phonolite as potassium manure, 1911, A., ii, 764.

Pfeiffer, Theodor, Paul Ehrenberg, and Ernst Reichenbach, nitrogen fixation in soils, 1907, A., ii, 126.

Pfeiffer, Theodor, Albert Einecke, and Wilhelm Schneider, effect of asparagine on the production of milk and its constituents, 1905, A., ii, 757.

Pfeiffer, Theodor, Albert Einecke. Wilhelm Schneider, and Albert Hepner, assimilation of potassium and sodium by plants, 1906, A., ii, 385.

Pfeiffer, Theodor, and Kurt Friske. increase of protein during the fattening of full-grown animals, 1911, A., ii,

304.

Pfeiffer, Theodor, Artur Guttmann, and Fritz Thiel, nitrogen economy of arable soils, 1910, A., ii, 535.

Pfeiffer, Theodor, Albert Hepner, and Leonhard Frank, utilisation of nitrogen in the form of ammonium nitrate, 1908, A., ii, 980.

fixation of ammonia by zeolites in

soils, 1909, A., ii, 87.

action of ammoniacal nitrogen [as manure] under the influence of lime,

1909, A., ii, 515.

Pfeiffer, Theodor, Richard Riecke, and Carl Bloch, parent substance of the hippuric acid produced in the organism of herbivorous animals, 1904, A., ii, 754.

Pfeiffer, Theodor, Wilhelm Schneider, and Albert Hepner, influence of asparagine on the production of milk and its constituents, 1907, A., ii, 491.

Pfeiffer, Theodor. See also Albert

Einecke.

Pfeiffer, V. O., alloying of copper with pure iron and iron-carbon alloys, 1906, A., ii, 358.

Pfeiffer, Wilhelm, uric acid metabolism,

1906, A., ii, 109.

uric acid synthesis in men mammals, 1907, A., ii, 899.

Pfeil, Paul, influence of diet on uric acid excretion, 1904, A., ii, 192.

Pfenning, F. See Wilhelm Biltz. Pfenning, Fritz. See Erwin Rupp.

Pfenninger, Urs, investigations of the beans of Phaseolus vulgaris at different stages of development, 1909, A., ii. 696.

Pfenniger, Urs. See also Ernest Schulze. Pfister, Alfred. See Fritz Fichter. Pfister, Karl. See Otto Dimroth.

Pfitzinger, Wilhelm, condensation of isatic acid to cinchonic acid and its derivatives, 1903, A., i, 53.

Pfizenmaier, Karl. See Alfred Heidu-

Pfleiderer, Georg, liberation of oxygen during the electrolysis of hydrochloric acid with a platinum anode, 1909, A., ii, 963.

Pflüger, Alexander, colour of ions, 1903, A., ii, 628.

Pflüger, Alexander, absorption of ethereal oils in the ultra-violet, 1909, A, ii, 630.

absorption and inversion phenomena in luminous hydrogen, 1910, A., ii,

1015.

Pflüger, Eduard [Friedrich Wilhelm], behaviour of glycogen to boiling caustic alkali, 1903, A., i, 72; ii, 247.

Hensen's method of preparing glyco-

gen, 1903, A., i, 403.

glycogen in the cartilage of mammals, 1903, A., ii, 90.

history of glycogen analysis, 1903,

A., ii, 247. estimation of glycogen, 1903, A., ii, 248; 1904, A., ii, 595; 1906, A., ii,

812; 1910, A., ii, 81. glycogen of the feetal liver, 1903, A., ii,

384; 1904, A., ii, 427.

glycogen, 1903, A., ii, 499. formation of sugar from protein and fat in the animal body, 1904, A., ii,

575.

pancreatic diabetes, 1905, A., ii, 100; 1906, A., ii, 186; 1907, A., ii, 639. origin of the sugar excreted in pancreatic diabetes, 1905, A., ii, 469.

[glycosuria], 1905, A., ii, 844.

nutrition with protein and glycogen analysis, 1906, A., ii, 240.

can sugar be detected with certainty in the urine by the fermentation test ? 1906, A., ii, 255.

the usefulness of the Hammarsten-Nylander and Worm-Müller sugar-

tests, 1907, A., ii, 137.

the relative value of Almén's and Worm-Müller's tests for sugar, 1907, A., ii, 309.

conditions of sugar in the blood, 1907,

A., ii, 367.

influence of nutrition and inanition on the glycogen of the body, 1907, A., ii, 796.

glycogen in frogs during inanition,

1908, A., ii, 52.

the capacity of the liver to reverse the optical action of sugars, 1908, A., ii, 307.

precipitation of glycogen, 1908, A., ii, 329.

constitution of protein, 1909, A., i,

Mohr's work on the origin of glycogen from protein, 1909, A., ii, 328.

the rôle of the small intestine in glycogen formation, 1909, A., ii,

intestinal diabetes, 1909, A., ii, 507.

Pflüger, Eduard [Friedrich Wilhelm]. the author's method for the estimation of glycogen, and the specificity of substances of the animal body, 1909, A., ii, 946.

estimation of glycogen in the tortoise's

liver, 1910, A., ii, 225.

the parent substance of glycogen, 1910, A., ii, 225.

Pflüger, Eduard, and Peter Junkersdorf, the parent substance of glycogen, 1910, A., ii, 225.

Pflüger, Eduard, Bernhard Schöndorff, and Friedrich Wenzel, the influence of surgical operations on carbohydrate metabolism, 1905, A., ii, 44.

Pfotenhauer, Hermann. See Richard

Meyer.

Pfund, August H., re-determination of the wave-lengths of the iron lines used for comparison purposes, 1909, A., ii, 106.

Pfvl. Balthasar, estimation of nitric acid in the presence of organic matter, 1905, A., ii, 762.

new absorption apparatus, 1907, A., ii,

Pfyl, Balthasar, and Bruno Linne, quantitative hydrolysis of saccharose, maltose, lactose, and raffinose, 1905, A., ii, 770.

new pressure cylinder, 1908, A., ii, 270. Pfyl, Balthasar, and Wilhelm Scheitz, constituents of saffron, 1908, A., ii, 979. process for the valuation of saffron, 1908, A., ii, 997.

Phelps, Earle Bernhard, estimation of small quantities of copper in [drinking]

waters, 1906, A., ii, 393.

Phelps, Isaac King, titrimetric estimation of nitric acid. I., 1903, A., ii, 240. use of ferrous sulphate in the estimation of chlorates and bromates, 1904, A., ii, 205.

estimation of nitrites in the absence of

air, 1904, A., ii, 208.

hydrazine derivatives of tetrachlorophthalic acid, 1905, A., i, 528.

Phelps, Isaac King, and Clinton Demas Deming, preparation of formamide from ethyl formate and ammonium hydroxide, 1907, A., i, 832.

Phelps, Isaac King, and James Lanman Hubbard, esterification of succinic acid, 1907, A., i, 467.

succinic acid as a standard in alkalimetry and acidimetry, 1907, A., ii, 297.

nelps, Isaac King, Howard Earle Palmer, and Ralph Smillie, influence Phelps, of catalytic agents in ester formation; effect of certain sulphates on benzoic and succinic acids, 1908, A., i, 790.

Phelps, Isaac King, and Martha Austin Phelps, use of zinc chloride in the esterification of succinic acid, 1907, A., i, 823.

preparation of acetamide by the action of ammonium hydroxide on ethyl

acetate, 1907, A., i, 1016.

Phelps, Isaac King, Martha Austin Phelps, and Ernest Arthur Eddy. purification of esters, 1908, A., i,

influence of catalytic agents in ester formation; hydrogen bromide and zinc bromide in the formation of ethyl benzoate, 1908, A., i, 789.

influence of catalytic agents in ester formation; esterification of benzoic acid with certain chlorides, 1908,

A., i, 790.

Phelps, Isaac King, Martha Austin Phelps, and Raymond William Osborne, esterification of benzoic acid, 1908, A., i, 166.

Phelps, Isaac King, and Edward Ward Tillotson, jun., esterification of malonic acid, 1908, A., i, 756.

conversion of ethyl cyanoacetate into ethyl malonate, 1908, A., i, 756.

influence of catalytic agents in ester formation; esterification of cyanoacetic acid, 1908, A., i, 756.

preparation of malonic acid or its ester from monochloroacetic acid.

1908, A., i, 757.

preparation of cyanoacetic acid and its ester from monochloroacetic acid, 1908, A., i, 757.

Phelps, Isaac King, and Lewis Hill Weed, use of certain organic acids and acid-anhydrides for the standardisation of alkali and acid solutions, 1908, A., ii, 730.

comparison between succinic acid, arsenious oxide, and silver chloride for the standardisation of solutions iodimetry, alkalimetry, acidimetry, 1908, A., ii, 730.

Phelps, Isaac King, Lewis Hill Weed, and Charles Robert Housum, action of dry ammonia on ethyl oxalate, 1908,

A., i, 11.

Phelps, John, the accuracy of the gold bullion assay, 1910, T., 1272; P., 139.

Phelps, Martha Austin. See Frank Austin Gooch, and Isaac King Phelps.

Philip, James Charles, freezing point curves for some binary mixtures of organic substances, chiefly phenols and amines, 1903, T., 814; P., 143; discussion, P., 144.

Philip. James Charles, influence of various sodium salts on the solubility of sparingly soluble acids, 1905, T., 987; P., 200.

influence of non-electrolytes and electrolytes on the solubility of sparingly soluble gases in water; the question of hydrates in solution. 1907, T., 711; P., 85; discussion, P., 86; A., ii, 935.

the refraction and dispersion of triazocompounds, 1908, T., 918; P., 114; discussion, P., 115; 1912, T., 1866;

P., 226.

the dissociation constants of triazoacetic and a-triazopropionic acids, 1908, T., 925; P., 114; discussion, P., 115.

note on the hydrolysis of acetic an-

hydride, 1912, P., 259.

Philip, James Charles, and Harold Reuben Courtman, behaviour of two salts with a common ion, when dissolved in an organic solvent, 1910, T., 1261; P., 140; discussion, P.,

Philip, James Charles, and Frederick Basil Garner, influence of various sodium salts on the solubility of sparingly soluble acids. 1909, T., 1446; P., 212. Part II..

Philip, James Charles, and (Miss) Dorothy Haynes, the dielectric constants of phenols and their ethers dissolved in benzene and m-xylene, 1905, T., 998; P., 200; discussion, P., 201.

Philip, James Charles, and Sydney Herbert Smith, researches on the freezing points of binary mixtures of organic substances; the behaviour of the dihydric phenols towards p-toluidine, a-naphthylamine, and picric acid, 1905, T., 1735; P., 255.

Philip, Robert, mercury fulminate, 1912,

A., i, 839.

Philipoff, O. See Wladimir N. Ipatieff. Philipp, Hans. See Ernst Deussen.

See Richard von Philipp, Herbert. Foregger.

Philipp, Karl. See Fritz Fichter, Emilio Noelting, and Frédéric Reverdin.

Philippe, Ernst, the detection of benzoic and salicylic acids in milk, 1912, A., ii, 500.

a new sublimation apparatus and results obtained with it, 1912, A., ii, 932.

Philippe, Ernst, and H. Duperthuis, physico-chemical analysis of wine according to Dutoit, 1911, A., ii, 662.

Philippe, Ernst, and Theodore von Fellenberg, detection of thujone [tanacetone] in absinthe, 1911, A., ii 1040.

Philippe, Ernst. See also H. Duperthuis, and Friedrich Schaffer.

Philippe, Louis, Kapok oil, 1903, A., ii, 340.

Philippe, Louis. See also Léon Maquenne.

Philippe, L. H., preparation and properties of β-glucoheptitol, 1909, A., i.

glucodeconic acids, 1911, A., i, 12,

glucodecose and a-glucodecitol, 1911,

A., i, 605.

the higher carbohydrates derived from dextrose, 1912, A., i, 607. Philippi, Emil, formation of dolomite

and the chemical precipitation of calcium carbonate from sea-water,

1908, A., ii, 302.

Philippi, Emil. See also Robert Kremann.

Philippi, Ernst, synthesis of linear diphthaloylbenzene, 1911, A., i, 793. the melting point of anthraquinone, 1912, A., i, 476.

Philippi, Ernst. See also Zdenko Hanns

Skraup.

Philippson, Maurice, precipitation of colloidal silver by metal plates, 1912, A., ii, 914.

Philips, Moritz, estimation of silicon in presence of silica, 1906, A., ii, 125. silicon-copper, 1907, A., ii, 870.

Phillips, Alexander Hamilton, gageite, a new mineral from Franklin, New

Jersey, 1910, A., ii, 968.

Phillips, Henry Ablett. See Oswald Silberrad.

Phillips, Harry Edward William, the electrical conductivity of phosphoric acid, 1908, P., 239; 1909, T., 59.

Phillips, J. A. See Francis Barclay Allan.

Phillips, Percy, viscosity of carbon dioxide, 1912, A., ii, 382.

Phillips, Percy. See also E. F. Burton. Philoche, (Mile.) Ch., action of maltase; stability of the ferment; influence of the products of the reaction, 1904, A., i, 839; ii, 318.

physico-chemical investigation of amylase and maltase, 1908, A., i, 712;

ii, 470.

Philosophoff, Peter, estimation of carbon dioxide in electrolytic bleaching powder, or bleaching fluids, 1907, A., ii, 908.

Philosophoff, Peter, estimation of carbon dioxide in electrolytic chlorine, 1908, A., ii, 132.

the place of formation of uramic acids,

1910, A., ii, 730.

Phipps, Samuel. See Arthur George Perkin.

Phipson, Thomas Lamb, presence of lime as dolomite in certain cultivated soils, 1903, A., ii, 38.

Phisalix, C., influence of radium emanations on the toxicity of venoms, 1905,

A., ii, 339.

Piaggesi, G., magnetisation of liquids with change of temperature, 1903, A., ii, 197.

Piantoni, Giovanni, influence of sugars on the secretion of milk, 1909, A., ii, 164.

Piantoni, Giovanni, See also Karl von

Noorden, jun.

Piasecki, St. See Léon Marchlewski.

Piault, L., occurrence of stachyose and a glucoside hydrolysable by emulsin in the subterranean parts of Lamium album, 1909, A., ii, 338.

presence of stachyose in the underground parts of labiate plants, 1910,

A., ii, 336.

Piazza, Evaristo. See Luigi Francesconi, and Massimo Tortelli.

Picard, L., estimation of morphine in opium, 1907, A., ii, 318.

Picard, L. See also Edmond Emile

Blaise.

Piccard, Jean, auxochromic action of amino- and aminophenyl groups,

1910, A., i, 66. a reaction of polybasic acids and a new reaction for titanium, 1910, A., i, 67.

holo- and meri-quinonoid salts of ben-

zidine, 1911, A., i, 493.

the simplest quinonoid dyes, 1911, A., i, 568.

the colorimetric dilution law and its application to triphenylmethyl, 1911, A., ii, 561.

Piccard, Jean. See also Adolf von Baeyer, and Richard Willstätter.

Piccini, Augusto, [construction of the periodic system], 1906, A., ii, 78.

Piccinini, Galeazzo, condensation of ethyl cyanoacetate with cinnamaldehyde and piperonaldehyde, 1904, A., i, 91. general method for preparing substi-

tuted malonic acids, 1904, A., i, 504. condensation of ethyl cyanoacetate with some dihydroxyphenolic alde-

hydes. II., 1904, A., i, 919. action of bromine on certain nonsaturated compounds, 1905, A., i, 598. Piccinini, Galeazzo, new acid of the tetrahydropyridine series (2-oxy-1:6:6-trimethyl-Δ³-tetrahydropyridine-4-carboxylic acid), 1906, A., i, 983.

detection of the alkali metals, 1907, A., ii, 395.

hydrolysis of oxyhydropyridine nitriles,

1908, A., i, 51, 679. certain o-amino- and o-hydroxy-keto-

hydropyridines. 908.

mobility of the amino-group, 1909, A., i, 837.

I., 1908, A., i,

estimation of the hardness of water by Clark's method, 1909, A., ii, 832.

Piccinini, Galeazzo, and A. Delpiano, cyanoacetylchloroanilines and the corresponding oxamic acids, 1906, A., i, 944.

Piccinini, Galeazzo. See also Icilio Guareschi, and Giuseppe Plancher.

Piccinini, Guido M., ammonia in the expired air and blood, 1906, A., ii, 460.

biochemical study of manganese. I.

Metabolism of manganese and the
law of minimum regarding manganese and iron, 1911, A., ii, 622.

biochemical study of manganese. II.,

1911, A., ii, 622.

viscometric and cryoscopic changes in the blood produced by antipyrin, phenacetin, and antifebrin, 1912, A., ii, 58.

Piccinini, P., therapeutic application of quinine formate, 1906, A., ii, 693. [physiological] action of forgenine.

1907, A., ii, 378.

Picek, Jan. See Bohuslav Brauner.

Picha, M., Richard Doht, and Siegmund Weisl, new synthesis of ethyl γ-chloroacetoacetate, 1907, A., i, 178.

Pick, Ernst Peter, and Friedrich Pineles, the relationship of the thyroid gland to the physiological action of adren-

aline, 1908, A., ii, 875.

Pick, Ernst Peter, and Oswald Schwarz, the action of salts on toxin and on toxin-antitoxin combinations in presence of serum proteins, 1909, A., ii, 598.

Pick, Ernst Peter. See also A. Baumgarten, Karl Glaessner, Georg Joannovics, Ernst Löwenstein, and Fritz Obermayer.

Pick, Friedel, the glycogen-splitting ferment of the liver, 1903, Δ., ii, 160.

Pick, Hans, condensation of diphenic anhydride with toluene, 1905, A., i, 68.

Pick, Hans, viscosity of liquid-crystalline mixtures of p-azoxyanisole and p-azoxyphenetole, 1911, A., 858.

molecular condition and ionisation of aqueous solutions of hydrofluoric

acid, 1912, A., ii, 1131.

Pick, Hans. See also Richard Abegg, Friedrich Auerbach, Paul Ehrenberg, Julius Lewkowitsch, and Otto Sackur.

Pickard, Joseph Allen. Gilbert See

Thomas Morgan.

Pickard, Robert Howson, and Joseph Kenyon, contributions to the chemistry of oxygen compounds. Part I. The compounds of tertiary phosphine oxides with acids and salts, 1906,

T., 262; P., 42.

contributions to the chemistry of oxygen compounds. Part II. The compounds of cineole, diphenylsulphoxide, nitroso-derivatives, and the carbamides with acids and salts, 1907, T., 896; P., 138.

the resolution of sec.-octyl alcohol [methylhexylcarbinol: octane-2-ol],

1907, T., 2058; P., 286.

the reaction between organo-magnesium haloids and nitro-compounds, 1907, P., 153.

resolution of racemic alcohols; preliminary note, 1909, P., 167.

investigations on the dependence of rotatory power on chemical constitution. Part I. The rotations of the simplest secondary alcohols of the fatty series, 1910, P., 336; 1911, T., 45.

note on methyl-n-tridecyl- and methyln-pentadecyl-carbinols and corresponding ketones, 1911, P.,

investigations on the dependence of rotatory power on chemical constitution. Part II. The rotations of some secondary alcohols containing the isopropyl group, 1911, P., 324; 1912, T., 620.

investigations on the dependence of rotatory power on chemical constitution. Part III. The rotations of ac-tetrahydro-2-naphthol and some of its esters, 1912, T., 1427; P., 137; discussion, P., 138.

investigations on the dependence of rotatory power on chemical constitution; preliminary note, 1912,

optically active phenylmethylcarbinols, 1912, A., i, 554.

Pickard, Robert Howson, and William Oswald Littlebury, studies on opfically active carbimides. Part III. The resolution of a-phenyl-a'-4 hydroxyphenylethane by means of l-menthylcarbimide, 1906, T., 467; P., 71; discussion, P., 71.

studies on optically active carbimides. Part IX. The resolution of ac-tetrahydro-2-naphthol by means of lmenthylcarbimide, 1906, T., 1254;

P., 238.

studies on optically active carbimides. Part V. The aryl esters and the amides of l-menthylcarbamic acid, 1907, T., 300; P., 30.

the alcohols of the hydroaromatic and terpene series. Part I. Resolution of the alcohols into their optically active components and the preparation of the borneols, 1907, T., 1973; P., 262.

the isomeric menthols, 1908, P.,

217.

the alcohols of the hydroaromatic and terpene series. Part II. The menthols corresponding with optically inactive menthone, 1911, P., 324; 1912, T., 109.

Pickard, Robert Howson, William Oswald Littlebury, and Henry Allen Dugdale Neville, studies on optically active carbimides. Part II. The reactions between l-menthylcarbimide and alcohols, 1905, P., 286; 1906, T., 93.

Pickard, Robert Howson, and Henry Allen Dugdale Neville, optically active reduced naphthoic acids. Part I. d-Δ2 (or 3)-Dihydro-1-naphthoic acid,

1905, T., 1763; P., 257.

Pickard, Robert Howson, and Joseph

Yates, cholesterol, 1903, P., 147. optically active reduced naphthoic acids. Part II. The resolution of the tetrahydronaphthoic acids, 1906, T., 1101; P., 202.

optically active reduced naphthoic acids. Part III. The relative catalytic effect of bases on the compounds of \(\Delta^2\)-dihydro-1-naphthoic acid, 1906, T., 1284; P., 244.

contributions to the chemistry of the cholesterol group. Part I. The action of hydrogen peroxide and of fused potassium hydroxide on cholesterol, 1908, T., 1678; P., 121, 199.

contributions to the chemistry of the cholesterol group. Part II. Some oxidation products of sitosterol, 1908, T., 1928; P., 227.

Pickard, Robert Howson, and Joseph Yates, the action of fused potassium hydroxide and of hydrogen peroxide on cholesterol; preliminary note, 1908, P., 121.

optically active reduced naphthoic acids. Part IV. Comparison of the rotatory powers of the di- and tetrahydronaphthoic acids with those of phenylallylacetic, a-phenylvaleric, β-phenyl-a-ethyl-, and β-phenyl-amethyl-propionic acids, 1909, T., 1011; P., 152.

Pickard, Robert Howson. See also Henry

Allen Dugdale Neville.

Pickardt, Edgar von, molecular lowering of the crystallisation-velocity by the addition of foreign compounds, 1903, A., ii, 66.

Pickel, George, action of ozone on hydro-

gen, 1904, A., ii, 248.

Pickel, James Marion, and Charles B. Williams, efficient asbestos or graphite muffle, 1904, A., ii, 202.

Pickering, Spencer Percival Umfreville, note on the arsenates of lead and calcium, 1907, T., 307; P., 35.

the interaction of metallic sulphates and caustic alkalis, 1907, T., 1981; P., 261.

the chemistry of Bordeaux mixture,

1907, T., 1989; P., 261. emulsions, 1907, T., 2001; P., 256; discussion, P., 256. hydration of precipitates, 1909, T.,

123; P., 12.

the carbonates of copper and the cupricarbonates, 1909, T., 1409; P., 188; discussion, P., 188.

cupricitrates, 1910, T., 1837; P., 17; discussion, P., 18.

the constitution of basic salts, 1910, T., 1851; P., 19.

cupritartrates and analogous pounds, 1911, T., 169; P., 7. potassium cupricarbonates, 1911, T.,

800; P., 55.

cuprigly collates, 1911, T., 1347; P.,

copper salts and their behaviour with alkalis, 1911, P., 276; 1912, T., 174.

alkaline cupri-compounds, 1912, T.,

1614; P., 142.

the colour intensity of copper salts, 1912, T., 1625; P., 184; discussion, P., 184. copper fungicides, 1912, A., ii,

285.

Pickford, Percival. See Nevil Vincent Sidgwick.

Pickles, Samuel Shrowder, the constituents of Cyprus origanum oil: isolation of a new terpene (origanene), 1908, T., 862; P., 91.

the constitution and synthesis of caoutchouc, 1910, T., 1085; P., 111;

discussion, P., 111.

composition of the essential oil of Myrica gale, 1911, T., 1764; P.,

the essential oil of Origanum hirtum; preliminary note, 1911, P., 284.

the essential oil of Dalmatian white thyme; preliminary note, 1911, P.,

the essential oil of the "Nepal sassafras" or "Nepal camphor" tree, 1912, T., 1433; P., 192.

Pickles, Samuel Shrowder, and William Prince Hayworth, composition of the fat from the seeds of Lophira alata, 1911, A., ii, 1024.

composition of Para rubber-seed oil,

1911, A., ii, 1024.

Pickles, Samuel Shrowder, and Charles Weizmann, the effect of anhydrides organo-magnesium bromides. Part I. The action of phthalic anhydride on magnesium a-naphthyl bromide, 1904, P., 201.

the halogen derivatives of naphtha-

cenequinone, 1904, P., 220.

Pickles, Samuel Shrowder, and Bernard Wyndham Whitfeild, the carbohydrate constituents of Para rubber; separation of l-methylinositol; preliminary note, 1911, P., 54.

Pickles, Samuel Shrowder. See also Samuel James Manson Auld. William Henry Perkin, jun.

Pictet, Amé, action of mineral acids on

acetic acid, 1903, A., i, 456. the synthesis of nicotine, 1904, A., i,

origin of alkaloids in plants, 1905, A.,

i, 541; 1906, A., ii, 884. 1-methylpyrrolidine from nicotine,

1905, A., i, 543. pyrogenic transformation of methylpyrroles into pyridine derivatives,

1905, A., i, 545. alkaloids of tobacco, 1906, A., i,

Pictet, Amé, and A. Bon, acetic arsenious anhydride, 1906, A., i, 3.

Pictet, Amé, and G. Court, some new alkaloids from plants, 1907, A., i, 954.

Pictet, Amé, and (Mlle.) Marie Finkelstein, complete synthesis of laudanosine, 1909, A., i, 323.

Pictet, Amé, and Alphonse Gams, synthesis of papaverine, 1909, A., i, 671.

new method for the synthesis of isoquinoline bases, 1910, A., i, 773.

synthesis of oxyberberine, 1911, A., i,

synthesis of berberine, 1911, A., i, 807.

Pictet. Amé, and Antonina Geleznoff. mixed anhydrides of boric acid and organic acids, 1903, A., i, 601.

Pictet, Amé, Antonina Geleznoff, and Hermann Friedmann, mixed anhydrides of mineral and organic acids, 1903, A., i, 309.

Pictet, Amé, and Paul Genequand, tetranitromethane, 1903, A., i, 305, 596. acetylchromic acid, 1903, A., i, 601.

Pictet, Amé, Paul Genequand, and Emmerich Klein, organo-mineral anhydrides, 1903, A., i, 675.

Pictet, Amé, and G. Jenny, brucine ox-

ide, 1907, A., i, 436.

Pictet, Amé, and Georges Karl, a mixed anhydride of sulphuric and nitric acids, 1907, A., ii, 758.

mixed anhydrides of sulphuric acid.

1909, A., ii, 38.

Pictet, Amé, and Francis William Kay, synthesis of isoquinoline bases, 1909, A., i, 513.

Pictet, Amé, and Eugen Khotinsky, acetyl nitrate, 1907, A., i, 175.

Pictet, Amé, and Gerard Hendrik Kramers, action of nitrous and of hydrochloric acids on papaverine, 1903, A., i, 358.

papaverine and cryptopine, 1910, A.,

Pictet, Amé, Gaspard Long, Salomon Roudstein, and Albert Steinmann, pyrogenic changes in the pyrrole series, 1904, A., i, 771.

Pictet, Amé, and Max Mattisson, strychnine oxide, 1905, A., i, 816.

Pictet, Amé, and R. R. Misner, synthesis of quininic acid and of 6-methoxy-4methylquinoline, 1912, A., i, 650.

Pictet, Amé, and Louis Ramseyer, a constituent of coal, 1911, A., i, 850.

Pictet, Amé, and Auguste Rilliet, action of formaldehyde and of methylene chloride on pyrrole, 1907, A., i, 445.

Pictet, Amé, and Arnold Rotschy, synthesis of nicotine, 1904, A., i, 520.

Pictet, Amé, and Theodor Spengler, formation of isoquinoline derivatives by the action of methylal on phenylethylamine, phenylalanine, and tyrosine, 1911, A., i, 750.

Pictet, Amé. See also A. Bacovescu. J. Breslauer, Eugen Khotinsky, and E. Oertly.

Picton, Harold, See Ernest Linder.

Picton, Norman. See Arthur Hantzsch. and John Joseph Sudborough.

Pidduck, Frederick Bernard, absorption of ultra-violet light by dilute solutions. 1909, A., ii, 454.

Pidduck, Frederick Bernard. See also Ernest Walter Brudenell Gill.

Pieper, M. See Alfred Werner.

Pier, Mathias, specific heat and dissociation of chlorine, 1908, A., ii, 352. specific heat of hydrogen chloride from explosion experiments, 1909, A., ii, 542.

the specific heats of argon, steam, nitrogen, and hydrogen at very high temperatures, 1909, A., ii, 789.

specific heats and gas equilibria from explosion experiments. II., 1910,

A., ii, 1031.

Pieraerts, Joseph, hydrolysis of raffinose by means of citric acid, 1906, A., i, 729.

optical estimation of mixtures of sucrose and raffinose, 1906, A., ii,

detection of lævulose in presence of other natural sugars, 1908, A., ii,

test for pentoses with orcinol and hydrochloric acid, 1908, A., ii, 903, hydrolysis of maltose by citric acid,

1909, A., i, 136.

Seliwanoff's test for sugars of the lævulose group, 1909, A., ii, 272. Pierce, George, the deviation of ferment

action from the unimolecular law, with especial reference to the esterases, 1910, A., i, 907.

Pierce, George Washington. See Harry Wheeler Morse.

Pieri, Cosimo. See Giovanni Leoncini. Pierle, C. A. See Dunlap Jamison McAdam, jun.

Pieroni, A., urethane and mercuric acetate, 1912, A., i, 245.

hypoiodites in the formation of iodo-

form, 1912, A., i, 526.

action of phenylthiocarbimide on carbamide and on thiocarbamide, 1912, A., i, 752.

Pieroni, A. See also Mario Raffo.

Pierpaoli, Carlo, cause of the loss of mercury in the decomposition of organic substances by Fresenius and Babo's method, and in the purification of mercury sulphide, 1903, A., ii, 106.

Pierre, L., solution of the nitrogenous substances of malt, 1904, A., ii,

indirect estimation of fat in milk, 1904, A., ii, 845.

Pierron, Paul, nitrophenyleyanamides, 1905, A., i, 125.

aromatic azocyanamides, 1906, A., i.

preparation of simple aromatic cyanamides, 1907, A., i, 121.

aromatic monatomic cyanamides, 1908, A., i, 925.

method for preparing aromatic acylguanidines, 1911, A., i, 166.

Piest, C., nitration of cotton wool; cellulose, 1910, A., i, 464. viscosity of cellulose nitrate solutions,

1911, A., ii, 586.

Pieszczek, Ernst, blue rock salt, 1906, A., ii, 863.

assay of red lead, 1908, A., ii, 228. potassium chlorate containing bromate,

1909, A., ii, 516. prevention of "bumping" of boiling liquids, 1912, A., ii, 341.

Pietrafesa, Francesco. See Giuseppe Kernot.

Pietsch, Hunold. See Paul Pfeiffer. Piettre, Maurice, glycocholic acid, 1908, A., i, 959.

bile and biliary pigments, 1908, A., ii,

the green pigment of bile, 1909, A., i, 115.

chemical treatment of bile; separation of the bile acids, 1909, A., i, 206. bilirubin, 1909, A., i, 402.

cholic acids, 1909, A., i, 586.

estimation of glycogen and starch; detection of horse flesh in sausages, 1909, A., ii, 706.

melanin pigments of animal origin, 1911, A., i, 1006.

a mode of resorption of reserve fat, 1911, A., ii, 905.

melanins, 1912, A., i, 42.

influence of some chemical compounds on the artificial melanins, 1912, A., i, 887.

Piettre, Maurice, and Antony spectroscopic study of oxyhemo-globin, 1905, A., i, 399, 500.

methæmoglobin, 1905, A., i, 622. oxyhæmoglobin of guinea-pigs; action of fluorides, 1905, A., ii, 601.

nature of blood pigments, 1906, A., i,

crystallised hæmatin, 1906, A., i, 55. the nucleus of birds' red corpuscles, 1906, A., ii, 373.

Piettre, Maurice, and Antony Vila, amount of oxygen in horses' oxyhæmoglobin, 1907, A., i, 738.

the stroma of the red corpuscles, 1907,

A., ii, 37.

relations between ovyhæmoglobin and the blood gases, 1907, A., ii, 367. Piettre, Maurice. See also Ernest Four-

neau, and Antony Vila.

Pieverling, von, Hydrargyrum cyanatum, 1906, A., i, 341.

Pighini, Giacomo, metabolism in dementia præcox, 1909, A., ii, 507. cholesterol in cerebro-spinal fluid,

1909, A., ii, 821.

estimation of the enzymatic activity of nuclease by the optical method, 1911, A., ii, 236.

the esterase and nuclease content of serum in different forms of insanity,

1911, A., ii, 632.

the central nervous system under normal and pathological conditions. I. The indophenol oxydase in the central nervous system, the choroid plexus, and cerebro-spinal fluid, 1912, A., ii, 783.

Pighini, Giacomo, and Pietro Barbieri, the central nervous system under normal and pathological conditions. II. The catalase of the cerebro-spinal fluid, 1912, A., ii, 783.

Pighini, Giacomo, and Flaminio Nizzi, the central nervous system under normal and pathological conditions. III. The esterase and lecithase in normal and pathological cerebro-spinal fluids, 1912, A., ii, 784.

Pighini, Giacomo. See also Ciro

Ravenna.

Pignet, P. See Alfred Guyot.

Pigorini, Luciano, diminution of toxicity of silver nitrate treated with sodium thiosulphate and the influence of light on the phenomenon, 1907, A., ii, 379.

toxicity of silver salts to fishes, 1908,

A., ii, 412.

behaviour of dextrosephenylosazone in the organism, 1908, A., ii, 876.

Piguet, Alfred. See Fritz Foerster, and Alfred Werner.

Pigulewsky, G. See Leo A. Tschugaeff. Pigulewsky, M., electrical conductivity

of sulphur, 1912, A., ii, 418. Pihlblad, Nils, absorption of light by silver hydrosols, 1911, A., ii, 1043.

Pihlblad, Nils. See also Theodor Svedberg. ke, Frank H. See Charles Claude

Guthrie.

Pilch, Fritz, volumetric analysis with small quantities of liquid, 1911, A., ii, 225,

Pilch, Fritz. See also Robert Kremann. Pildon, Lasar. See Carl Adam Bischoff. Pilgrim, Aletta Amelia Louise, ethereale oil of the root bark of Cinnamomum zeylanicum, 1909, A., i, 172.

Pilipenko, P. P., selenium in Altai min-

orals, 1910, A., ii, 45.

bertrandite from Altai, 1910, A., ii, 48. apophyllite from Tomsk, Siberia, 1912, A., ii, 175.

Pillai, Narayana Kunjan, See Felix Löhnis.

Pilling, O., general formula for saturated vapours, 1909, A., ii, 381.

Pillow, Albert. See Otto Diels.

Piloty, Oscar, the pigment of blood, 1909, A., i, 539.

synthesis of pyrrole derivatives: pyrroles from ethyl succinylosuccinate and from azines, 1910, A., i, 277.

Piloty, Oscar, and Edmund Dormann, constitution of the coloured constituent of the pigment of blood. II., 1912, A., i, 519.

phonopyrrolecarboxylic acid and its companions, 1912, A., i, 924.

Piloty, Oscar, Paul Eppinger, and Eugen Quitmann, the constitution of the coloured constituent of the pigment of blood, 1911, A., i, 92.

Piloty, Oscar, and Karl Finckh, uric acid group; constitution of murexide and of several of the derivatives of uric acid related to it, 1904, A., i. 820.

uramil, 1904, A., i, 824.

Piloty, Oscar, and Hermann Fink, molecular size of hæmin and hæmoglobin, 1912, A., i, 923.

Piloty, Oscar, and Paul Hirsch, hæmatopyrrolidinic acid, 1912, A., i, 925.

Piloty, Oscar, and Siegfried Merzbacher, the pigment of blood. II. So-called hæmatopyrrolidinic acid, 1909, A.,

the pigment of blood. III. New cleavage of hæmatoporphyrin, 1909, A., i, 858.

Piloty, Oscar, and Julius Neresheimer. amino- and diazo-malonic esters, 1906, A., i, 146.

Piloty, Oscar, and Eugen Quitmann, constitution of hæmopyrrole and of hæmopyrrolecarboxylic acid, 1910, A., i, 133.

Piloty, Oscar, and Josef Stock, pigment of the blood. IV. Hæmopyrrole, 1912, A., i, 923.

Piloty, Oscar, and Siegfried J. Thannhauser, constitution of the colouring matter of blood. III., 1912, A., i, 736.

dehydrobilic acid, a coloured oxidation product of bilic acid, 1912, A., i, 925.

Piloty, Oscar, and Wilhelm Vogel, constitution of porphyrexide, an analogue of isatin, 1903, A., i, 523. Piloty, Oscar, and K. Wilke, 2:2-di-

methylpyrrole, 1912, A., i, 899.

Piltschikow, Nicolai D., Moser rays, 1906, A., ii, 414.

Pilz, Ferdinand, siphon with a mercury valve, 1905, A., ii, 155.

relation between the increased yield due to phosphatic manure and the amount of phosphoric acid in the soil, 1908, A., ii, 423.

Pilz, O. See Max Siegfried.

Pilzecker, Alfons, the effect of phosphorus and arsenic poisoning on the bile, 1904, A., ii, 276.

Pimmer, Viktor. See Paul Pfeiffer. Piña de Rubies, Santiago, composition of the platiniferous dunite of the Urals, 1912, A., ii, 174.

determination of ferrous iron in chromite, 1912, A., ii, 605.

analysis of ferrozirconium, 1912, A., ii, 1001.

Piña de Rubies, Santiago. See also José Casares Gil.

Pinagel, Alfred. See Carl Friedheim. Pinckney, Reuben M. See Frederick

Jacob Alway.

Pincussohn, Ludwig, the lowering of the freezing point of pancreatic juice, 1907, A., ii, 635.

the influence of colloids on ferments,

1908, A., ii, 308.

the influence of colloids on ferments. II. The action of inorganic colloids on trypsin, 1912, A., i, 521.

the causation of cedema, 1912, A., ii, 666. Pincussohn, Ludwig. See also Emil Abderhalden, Adolf Bickel, and Leonor Michaelis.

Pinczewski, J. See Siegmund Reich. Pineles, Friedrich. See Ernst Peter Pick.

Piñerûa-Alvarez, Eugenio, diphenylamine as reagent for nitrites, nitrates, chlorates, and its use when mixed with resorcinol and \$-naphthol, 1905, A., ii, 352.

new reagent for potassium, 1905, A.,

ii, 355.

new general colour reagent of the polyphenols, their isomerides, and higher organic compounds, 1905, A., ii, 359.

Pinerûa-Alvarez, Eugenio, new iodised compound of osmium, 1905, A., ii, 423.

reaction of rhodium, 1905, A., ii,

colour reactions of pyruvic acid with a- and B-naphthols in sulphuric acid solution, 1905, A., ii, 487.

new reagent for aconitine, 1905, A., ii, 491.

useful reaction for cobalt, 1907, A., ii,

colour reactions of some organic com-

pounds, 1907, A., ii, 143. rapid estimation of vanadium in ores and technical products, 1909, A., ii,

useful reactions of zinc, nickel, and cobalt, 1910, A., ii, 454.

electrolytic separation of nickel and cobalt, 1910, A., ii, 657.

Pingree, M. H. See William Frear. Pinkus, Stanislaw N., fibrinolysis, 1907, A., ii, 372.

Pinna, Giuseppe. See Efisio Mameli. Pinner, Adolf, glyoxalines, 1903, A., i,

123; 1905, A., i, 476. locarpine. VI., 1905, A., i, 463. pilocarpine. pilocarpine and its transformation into a new modification, 1905, A., i, 658.

ψ-hydantoins, 1907, A., i, 92.

Pinner, Adolf, and Arthur Franz, influence of indifferent solvents on the alkylation of organic bases, 1905, A.,

Pinner, Ernst Ludwig, 4:6-dihydroxy-2phenylpyrimidine, 1908, A., i, 1017.

Pinnow, Johannes, the degrees of accuracy of iodometric estimations, 1903, A., ii, 39.

sensitiveness to light of colourless organie compounds, 1903, A., ii, 49. volumetric estimation of sulphurous

acid, 1904, A., ii, 290.

the reduction [of the photographic image] with persulphate and according to Farmer, 1908, A., ii, 245.

estimation of quinol, 1911, A., ii, 339. action of oxygen on quinol and a sulphite, 1912, A., i, 849.

Pinoff, Erw., Tollens' phloroglucinol and hydrochloric acid reaction for pentoses, 1905, A., ii, 289.

spectroscopic and colour reactions of important sugars, 1905, A., ii, 865.

Pinsker, Jacob. See Arthur Rosenheim. Pintza, Alexander. See Philippe Auguste Guye, and Adrien Jaquerod.

Piolti, Giuseppe, breunnerite from Avigliana, 1906, A., ii, 864.

Piolti, Giuseppe, oncosine from Variney (Valle d'Aosta), 1909, A., ii, 813. synthesis of anglesite, 1910, A., ii,

621.

synthesis of smithsonite and anglesite, 1911, A., ii, 902.

Pionchon, Joseph, dissolution of copper in water, 1912, A., ii, 452.

Piorkowski, Max, antibacterial properties of Peru balsam, 1903, A., ii, 320.

Piotrowski, Henruk. See Fritz Ephraim. Piper, H. See Joseph Barcroft.

Piper, Stephen H. See James Crosby Chapman.

Pipereaut, P., and Antony Vila, separation and estimation of zinc, 1911, A., ii. 441.

Pirani, Marcello von, tantalum and hydrogen, 1905, A., ii, 718.

specific resistance and temperature-coefficient of tantalum, 1907, A., ii,

specific resistance and absorptive power of tungsten at high temperatures, 1912, A., ii, 947.

Pirani, Marcello von, and Alfred R. Meyer, behaviour of platinum and nickel wires to hydrogen at high temperatures, 1910, A., ii, 719.

melting point of tantalum, 1911, A., ii, 899.

the melting point of tungsten and molybdenum, 1912, A., ii, 560.

Pirazzoli, (Mdlle.) Francesca. See Luigi Francesconi.

Pirinsky, A. See Iwan I. Bewad.

Pirret, (Miss) Ruth, and Frederick Soddy, the ratio between uranium and radium in minerals. II., 1911, A., ii, 454.

Pirret, (Miss) Ruth. See also Frederick Soddy.

Pisani, Felix, testing of minerals for radioactivity, 1904, A., ii, 530.

Pishtschimuki, P. S., methyl and ethyl esters of thiophosphoric acid, 1909, A., i, 5.

transformations of thio- and selenophosphoric esters, 1912, A., i, 68.

Pishtschimuki, P. S. See Alexander E. Arbusoff, and Felix Ehrlich.

Pisovschi, Ilie, a-anthramine and 1:4anthradiamine, 1908, A., i, 481.

1:2-dimethoxyphenanthraphenazine, 1910, A., i, 643.

transformation of naphthalimide into naphthastyril, 1911, A., i, 230.

a negative case of indigotin condensation, 1911, A., i, 577.

Pissarjewsky, Leo, catalysis of salts of per acids, 1903, A., ii, 66.

Pissarjewsky, Leo, condition in solution of salts of per acids, 1903, A., ii, 375.

pervanadic acid, 1903, A., ii, 432.

chemical equilibrium, 1904, A., ii, 243.

magnitude of the equilibrium of the same reaction in different solvents, 1905, A., ii, 16.

the atomic hypothesis and the energetic theory of the universe, 1908,

A., ii, 478.

existence of different modifications of ordinary grey silver, 1908, A., ii, 494. influence of insoluble salts in equilibria, 1910, A., ii, 595.

Pissarjewsky, Leo, and I. Belenowsky, influence of the solvent on the equilibrium constant, 1910, A., ii, 595.

Pissarjewsky, Leo, and E. Karp, relation between the diffusion constant, internal friction, and electrical conductivity, 1908, A., ii, 566.

Pissarjewsky, Leo, and N. Lemcke, influence of the solvent on the equilibrium constant, and the relationship between electric conductivity and viscosity, 1905, A., ii, 684.

Pissarjewsky, Leo, and A. Levites, influence of the solvent on the equilibrium constant, 1908, A., ii, 570.

Pissarjewsky, Leo, and I. Litvin, influence of the solvent on the equilibrium constant, 1911, A., ii, 12.

Pissarjewsky, Leo, and A. Scheljapin, heat effect and free energy of chemical action in different solvents, 1909, A., ii, 866.

Pissarjewsky, Leo, and A. Shapovalenko, electrical conductivity of potassium bromide and potassium silver cyanide in mixtures of glycerol and alcohols, 1911, A., ii, 11.

Pissarjewsky, Leo, and P. Trachoniotowsky, free energy of chemical action in mixtures of glycerol with alcohols,

1910, A., ii, 402.

Pissarjewsky, Leo, and K. Zembisky, free energy of chemical action in mixtures of water with non-electrolytes. III., 1910, A., ii, 595.

Pistermann, A., and Josef Tambor, synthesis of o-hydroxyflavone, 1912,

A., i, 486.

Pistschimuka. See Pishtschimuki.

Pitini, Andrea, the influence of certain toxins and antitoxins on the oxidising and reducing capacities of the tissues. I., 1910, A., ii, 631.

Pitini, Andrea. See also Francesco
Angelico, and Vincenzo Cervello.

Pitman, John Edmund. See David Runciman Boyd.

Pitoni, R., a lecture voltameter, 1908, A., ii, 657.

Pitra, J. See Julius Stoklasa.

Piutti, Arnaldo [Teofilo Pietro], density of asparagine, 1904, A., i, 800.

action of alkali hydroxides and alkyloxides on unsaturated imides, 1906, A., i, 657.

action of alkali alkyloxides on unsaturated imides, II., 1907, A. i, 312.

maleic and fumaric derivatives of paminophenols, 1908, A., i, 783;

1910, A., i, 22.

action of unsaturated dicarboxylic acids on p-aminophenols, 1910, A., i, 264.

helium in the air of Naples and in Vesuvius, 1910, A., ii, 290.

non-radioactive minerals containing helium, 1910, A., ii, 677.

the helium in recent minerals, 1910, A., ii, 767.

researches on helium. IV. Absorption of helium by salts and minerals, 1911, A., ii, 88.

the presence of helium in autunites and the period of life of ionium, 1911, A., ii, 565.

absorption spectra of isomeric complex salts. I., 1912, A., ii, 712.

Piutti, Arnaldo, and Gino Abati, aminoderivatives of phthalic acid, 1903, A., i, 424.

Piutti, Arnaldo, Gino Abati, Cesare Allegri, Ida Foa, Luciano Rossi, G. Leone, C. D'Emilio, Alfredo Pagniello, A. Marciano, Domenico Pugliese, Giambattista Selvaggi, and Calogero Schifani, action of unsaturatred dicarboxylic acids on p-aminophenols, 1910 A. i. 672

phenols, 1910, A., i, 672.

Piutti, Arnaldo, and G. Bentivoglio, use of carbon tetrachloride in investigating the colouring matters prohibited in food by the sanitary law,

1906, A., ii, 590.

Piutti, Arnaldo, and Gennaro Calcagni, velocities of addition of bromine to itaconic, citraconic, and mesaconic acids. I., 1909, A., i, 360.

velocities of addition of bromine to the imides of some substituted maleinamic acids. II., 1911, A., i, 124.

Piutti, Arnaldo, Fabrizio Cobellis, and Diego Gandolfo, derivatives of 5-aminosalicylic acid [5-amino-2hydroxybenzoic acid], 1907, A., i, 320. Piutti, Arnaldo, and E. de Conno, chromoisomerides, 1912, A., i, 360,

Piutti, Arnaldo, and Gennaro Magli. influence of temperature and concentration on the rotatory power of aqueous solutions of certain alkyl hydrogen aspartates, 1907, A., i, 296.

absorptive power for air of certain varieties of vegetable carbon, 1908,

A., ii, 585.

the radioactivity of the products of the recent eruption of Etna, 1910, A., ii, 1026.

Piutti, Arnaldo, and Ermenegildo Stoppani, presence of bismuth in pyrites from Agordo, 1905, A., ii, 718

Pizzighelli, R. See Arturo Miolati. Pizzorno, P. P., rapid method of estimating uric acid in urine, 1911, A., ii, 667.

Pizzuti, G., some derivatives of 3-nitrocumaldehyde, 1911, A., i, 62.

Pla y Janini, J. M. See Adolf Kaufmann.

Plaats, B. J. van der. See W. H. Julius.

Plahl, Wilhelm, bilberry juice, and a colour reaction of the same, 1907, A., ii, 204

Plancher, Giuseppe A., action of alkyl iodides on the indoles. I. New syntheses and characters of 1:3-dimethyl-3-ethyl-2-methyleneindoline, 1903, A., i, 433.

stirring and cooling apparatus, 1903,

A., ii, 722.

phenylhydrazine as a reducing agent in organic chemistry, 1906, A., i, 111.

Plancher, Giuseppe A., and Silvio Albini, synthesis of furan derivatives from chloroacetaldehyde, 1904, A., i, 334.

Plancher, Giuseppe A., and Giuseppe Barbieri, electrolytic preparation of ceric ammonium nitrate, 1905, A., ii, 250.

Plancher. Giuseppe A., and Aldo Bonavia, action of alkyl iodides on the indoles. II. Transposition of radicles in some indolines; 3:3-dimethyl-2-ethylindolenine and 1:3:3trimethyl-2-ethylideneindoline, 1903, A., i, 433.

Plancher, Giuseppe A., and A. Caravaggi, transformation of pyrrole into indoles; synthesis of 4:7-dimethyl-

indole, 1905, A., i, 298.

Plancher, Giuseppe. A., and Oreste Carrasco, preparation and transformations of members of the tetrahydrocarbazole series, 1904, A., i, 777.

Plancher, Giuseppe A., and Oreste Carrasco, action of chloroform on 2:3dimethylindole; transformation of pyrrole into pyridine, 1905, A., i,

action of chloroform on 1:2:3-trimethylindole, 1905. A., i. 666.

3-ethylindole and 1:3:3-triethyl-2ethylideneindoline, 1905, A., i, 719. reactions of 2:3:3:5-tetramethylindolenine, 1909, A., i, 959.

Plancher, Giuseppe A., and Federico oxidation of 2:4-di-Cattadori, methylpyrrole, 1903, A., 1, 361.

oxidation of pyrrole to maleimide, 1904, A., i, 770.

Plancher, Giuseppe A., and Riccardo . condensation products of pyrroles, 1907, A., i, 80.

Plancher, Giuseppe A., and U. Colacicchi, new oxidation of 2-methyl-

indole, 1911, A., i, 566.

Plancher, Giuseppe A., and Luigi Forghieri, action of alkyl iodides on the indoles, 1903, A., i, 114.

Plancher, Giuseppe A., and D. Giumelli. synthesis of indolenine ketones, 1910, A., i, 63.

Plancher, Giuseppe A., and A. Manaresi, lecithans of wine, 1907, A., ii,

Plancher, Giuseppe A., and Galeazzo Piccinini, compounds of \(\beta\)-phenylhydroxylamine with aromatic aldehydes, 1905, A., i, 705.

Plancher, Giuseppe A., and Ugo Ponti, action of chloroform on 2-methylindole and on certain pyrroles, 1907, A., i, 341.

action of chloroform on 2:5-dimethylpyrrole, 1910, A., i, 132.

Plancher, Giuseppe A., and Ciro Ravenna, oxidation of pyrrole to maleimide, 1905, A., i, 333.

indoline, 1905, A., i, 611.

assimilation of carbon by plants. Supposed formation of formaldehyde, 1905, A., ii, 191.

action of Grignard's reagent on certain indolenines, 1907, A., i, 152.

Plancher, Giuseppe A., and Emilio Soncini, benzeneazopyrroles and benzeneazoindoles, 1903, A., i, 449.

Plancher, Giuseppe A., and Tomaso Zambonini, the synthesis of tetramethylpyrrole, 1912, A., i, 646.

Plancher, Giuseppe A. See also Oreste

Carrasco.

Planck, Max [Karl Ernst Ludwig], osmotic pressure of a solution of variable density, 1903, A., ii, 272.

Planck, Max [Karl Ernst Ludwig], new thermodynamic theories (Nernst's heat theorem and quanta-hypothesis), 1912, A., ii, 230.

Planes, Paul, colorimetric estimation of bismuth, 1904, A., ii, 93.

colorimetric estimation of hydrogen peroxide, 1905, A., ii, 199.

Plangger, Alois, new indoline bases, 1905, A., i, 718.

Plank, Rudolph, equations and tables for saturated and superheated nitrogen vapour; 1910, A., ii, 706.

Plant, O. H., absorption of fat from intestinal loops in dogs, 1908, A., ii,

1050.

• Plaschke, Emanuel. See Max Le Blanc. Plate, Erich. See F. L. Kohlrausch.

Plato, Giovanni de, the action of potassium salts on the formation of sucrose in seeds, 1910, A., ii, 742.

the presence of allantoin in the seeds of *Datura metel*, 1910, A., ii, 742.

amount of hydrogen cyanide during the ripening of bitter and sweet almonds, 1912, A., ii, 80.

Plato, Giovanni de. See also Luigi Francesconi, and Francesco Scurti.

Plato, Wilhelm, solidification of inorganic salts and salt mixtures. I. Solidification of pure salts and the accompanying thermal effects, 1906, A., ii, 521.

solidification of inorganic salts and salt mixtures. II. Solidification of salt mixtures and the result of the salt salts and
ties, 1907, A., ii, 239.

solidification phenomena exhibited by inorganic salts and salt mixtures, 1908, A., ii, 758.

the separation of antimony and tin by distillation, 1910, A., ii, 903.

Plato, Wilhelm. See also Otto Ruff. Platon, Eilif. See Fritz Haber.

Platz, Ludwig. See Walter Dieckmann.

Plant, Georg. See Otto Diels.

Plant, Max, and Heinrich Reese, behaviour of amino-acid administered to

haviour of amino-acid administered to animals, 1906, A., ii, 110.

Plavec, Václav, the chemical combination and action of absorbed phosphorus in the body, 1904, A., ii, 672.

Playfair, (Lord) Lyon, obituary notice of, 1905, T., 600.

Pleissner, Max, solubility of certain lead compounds in water, 1908, A., ii, 40.

Plenge, H., the solution by microorganisms of sodium a-nucleate, 1903, A., ii, 679. Pletneff, Dimitri. See Leon Asher, and Otto Cohnheim.

Pleus, Bernhard. See Carl Liebermann. Pleyel, H., potential difference between two electrolytic solutions, 1910, A., ii. 386.

Plimmer, Henry George, and John D. Thomson, experimental treatment of trypanosomiasis in rats, 1907, A., ii, 902.

Plimmer, Robert Henry Aders, separation and estimation of silver cyanide and silver chloride, 1903, P., 285; 1904, T., 12.

formation of hydrogen cyanide by the oxidation of proteins, 1904, A., i,

538; 1905, A., i, 162.

adaptation of the pancreas to lactose, 1906, A., ii, 239.

lactase and the adaptation of the intestine to lactose, 1907, A., ii, 108. the proteins of egg-yolk, 1908, T.,

1500; P., 190. sodium antimonyl tartrate, 1908, A.,

i, 129.

origin of uric acid, 1909, A., ii, 817.

Plimmer, Robert Henry Aders, and William Maddock Bayliss, separation of the phosphorus from caseinogen by enzymes and alkali, 1906, A., i, 325.

Plimmer, Robert Henry Aders, and Riukichi Kaya, distribution of phosphoproteins in tissues, 1909, A., ii, 685.

Plimmer, Robert Henry Aders, and Frederick Hughes Scott, a reaction distinguishing phosphoprotein from nucleoprotein and the distribution of phosphoproteins in tissues, 1908, T., 1699; P., 200.

transformations in the phosphorised compounds of the hen's egg during development, 1909, A., ii, 415.

Plimmer, Robert Henry Aders. See also Augustus Désiré Waller.

Plocksties, Max. See Conrad Willgerodt.

Plöcker, Phillip. See Karl Löffler. Ploetze, Hans. See Franz Fischer.

Plogmeier, Franz, formation of solid surfaces on colloidal liquids and their photoelectric behaviour, 1909, A., ii, 984.

Plohn, Robert. See Paul Cohn.

Plotnikoff, Joh., a rule in chemical dynamics, 1905, A., ii, 376. relation between the logarithmic

relation between the logarithmic temperature constant and heat evolution, 1905, A., ii, 571.

reaction velocities at low temperatures, 1906, A., ii, 12.

Plotnikoff, Joh., photochemical oxidation of hydrogen iodide by oxygen, 1907, A., ii, 212; 1908, A., ii, 790.

photochemical studies; oxidation of iodoform by oxygen, 1911, A., ii, 4,

452.

photochemical studies; the classification of light reactions, 1911, A., ii, 834.

photochemical studies. III. Progressive light reactions, 1912, A., ii, 4. photochemical studies. IV. Photo-

chemical temperature-coefficients of bromine, 1912, A., ii, 218.

photochemical studies. V. Measurements of light absorption in solutions of bromine and of certain dyes, 1912, A., ii, 405.

photochemical studies. VI. Spectral distribution of the light sensitiveness of bromine, 1912, A., ii, 615.

ness of bromine, 1912, A., ii, 615.

Plotnikoff, Joh. See also Robert Luther.

Plotnikoff, Wladimir Alexandrowitsch,
compounds of aluminium bromide
with bromine, ethyl bromide, and
carbon disulphide, 1903, A., i, 137.
electrical conductivity of solutions in

bromine, 1904, A., ii, 156.

compounds of dimethylpyrone with trichloroacetic acid, 1905, A., i, 77. electrical conductivity of ethereal solutions of phosphoric acid, 1905, A., ii,

electrical conductivity of solutions in ethyl bromide; compounds of dimethylpyrone with acids, 1905, A., ii, 433.

electrical conductivity of solutions of compounds of dimethylpyrone with trichloroacetic acid in chloroform and

benzene, 1906, A., ii, 144.

compounds of dimethylpyrone with trichloroacetic acid; electrical conductivity of solutions in ethyl bromide, chloroform, and benzene, 1906, A., ii, 419.

compounds of aluminium bromide with ethyl ether, 1907, A., i, 580.

electrical conductivity of mixtures of bromine and ethyl ether, 1907, A., ii, 152.

compounds of dimethylpyrone and tribromoacetic acid, 1908, A., i, 281.

abnormal course of curves, showing the change of molecular conductivity with the concentration, 1909, A., ii, 13.

electrical conductivity of solutions of compounds of dimethylpyrone with tribromoacetic acid in ethyl bromide, 1909, A., ii, 14. Plotnikoff, Wladimir Alexandrowitsch, decomposition of complex ions, 1909, A., ii, 17.

electrical conductivity of non-aqueous solutions. VIII. Aluminium bromide and nitrobenzene, 1911, A., ii, 247.

the compounds of dimethylpyrone with aluminium bromide and with trichloroacetic acid, 1912, A., i, 792.

Plotnikoff, Wladimir Alexandrowitsch. See also W. A. Izbekoff, and W. W. Neminsky.

Plücker, W., preparation of pure ethyl alcohol, 1909, A., i, 350.

estimation of phosphoric acid in ashes,

1909, A., ii, 518. Plüddemann, Werner. See Friedrich

Auerbach, and Lothar Wöhler.

Plummer, George W., the constitution of marcasite and pyrites, 1911, A., ii, 901.

Plzák, Franz, cyclamin, 1903, A., i, 643. anodic decomposition points of aqueous sodium hydroxide solutions, 1903, A., ii, 52.

Plzák, Franz, and Bedřich Hušek, inversion of sucrose induced by the platinum metals, 1904, A., ii, 391.

Plzák, Franz, and Vojtěch Rosický, fichtelite from Borkovic, Bohemia, 1908, A., ii, 395.

Pochettino, Alfredo, cathode luminescence of crystals, 1905, A., ii, 430.

photoelectric behaviour of anthracene, 1906, A., ii, 417, 722.

luminescence phenomena in certain organic compounds, 1910, A., ii, 5.

luminescence of crystals, 1910, A., ii, 89.

preparation of colloidal solutions of selenium, 1910, A., ii, 119.

cathode luminescence in minerals, 1911, A., ii, 357.

new methods of preparing colloidal selenium solutions, 1911, A., ii, 597. cause of the sensitiveness of selenium preparations to light, 1912, A., ii, 1118.

Pockels, Friedrich, growth and solution

of crystals, 1907, A., ii, 16.

Poda, Heinrich, a water thermostat for the normal temperature of 15°, 1908, A., ii, 83.

practice of cryometric measurements, 1908, A., ii, 564.

Poda, Heinrich. See also Karl Helle. Podkopajeff, Nicolaus Ivan, alloys of

platinum and tin, 1908, A., ii, 391.

Podkopajeff, Nicolaus Ivan See also
Nicolai S. Kurnakoff.

Podreschetnikoff, E., new volumetric method of estimating sodium sulphide, 1908, A., ii, 66.

Podszus, Emil, thermo-electric forces in

electrolytes, 1909, A., ii, 16. Poehl, Alexandre de, influence of catalytic agents on the functions of the organism; spermin, cerebrin, and adrenal hydrochloride, 1903, A., ii, 164.

the state of oxidation of the tissues and the electrical charge of leucocytes as important agents in immunisation, 1907, A., ii, 802.

Pöschl, Viktor, artificial production of isomorphous silicate mixtures, 1908,

A., ii, 400.

relationships between chemical composition, crystalline form, hardness, and density. I., 1908, A., ii, 673. new periodic function of the atomic

weight, 1909, A., ii, 35.

pyrites and marcasite, 1911, A., ii,

Poetschke, Paul, new thermo-regulator for use with gas, 1909, A., ii, 973.

Pötter, Heinz. See Hermann Grossmann. Pogerski, E. See C. Delezenne.

Pogorželsky, Zdislav Antonovitsch, transformations of octyl di-tert-(y-tetramethylbutylene-\gamma-glycol glycol), 1904, A., i, 214.

action of chlorine on isobutylene, 1905,

A., i, 165.

action of bromine on isobutylene, 1905, A., i, 315.

reaction of iodine with isobutylene, 1906, A., i, 129.

di-isobutenyl tetrabromide [aße (-tetrabromo-βε-dimethylhexane], 1906, A., i, 131.

Pohl, Franz, dicyanodiamide, 1908, A., i. 575.

Pohl, Heinrich. See Josef Houben.

Pohl, Julius, alkyl synthesis after administration of thiocarbamide, 1904, A., ii, 757.

organ-protein, 1906, A., ii, 106.

quantitative researches on the exhalation of alcohols, 1908, A., ii, 1056. the behaviour of phthalic acid in the animal organism, 1909, A., ii, 254. acid poisoning, 1909, A., ii, 599.

oxalic acid metabolism, 1911, A., ii, 51.

Pohl, Richard. See Max Dittrich.

Pohl, Robert, action of the silent electric discharge on ammonia and oxygen, 1906, A., ii, 437.

the unimolecular course of the de-composition of ammonia by the silent discharge, 1908, A., ii, 819.

Pohl, Robert, [calculation of the ratio of the electric charge to the mass of the molecule of mercury vapourl,

1909, A., ii, 207. dependence of the photoelectric effect of the alkali metals in polarised light on the wave-length, 1910, A.,

ii, 90.

a relationship between the selective photoelectric effect and phosphor-

escence, 1912, A., ii, 5.

Pohl, Robert, and P. Pringsheim, photoelectric sensitiveness of the alkali metals as a function of the wavelength. I. and II., 1910, A., ii, 379, 472.

selective photoelectric effect of potassium mercury alloys, 1910, A., ii,

922.

relationship between chemical affinity and the photoelectric effects of potassium in its compounds, 1911, A., ii, 90.

the photoelectric effects of colloidal alkali metals, 1911, A., ii, 363.

the selective photoelectric effect for metals outside the alkali group, 1911, A., ii, 787.

the selective photoelectric effect of lithium and sodium, 1912, A., ii,

photoelectric observations on aluminium and magnesium, 1912, A., ii,

formation of metal mirrors by distilla-

tion in a vacuum, 1912, A., ii, 625. ohl, Robert. See also J. Franck, Gustav Leithäuser, and Bernhard Pohl, Robert. Walter.

Pohl, Wilhelm. See Max Bodenstein. Pohle, Friedrich. See Otto Wallach.

Pointet, René, exception to the general method for preparation of aldehydes by means of glycidic acids, 1909, A., i,

Poirson, Lucien, the chemical action of sea-water on Portland cement, 1911, A., ii, 204.

Poizat, Louis. See Alphonse Seyewetz.

Pokorný, F. See Robert Luther.

Pokrowska, Marie. See Alfred Werner. Polack, Leo. See Emil Knoevenagel.

Polak, Julius. See Josef Herzig.

Polak, James Jozef, sulphonation of benzenesulphonic acid, 1911, A., i,

analysis of soap powders, 1912, A., ii,

Polak, James Jozef. See also Arnold Frederik Holleman.

Polányi, Michael, the chemical and physical changes in the blood-serum taking place during starvation, 1911, A., ii, 741.

the chemistry of hydrocephalic liquid,

1911, A., ii, 746.

Polenske, Eduard, testing lard and butter, 1905, A., ii, 870.

testing lard, 1905, A., ii, 870.

detection of benzoic acid in foods, 1911, A., ii, 1142.

Polenske, Eduard. See also Emil Baur. Policard, A. See Maurice Doyon.

Polimanti, Osw., the distribution of enzymes in the stomach and intestines of fish, 1912, A., ii, 182.

Politis, Ioannes, presence of glycogen in phanerogams and its relation to calcium oxalate, 1912, A., ii, 83. origin and function of calcium oxalate

in plants, 1912, A., ii, 194.

Poljansky, E. V. See Antony G. Doroschewsky.

Pollacci, Egidio, white and yoke of egg: action of hydrogen sulphide on unbroken eggs, 1904, A., i, 639.

detection of thiocyanic acid in saliva,

1904, A., ii, 522.

violent explosions of hydrocyanic acid and the nature of the products formed thereby, 1907, A., i, 397.

nature of the alkalinity of intestinal

juice, 1908, A., ii, 50.

spontaneous oxidation of sulphur and sulphides, 1908, A., ii, 684.

detection of thiocyanic acid by means of mercurous chloride, 1908, A., ii,

Pollacci, Gino, new apparatus for gas

analysis, 1905, A., ii, 478. detection of formaldehyde in plants,

1907, A., ii, 289.

combination of nitrogen with calcium

carbide, 1908, A., ii, 886.

the catalytic action of potassium carbonate on the absorption of nitrogen by calcium carbide, 1911, A., i, 358. Pollacci, Gino. See also Eva Mameli.

Pollack, Walter von, condensation of aminobenzoic acids with ethyl malonate, 1905, A., i, 353.

See Bruno Eissler. Pollak, Alexander. Artur. See Pollak, Georg Georgievics.

Pollak, Fritz, substantive dyes containing sulphur, 1904, A., i, 762.

Pollak, Hermann. See Carl Neuberg. Pollak, Jacques, formation of nitrosopolyhydroxylic compounds of phenols, 1904, A., i, 46. elaterin, 1906, A., i, 973.

Pollak, Jacques, and J. Carniol, trithiophloroglucinol, 1909, A., i, 791.

Pollak, Jacques, and H. Feldscharek. wandering of alkyl groups during the distillation of ether acids, 1908, A., i, 542.

Pollak, Jacques, and G. Gans, nitrosoformation from phloroglucinolmonomethyl ether, 1903, A., i, 252.

Pollak, Jacques, and J. Goldstein, new case of wandering of an alkyl group, 1907, A., i, 320.

diethoxybenzoquinone, 1908, A., i, 554. Pollak, Jacques, and R. Tucakovic, symmetrical trithiophenols, 1910, A., i, 734.

Pollak, Jacques. See also Josef Herzig. Pollak, Leo, oxidation products of

glycylglycine, 1905, A., i, 750. the individuality of trypsin, 1905, A.,

the formation of acetone from acetoacetates by means of organ-extracts and proteins, 1907, A., i, 991.

adrenaline diabetes, 1909, A., ii, 915. inurement to adrenaline, 1910, A., ii, 881.

renal glycosuria, 1911, A., ii, 417.

Pollak, Leo. See also Hans Januschke. Pollard, William, minerals from Skye and Ross-shire, 1903, A., ii, 378.

rottenstone from South Wales, 1903, A., ii, 383.

weathering of magnesian limestone, 1903, A., ii, 383.

[nephelite, laumontite, baryto-celestite, etc.], 1904, A., ii, 182.

Pollard, William. See also John Smith

Pollard, William Branch, rapid method of qualitative analysis, 1908, A., ii, 1069.

Pollatz, Walter. See Wilhelm Böttger. Polle, R., influence of different amounts of water, different manures, and consolidation of the soil on the root development of wheat and barley in the first period of growth, 1911, A., ii, 224.

Pollitt, George Paton. See Georg Lunge. Pollitzer, Franz, the equilibrium of the reaction $H_2S + 2I = 2HI + S$ and the dissociation of hydrogen sulphide, 1909, A., ii, 871.

heat development of the Clark cell,

1910, A., ii, 1029.

determination of specific heats at low temperatures and their use in the calculation of electromotive forces, 1911, A., ii, 180.

thermodynamics of the Clark cell,

1912, A., ii, 14.

Pollock, Ernest Ferguson. See George Gerald Henderson, and Paul Rabe.

Pollock, James Arthur, a simple form of Sprengel vacuum pump, 1908, A., ii, 938.

the electron theory of the carbon arc,

1909, A., ii, 374. mobility of the large ions in the air, 1910, A., ii, 11.

Pollok, James Holms, the heat of formation of glucinum chloride, 1904, T., 603; P., 61.

the composition of bervl. 1904. T., 1630; P., 189.

index of the principal lines of the spark spectra of the elements, 1907, A., ii, 917.

quantitative spark spectra of titanium, uranium, and vanadium, 1909, A.,

spectrographic analysis of a specimen of commercial thallium, 1909, A., ii,

vacuum tube spectra of the vapours of some metals and metallic chlorides. I. Cadmium, zinc, thallium, mercury, tin, bismuth, copper, arsenic, antimony, and aluminium, 1912, A., ii, 710.

vacuum tube spectra of some metals and metallic chlorides. II. Lead, iron, manganese, nickel, cobalt, chromium, barium, calcium, strontium, magnesium, potassium, sodium and lithium, 1912, A., ii, 710.

Pollok, James Holms, and Alfred Godfrey Gordon Leonard, quantitative spectra of iron, aluminium, chromium, silicon, zinc, manganese, nickel, and cobalt, 1907, A., ii, 918.

of quantitative spectra barium, strontium, calcium, magnesium, potassium, and sodium, 1907, A., ii, 918.

the separation and quantitative spectra of cerium, lanthanum, and didymium, 1908, A., ii, 645.

Polonyi, H. See F. Epstein. Polotzky, A. See Reginald Oliver Herzog. Polowzoff, V., origin of internal pressure

in solutions, 1911, A., ii, 101. Polowzowa, W. W. See Efim Semen London.

Polstorff, Karl, choline content of certain

edible fungi, 1910, A., ii, 234. occurrence of betaines and choline in drugs containing caffeine and theobromine, 1910, A., ii, 234.

Polstorff, Karl, and Hermann Meyer, action of potassium cyanide on formaldehyde, 1912, A., i, 605.

Polstorff, Karl, and Hermann Meyer, detection and estimation of haloid hydrogen in presence of hydrogen cyanide by means of formaldehyde, 1912, A., ii, 988.

Polzeniusz, Ferdynand E., absorption of nitrogen by calcium carbide, 1907.

A., ii, 867.

Poma, Gualtiero, equilibrium between cuprous and cupric chlorides in hydrochloric acid solution, 1909, A., ii, 315.

constitution of the cuproso-cupric chloro-salts, 1909, A., ii, 315.

new series of solid amino-salts, 1910, A., ii, 417.

colour and hydration. I., 1910, A., ii,

influence of neutral salts on the velocity of reaction, 1911, A., ii,

2:6-dimethylpyrone as a solvent, 1912, A., ii, 130.

state of substances dissolved in absolute sulphuric acid, 1912, A., ii, 907.

Poma, Gualtiero, and G. Gabbi, binary systems of the chlorides of certain univalent metals, 1911, A., ii, 606.

Poma, Gualtiero, and B. Tanzi, influence of electrolytes on the dissociation constant of water, 1912, A., ii,

velocity of reaction. I., 1912, A., ii,

Pomeranz, Cæsar, solubility of salts of optically active monobasic acids, 1903, A., ii, 65.

equilibrium between maltose and dextrose, 1903, A., ii, 65.

allyl cyanide and allylthiocarbimide, 1907, A., i, 300.

Pomeranz, Casar, and Friedrich Sperling, lactucon [lactucerin], 1904, A., i, 907.

Pomeranz, H., action of alkali [hydroxides] on sulphur, 1905, A., ii, 698.

Pomeroy, J. C., charges on thermions produced in air and hydrogen at atmospheric pressure, 1912, A., ii, 114.

Pomilio, Umberto, new metallo-quinolides; metallo-quinolides of silver nitrate. I., 1912, A., i, 386.

metallo-quinolides; metalloquinolides of nickel chloride. II., 1912, A., i, 386.

Pomilio, Umberto. See also Giuseppe Kernot.

Pomme, Georg. See Franz Feist. Pommerehne, Herbert, damascenine, 1904, A., i, 685.

Pommerenke, H., calcination of zinc sulphate in the presence of zinc oxide, 1907, A., ii, 392.

Pompilian, (Mlle.) M. See M. Letulle. Pond, Francis Jones, and Cyrus R. Siegfried, derivatives of isosafrole and isoapiole, 1903, A., i, 417.

Pond, Raymond Haines, solution tension and toxicity in lipolysis, 1907, A., ii,

Ponder, C. W. See R. R. Fasson.

Poni, Petru, composition of Roumanian petroleum, 1903, A., i, 593. bromine derivatives of tetramethyl-

methane, 1906, A., i, 1.

presence of \u03c4-cumene in Roumanian petroleum, 1906, A., i, 9.

apparatus for fractional distillation under constant pressure, 1906, A., ii, 14.

Roumanian petroleum, 1907, A., ii,

883.

Poni, Petru, and N. Costachescu, action of nitric acid of different concentrations under pressure on isopentane, 1903, A., i, 596.

isohexanes in Roumanian petroleum,

1905, A., i, 109.

Ponnaz, Charles. See Paul Askenasy. Ponndorf, Georg. See Paul Duden.

Pons, Ch., excretion of chondroitinsulphuric acid, 1907, A., ii, 494.

Ponsot, Auguste, experimental law of electric transport of dissolved salts, 1904, A., ii, 232.

osmose, 1904, A., ii, 240.

simple proofs of the phase rule, 1904, A., ii, 314.

Ponte, A., comparison of methods for the estimation of phosphates in vegetable substances, 1912, A., ii, 91.

Ponte, G., mesolite from Palagonia, Sicily, 1911, A., ii, 298.

Ponti, Ugo, Ajuga iva, 1910, A., ii, 63.

Ponti, Ugo. See also Maurizio Padoa, and Giuseppe A. Plancher.

Pontio, Maurice, digester-lixiviator for testing gutta-percha, 1903, A., ii,

detection and estimation of bitumen in gutta-percha, 1905, A., ii, 362.

Pontius, J., new chlorometric method, 1904, A., ii, 204.

Ponzio, Giacomo, camphonitrophenol, 1903, A., i, 44.

constitution of primary dinitrohydro-carbons, 1903, A., i, 161, 305, 786. new method of preparation of nitrolic

acids, 1903, A., i, 453.

new acids of the oleic series. I. Δβ. Oleic acid, 1904, A., i, 548.

Ponzio. Giacomo, semicarbazones of isonitrosoketones and of acyldinitrohydrocarbons, 1904, A., i, 723.

isoerucic acid, 1904, A., i, 797.

new acids of the oleic series. Δa-Hypogæic acid, 1905, A., i, 405.

new acids of the oleic eries. III. Derivatives of Aa-oleic acid, 1905, A., i, 736.

laboratory notes; [diisobutyl ketone; isonitrosobenzylacetone; isobutyrylisovaleryl-phenylhydrazines; and erucic acid], 1906, A., i, 66.

behaviour of acetoxime and of dioximes towards sodium hypochlorite; properties of carbon tetrabromide,

1906, A., i, 482. constitutional formula of 1:2-dinitrosonaphthalene, 1906, A., i, 491.

action of nitrogen tetroxide on benzaldoxime, 1906, A., i, 593.

new method of preparing the so-called primary dinitro-hydrocarbons, 1906,

A., i, 735. chloromethylnitrolic acid, 1907, A., i,

action of diazo-salts on phenyldinitro-

methane-[ω-dinitrotoluene], 1908, A., i, 482.

transformation of phenylnitromethane [w-nitrotoluene] into phenyldinitromethane, [di-ω-nitrotoluene], 1908, A., i, 869.

constitution of the endoxypyrrodiazoles [4:5-oxy-1:2:5-osotriazoles].

1908, A., i, 1021.

behaviour of the compounds CRPh: NOH towards nitrogen peroxide, 1909, A., i, 308. behaviour of a diazo-salt towards

organic solvents, 1909, A., i, 338.

new method of preparing acylazoaryl compounds, 1909, A., i, 681.

reductions with ethyl alcohol, 1909,

A., i, 851. case of isomerism; [acylazoaryl com-

pounds], 1910, A., i, 192. displaceability of the nitro-group, 1910, A., i, 339.

action of ammonia on w-nitrobenzaldehyde-p-nitrophenylhydrazone, 1910, A., i, 442.

new method of preparation of hydrazidines, 1910, A., i, 443.

conversion of hydrazidines into hydr-

azines, 1910, A., i, 699. conversion of nitroaldehydes into cyanoaldehydes, 1911, A., i, 920.

behaviour of some aliphatic iodo-acids in the organism, 1911, A., ii, 1015.

Ponzio, Giacomo, passage of the nitrogroup from an aliphatic carbon atom to the benzene nucleus, 1912, A., i, 547.

migration of the nitro-group, 1912,

A., i, 757.

Ponzio, Giacomo, and G. Busti, action of sodium hypochlorite on aldoximes, 1906, A., i, 855.

Ponzio, Giacomo, and G. Charrier, methylation of oximino-compounds, 1907, A., i, 386.

bromomethylnitrolic acid, 1907, A., i,

action of silver nitrite on chloroisonitrosoketones, 1907, A., i, 828. halogen derivatives of dinitro-hydro-

carbons, 1908, A., i, 521.

action of diazo-salts on primary dinitro-hydrocarbons, 1908, A., i, 582. acylazoaryl compounds and behaviour of certain diazo-salts towards ethers,

1909, A., i, 443.

Ponzio, Giacomo, and Carlo Gastaldi, action of nitrous acid on substituted hydrazidines, 1911, A., i, 925.

relation between the iodine number and the structure with acids of the oleic series, 1912, A., i, 748.

Ponzio, Giacomo, and R. Giovetti, transformation of benzhydroxamic acid into anilides, 1908, A., i, 726. preparation of certain azines, 1908,

A., i, 834.

passage of the nitro-group from an aliphatic carbon atom to the benzene

nucleus, 1910, A., i, 194.

Ponzio, Giacomo, and E. Valente, βphenylbenzylhydrazine, 1908, A., i,

458.

Pool, (Miss) B. See Frederick Thomas Trouton.

Pool, Johan F. A., Jacquemin's phenol reaction; detection of oil of cloves in oil of cinnamon, 1904, A., ii, 298.

[chloroacetic acids], 1905, A., i, 404. laboratory notes [chloroacetic acids and their estimation and separation], 1905, A., ii, 425.

Beyerinek and Gosling's sarcina, 1907,

A., ii, 643.

Pool, Johan F. A. See also Alexander Tschirch.

Poole, Horace H., rate of evolution of heat by pitchblende, 1910, A., ii, 176; 1911, A., ii, 86.

Poole, Reginald Holliday. See Harold Brewer Hartley.

Pooth, Peter, Busch's nitron process, 1909, A., ii, 615.

Pope, Frank George, colour and constitution of azomethine compounds. Part I., 1908, T., 532; P., 24; discussion, P., 24.

p-benzoyloxybenzaldehyde, 1911, P.,

note on the nitration of p-hydroxyacetophenone, 1912, P., 331.

Pope, Frank George, and Robert Fleming. colour and constitution of azo-Part methine compounds. II., 1908, T., 1914; P., 228.

Pope, Frank George, and Hubert Arthur Harry Howard, the condensation of benzaldehyde with resorcinol, 1909.

P., 304; 1910, T., 78.

the condensation of anisaldehyde with resorcinol, 1910, T., 972; P., 88. fluorones, 1910, T., 1023; P., 113.

fluorone derivatives, 1911, T., 545;

P., 52.

Pope, Frank George, and Arthur Samuel Wood, the bromination of phenol; 2:4- and 2:6-dibromophenol, 1912, T., 1823; P., 225.

Pope, Frank George. See also John Jacob Fox, John Theodore Hewitt, and Hubert Arthur Harry Howard.

Pope, William Jackson, presentation of the Longstaff medal to, 1903, P., 180.

Pope, William Jackson, and Thomas Constantine Beck, resolution of tetrahydro-p-toluquinaldine into its optically active components, 1907, T., 458; P., 15.

Pope, William Jackson, and George Clarke, jun., the resolution of externally compensated dihydro-amethylindole, 1904, T., 1330; P., 182.

Pope, William Jackson, and Charles Stanley Gibson, the alkyl compounds of gold, 1907, T., 2061; P., 245, 295.

the resolution of externally compensated pavine and a-bromocamphorπ-sulphonic acid, 1910, T., 2207; P., 250.

the rotatory powers of the salts of d- and l-camphor-B-sulphonic acid with d- and l-pavine, 1910, T., 2211; P., 250.

some mixed phosphonium derivatives, 1912, T., 735; P., 108.

the alkaloidal salts of phenylmethylphosphinic acid, 1912, T., 740; P., 109.

the resolution of benzoylalanine into its optically active components, 1912, T., 939; P., 126.

the resolution of sec.-butylamine into optically active components, 1912,

T., 1702; P., 220.

Pope, William Jackson, and Stanley John Peachey, preparation of the tetra-alkyl derivatives of stannimethane, 1903, P., 290.

a new class of organo-tin compounds containing halogens, 1903, A., i,741.

a new class of organo-metallic compounds; preliminary notice; trimethylplatinimethyl hydroxide and its salts, 1907, P., 86; discussion, P., 87.

the alkyl compounds of platinum,

1909, T., 571; P., 96.

Pope, William Jackson, and John Read. the optical activity of compounds having simple molecular structure. 1908, T., 794; P., 99.

condensation of oxymethylenecamphor with primary and secondary aminocompounds, 1909, T., 171; P., 18.

the resolution of externally compensated acids and bases, 1910, T., 987; P., 118.

externally compensated tetrahydroquinaldine (tetrahydro-2-methylquinoline) and its optically active components, 1910, T., 2199; P.,

dihydroxydihydrindamine and its resolution into optically active components, 1911, T., 2071; P.,

asymmetric quinquevalent nitrogen compounds of simple molecular constitution, 1912, T., 519; P., 49.

the externally compensated and optically active hydroxyhydrindamines. their salts and derivatives, 1912, T., 758; P., 107. the absence of optical activity in the

a- and \$-2:5-dimethylpiperazines, 1912, T., 2325; P., 278.

Pepe, William Jackson, and Thomas Field Winmill, the relation between constitution and rotatory power amongst derivatives of tetrahydroquinaldine, 1912, T., 2309; P., 275.

William Jackson. See William Barlow, George Jerusalem, Frederic Stanley Kipping, and Wil-

liam Henry Perkin, jun.
Popescu, D. M. See G. Dumitrescou. Popielski, Leo, secretory activity of the pancreas under the influence of hydrochloric acid and intestinal extract, 1908, A., ii, 119.

action of barium chloride, adrenaline, and peptone on the vaso-motor apparatus, 1908, A., ii, 1059.

the action of choline on blood pressure, 1911, A., ii, 124.

Popielski, Leo, the property of urine of reducing the blood pressure, 1911. A., ii, 511.

substances which constrict and dilate the blood vessels of the surviving frog; remarks on S. Samuelson's

paper, 1912, A., ii, 470.

Popielski, Leo, and Kazimir Panek, vasodilatin; the active substance of extracts of all parts of the digestive canal, brain, pancreas, and peptone, 1909, A., ii, 593.

Poplawski, Wladislaus. See Friedrich

Kehrmann.

Popoff, Sergei Alexandrovitsch, decomposition of iodoform and chloroform in certain vegetable oils, 1907, A., ii, 314.

Popoff, Sergei Alexandrovitsch. See also

Iwan Pavlovitsch Osipoff.

Popoff, Sergei Platonovitsch, tamanite, a new iron-calcium phosphate, 1903, A., ii, 303.

cryoscopic observations on the different forms of sulphur, 1904, A., ii,

two new mineral phosphates from Russia, 1906, A., ii, 236.

Popovici, Joan, 2:2'-dinitrobenzoin, 1907, A., i, 628.

nitration of benzoylvanillin, 1907, A., i, 935.

the reaction between potassium cyanide and o-nitrobenzaldehyde, 1908, A., i. 550.

fluorides of gadolinium, neodymium, and praseodymium, 1908, A., ii, 283.

o-bromophenyl- and a-bromophenylacetamide, 1909, A., i, 28.

Popovici, Joan. See also Robert Pschorr. Popowsky, Nikolaus, estimation of organic carbon in waters, 1908, A., ii, 435.

Popowsky, Nikolaus, See also Carl Neuberg.

Popp, Max, action of organic nitrogen manures as compared with sodium nitrate, 1908, A., ii, 727.

a trustworthy method for the estimation of phosphoric acid soluble in citric acid in Thomas slag, 1912, A., ii, 992.

Popp, Max. See also Albin Köhler, and

Paul Wagner.

Poppe, Edmond, oxidation of organic matter by potassium permanganate, 1910, A., ii, 660.

removal of the constituents of peas by water and aqueous solutions, 1911,

A., ii, 428.

Poppe, Edmond. See also Albert Jacques Joseph Vandevelde.

Poppenberg, Otto, and Erich Stephan, estimation of nitrogen in explosives, 1910, A., ii, 451.

Poppenberg, Otto. See also Louis Lewin. and Alfred Wohl.

Popper, Hugo. See A. Baumgarten. and Ernst Freund.

Popper, N. See Adolf Kaufmann.

Porai-Koschitz, Alexander E., pentane-88-diol and 88-dibromopentane, 1904, A., i, 363.

the connexion between the colour and the structure of organic compounds,

1911, A., ii, 3.

Porai-Koschitz, Alexander E., Y. I. Auschkap, and N. K. Amsler, preparation of Schiff's bases from nitroso-compounds, 1911, A., i, 688. influence of the acridine ring on the

colour of certain colouring matters,

1912, A., i, 222.

Porai-Koschitz, Alexander E., P. Solodowinkoff, and M. Troitzki, methineammonium dyes, 1907, A., i, 974.

Porai-Koschitz, Alexander E. See also

Hans Rupe.

Porch, Madison B. See Joseph Hoeing Kastle.

Porcher, Charles, the sugar of buffalo's milk, 1903, A., i, 735.

detection of lactose in urines by means of phenylhydrazine, 1903, A., ii, 579.

lactosephenylosazone, 1904, A., i, 194. the origin of lactose, 1904, A., ii, 424; 1910, A., ii, 144.

formation of lactose in the cow, 1904,

A., ii, 500.

injection of phloridzin in the lactating

cow, 1904, A., ii, 500.

sugar in the blood during parturition in the goat deprived of its mammary glands, 1905, A., ii, 469.

animal lactase, 1905, A., ii, 540.

origin of lactose; removal of the mammary glands during lactation, 1905, A., ii, 600.

origin of lactose; effects of injections of dextrose during lactation, 1905,

A., ii, 739.

calculation of the proportion of lactose hydrolysed in a solution of this sugar submitted to the action of lactase; measurement of the activity of lactase, 1906, A., ii, 57.

detection of small quantities of dextrose in urine, 1907, A., ii, 56.

the urine in rabies, 1907, A., ii, 117.

Porcher, Charles, [symptomatic] significance of urinary indoxyl; detection of indole in pus, 1908, A., ii, 769.

researches on indole. I. Action of oxidising agents, 1909, A., i, 511.

behaviour of the three isomeric phthalic acids in the dog's organism. 1909, A., ii, 81.

indole-producing compounds of the

urine, 1909, A., ii, 506.

Porcher, Charles, and Marc Brisac. methylammonium and trimethylammonium magnesium phosphates, 1903, A., i, 607.

[attempts to prepare aniline and carbamide magnesium phosphates , 1903,

A., i, 618.

apparatus for the estimation of nitrogen, 1903, A., ii, 179.

Porcher, Charles, and Commandeur, the origin of lactose, 1904, A., ii, 424. Porcher, Charles, and Ch. Hervieux,

urinary indican, 1903, A., ii, 672. urinary chromogen due to subcutaneous injection of scatole, 1904, A., ii, 577.

pigments orginating from scatole and the scatoxyl question, 1905, A., ii, 187.

scatole, 1905, A., ii, 740.

urinary chromogen following the administration of indolecarboxylic acid, 1907, A., ii, 900.

Porcher, Charles, and Lucien Panisset, presence of indole-producing substances in culture bouillon, 1909, A., ii, 602.

Porcher, Charles. See also Paul Sisley. Porges, Otto, respiratory quotients after exclusion of the abdominal organs, 1910, A., ii, 785.

the magnitude of the work of the liver, 1911, A., ii, 1008.

the respiratory quotient in acid poison-

ing, 1912, A., ii, 1198.

Porges, Otto, and Ernst Neubauer, physico-chemical researches on lecithin and cholesterol, 1908, A., ii, 90; 1909, A., i, 756.

Porges, Otto, and Egon Přibram, influence of calcium on diuresis, 1908, A., ii, 718.

chemistry of phosphorus poisoning, 1908, A., ii, 721.

Porges, Otto, and Ernst Přibram, respiratory metabolism after fatiguing work, 1907, A., ii, 366.

Porges, Otto, and Hugo Salomon, the respiratory quotients of dogs with pancreatic diabetes when the abdominal organs are excluded from the system, 1910, A., ii, 785.

Porges, Otto, and Karl Spiro, serum globulius, 1903, A., i, 214.

Porges, Otto. See also R. Aschner, and

Ernst Neubauer.

Porlezza, C., the secondary spectrum of hydrogen, 1911, A., ii, 949.

line spectrum of nitrogen in a Geissler tube, 1912, A., ii, 109, 110.

spectra of silicon and fluorine in a Geissler tube, 1912, A., ii, 876.

Porlezza, C., and G. Norzi, secondary spectrum of hydrogen, 1911, A., ii,

concentration of the radioactive emanation of the gases of boracic suffioni by means of carbon at a low temperture, 1911, A., ii, 842.

the radioactive tufa of Fiuggi; occluded gases; content of radium and uranium, 1911, A., ii, 846.

the gas of the boriferous "suffioni" of Larderello, 1911, A., ii, 1106.

Porlezza, C. See also Luigi Marino, and Raffaele Nasini.

Porlier, A., composition of a cannon ball from the most of the Bastille, 1905, A., ii, 713.

Porter, Agnes Ellen, the identity of pepsin and rennet, 1911, A., i, 698.

Porter, Albert E., the inactivation of ferments, and the formation of antiferments in presence of collodium and other membranes, 1910, A., i, 600; 1911, A., i, 98.

Porter, Alfred William, osmotic pressure of compressible solutions of any degree of concentration, 1907,

A., ii, 743.

osmotic pressure of compressible solutions of any degree of concentration. Part II. Cases in which both solvent and solute are volatile, 1908, A., ii, 670.

the inversion points for a fluid passing through a porous plug and their use in testing proposed equations of state. II. An examination of ex-

perimental data, 1910, A., 592. viscosity of liquids, 1912, A.,

434. Porter, Alfred William. See also

George Senter.

Porter, Charles Walter, method for determining the molecular weights of volatile liquids, 1912, A., ii, 1159.

Porter, Charles Walter. See also Henry Augustus Torrey.

Porter, Horace Chamberlain, and F. K. Ovitz, the volatile matter of coal, 1911, A., ii, 201.

Porter, Horace Chamberlain, See also Charles Loring Jackson.

Porter, Harry Leonard, See William Henry Bragg.

Porter, (Miss) Mary Winearls. Alfred Edwin Howard Tutton.

Portevin, A., alloys of nickel and lead, 1907, A., ii, 694.

equilibrium of the system nickel-

bismuth, 1908, A., ii, 45. chromium steels, 1911, A., ii, 805. the alloys of iron and antimony, 1911,

A., ii, 898. effect of tempering on the electrical resistance of bronze and brass, 1912, A., ii, 890.

Portevin, A., and G. Arnou, the annealing of aluminium bronzes, 1912, A.,

Portheim, Leopold (Ritter) von, and Emil Scholl, formation and chemistry of anthocyanins, 1908, A., i, 905.

Portheim, Leopold (Ritter) von. See also Michael von Eisler, Viktor Grafe, and Walther Hausmann.

Portier, P., glycolysis of different sugars, 1903, A., ii, 306. glycolysis, 1904, A., ii, 828.

Portner, Edward G. See Peter Fire-

Posner, Edward R., and William John Gies, combinations of mucoids with other proteins, 1904, A., i, 790.

influence of hæmorrhage on lymph,

1904, A., ii, 185.

digestibility of connective tissue mucoids in pepsin-hydrochloric acid, 1904, A., ii, 497.

protagon, 1905, A., i, 252; 1906, A., i, 54.

Posner, Ferd. See Richard Meyer.

Posner, Theodor, unsaturated compounds. I. Action of hydroxylamine on unsaturated acids, 1904, A., i, 160.

disulphones. XIII. Sulphur derivatives of unsaturated ketones, 1904, A., i, 322.

p-amino-acids, 1905, A., i, 577.

β-amino-β-phenylpropionic acid, 1905, A., i, 776.

sulphonalcarboxylic acids, and the physiological activity of acid and basic derivatives of sulphonal, 1905, A., i, 852.

unsaturated compounds. II. The addition of free hydroxylamine to cinnamic acid; constitution and derivatives of B-hydroxylamino-6phenylpropionic acid, 1906, A., 1, 955.

Posner, Theodor, unsaturated compounds. IV. Action of hydroxylamine on ethyl cinnamate, 1907, A., i, 212.

action of hydroxylamine on coumarins, 1909, A., i, 583.

the constitution of thiophenoquinone, 1909, A., i, 809.

preparation of substituted cinnamic acids, 1911, A., i, 52.

constitution of thiophenoquinones and mechanism of quinone reactions, 1911, A., i, 554.

Posner, Theodor, and Robert Baumgarth, unsaturated compounds. V. Addition of mercaptans to unsaturated acids, 1908, A., i, 21.

Posner, Theodor, and Robert Hazard, disulphones. XII. Mixed disulphones,

1903, A., i, 242.

Posner, Theodor, and Johannes Lipski, phenoquinone, thiophenoquinone, and quinhydrone, 1904, A., i, 1029.

Posner, Theodor, and H. Oppermann, unsaturated compounds. III. Addition of free hydroxylamine to homologues of cinnamic acid; constitution and derivatives of \$\beta\$-hydroxylamino-B-p-tolylpropionic acid, 1907, A., i, 55.

Posner, Theodor, and Karl Rohde, unsaturated compounds. VII. and VIII. Addition of hydroxylamine to unsaturated acids containing conjugate double linkings, 1909, A., i, 649; 1910, A., i, 847.

so-called \(\psi \)-dichloroacetone, an alleged isomeride of dichloroacetone, 1909,

A., i, 765.

Posner, Theodor, Karl Rohde, August Stirnus, and Otto Unverdorben, unsaturated compounds. IX. Addition of hydroxylamine to unsaturated acids and esters of the cinnamic acid series and to analogous compounds, 1912, A., i, 453.

Posner, Theodor, and Jonasch-Scholom Tscharno, unsaturated compounds. II. Addition of mercaptans to unsaturated hydrocarbons, 1905, A., i, 279.

Posnjak, E., the swelling pressure, 1912, A., ii, 912.

Posnjak, E. See also Herbert Freundlich.

Posnjak, Georg. See Hans Stobbe. Possanner von Ehrenthal, chlorohydrin and oxide of αδ-dihydroxypentane, 1903, A., i, 674.

Posselt, Josef. See Alfred Werner. Posternak, Swigel, musculamine, the base derived from muscles, 1903, A., i, 111.

Posternak, Swigel, properties and composition of the reserve phosphoorganic substance of chlorophyllous plants, 1903, A., ii, 607, 679.

constitution of the phospho-organic acid of the reserve substance of green plants; first product of the reduction of carbon dioxide in chlorophyllous assimilation, 1903, A., ii, 680.

composition and signification of aleurone grains, 1905, A., ii, 276.

Posternak, Swigel. See also Albert Arnaud, Allyre Chassevant, and A. Gilbert.

Postma, G. E. See Austin Flint Rogers.

Postma, S. See Andreas Smits.

Postnikoff, A. See Leo A. Tschugaeff. Postoéeff, J. J., the influence of saponin on the physiological action of digitoxin, 1911, A., ii, 1016.

Potdar, G. N., the partition of silver between zinc and lead, 1908, A., ii,

945.

Pototzky, Carl, diuresis; the influence of diuretics on the excretion of sodium chloride, 1903, A., ii, 33.

Potozky, W., acetylation of some unsaturated amines, 1903, A., i, 795.

Potschiwauscheg, Julius, reduction products of mesobenzdianthrone (helianthrone), 1910, A., i, 495.

blue reduction product from flavanthren, 1910, A., i, 517.

Potschiwauscheg, Julius. See also Eugen Bamberger, and Roland Scholl. Pott, Paul, the active substance of

opium smoke, 1912, A., ii, 790.

Potter van Loon. See Loon.

Potter, Charles Etty. See Hooper Albert Dickinson Jowett.

Potter, Henry Noel, [preparation of silicon monoxide], 1908, A., ii, 277.

Ley Francis. See Theodor Potter, Curtius.

Michael Cresse, bacteria as Potter, agents in the oxidation of amorphous carbon, 1908, A., ii, 524.

electrical effects accompanying the decomposition of organic com-

pounds, 1911, A., ii, 913. Potter, Paul David. See Victor Lenher, and Alan Wilfrid Cranbrook Menzies.

Potter, Ralph S. See William Albert Noyes.

Pottevin, Henri, influence of the stereochemical configuration of glucosides on the activity of hydrolytic diastases, 1903, A., i, 378; ii, 230.

lipolytic actions, 1903, A., ii, 439.

Pottevin, Henri, reversibility of lipolytic action, 1903, A., ii, 494.

biochemical syntheses of olein and some esters, 1904, A., i, 284. bacteriology of infectious gastro-

enteritis, 1905, A., ii, 748.

reversible enzyme action; formation and decomposition of esters by pancreatic enzymes, 1906, A., i, 917.

Potts, Harold Edward. See Frederick George Donnan.

Pouchon, M., conductivity of acid solutions in presence of salts, 1909, A., i, 12.

Pouget, Isidore, estimation of nitrites and nitrates by the "sulpho-phenol" reagent, 1910, A., ii, 652.

Pouget, Isidore, and D. Chouchak, estimation of carbon, 1908, A., ii,

colorimetric estimation of phosphoric acid, 1909, A., ii, 266; 1911, A., ii, 823.

relationship between the fertility of the soil and the contained phosphoric acid soluble in water, 1911, A., ii, 145.

influence of the concentration of solutions of nutritive substances on their absorption by plants, 1912, A., ii, 796.

the law of the minimum, 1912, A., ii, 975.

Pouget, Isidore, and Guiraud, nitrification of soils in situ, 1909, A., ii, 428.
 Pouget, Isidore. See also D. Chouchak.
 Pougnet, Jean, a general reagent for

phenols, 1909, A., ii, 624.
action of ultra-violet rays on plants
yielding coumarin, and on plants
in which the odour is due to decomposable glucosides, 1910, A., ii,

action of ultra-violet rays in accelerating chemical reactions and in modifying a state of false equilibrium, 1911, A., ii, 85.

action of ultra-violet light on the green husks of vanilla, 1911, A., ii,

Poulenc Frères. See Les Etablissements Poulenc Frères.

Poulsson, Edvard, isocreatinine and its identity with creatinine, 1904, A., i, 768.

the behaviour of moss carbohydrates in the human body, and their use in diabetes mellitus, 1907, A., ii, 39. action of radium emanations [in dia-

betes], 1908, A., ii, 1057.

Poulsson, Edvard, the different action of barium chloride on the frog's heart when applied internally and externally, 1910, A., ii, 529.

Poulton, Edward Palmer. See John Scott

Haldane.

Pound, James Robert, physical properties of mixtures of ether and sulphuric acid, 1910, P., 341; 1911, T., 698.

Pound, V. E., absorption of the different types of β-rays, together with a study of the secondary rays excited by them, 1909, A., ii, 204.

the secondary rays excited by the arays from polonium. I. & II., 1912,

A., ii, 514, 886.

Povarnin, G., hydrolysis of salts of the cations Al... and Cr..., 1909, A., ii, 1016; 1910, A., ii, 412.

Povarnin, G., and Chitrin, reduction of Cr₂O₇" by thiosulphate, 1909, A., ii, 1020.

Povarnin, G., and A. Sekreteff, the root of the kermek (Statice phumbaginaceae), 1911. A., ii, 64.

1911, A., ii, 64.
Powell, H. W. See Anton Julius Carl-

Power, Frederick Belding, chemistry of the stem of Derris uliginosa; an eastern fish poison, 1903, A., ii, 323.

Power, Frederick Belding, and Marmaduke Barrowcliff, the constituents of the seeds of Hydnocarpus wightiana and of Hydnocarpus anthelminthicus; isolation of a homologue of chaulmoogric acid, 1905, T., 884; P., 175.

the constituents of the seeds of Gynocardia odorata, 1905, T., 896; P.,

176

Power, Frederick Belding, and Henry Browning, jun., the constituents of Taraxacum root, 1912, T., 2411; P., 285.

Power, Frederick Belding, and Thomas Callan, the constituents of the seeds of Casimiroa edulis, 1911, T., 1993; P., 257.

chemical examination of jambul seeds, 1912, A., ii, 480.

Power, Frederick Belding, and Frank Howorth Gornall, the constituents of chaulmoogra seeds, 1904, T., 838; P., 135.

the constitution of chaulmoogric acid, 1904, T., 851; P., 136.

gynocardin, a new cyanogenetic glucoside; preliminary note, 1904, P., 137. Power, Frederick Belding, and Frederic Herbert Lees, constituents of kô-sam seeds (Brucea sumatrana), 1903, A.,

the constituents of the essential oil of Californian laurel, 1904, T., 629;

P., 88.

gynocardin, a new cyanogenetic glucos-

ide, 1905, T., 349; P., 88.

Power, Frederick Belding, and Charles Watson Moore, the constituents of the bark of Prunus serotina; isolation of l-mandelonitrile glucoside, 1909, T., 243; P., 27.

the constituents of the fruit of Ecballium elaterium, 1909, T., 1985;

P., 260.

chemical examination of elaterium and the characters of elaterin, 1909, A.,

the constituents of colocynth, 1910,

T., 99; P., 3.

the constituents of the leaves of Prunus serotina, 1910, T., 1099; P., 124.

the constituents of bryony root, 1911, T., 937; P., 118.

Power, Frederick Belding, and Harold Rogerson, chemical examination of Ipomæa purpurea, 1908, A., ii, 725. chemical examination of jalap, 1909,

A., i, 819. the constituents of leptandra, 1910, T.,

1944; P., 218. chemical examination of Ornithogalum

thyrsoides, 1910, A., ii, 338.

chemical examination of the tuberous root of Ipomæa horsfalliæ, 1910, A., ii. 888.

chemical examination of the root of Ipomæa orizabensis, 1911, P., 304; 1912, T., 1.

chemical examination of scammouv root and of scammony, 1912, T.,

398; P., 39.

Power, Frederick Belding, and Arthur Henry Salway, the constituents of the essential oil of nutmeg, 1907, T., 2037; P., 285; discussion, P., 285.

examination of the fruit of Brucea antidysenterica, 1907, A., ii, 807.

the constituents of the expressed oil of nutmeg, 1908, T., 1653; P., 197.

chemical examination of Micromeria chamissonis (Yerba buena), 1908, A., ii, 418.

chemical examination and physiological action of nutmeg, 1909, A.,

ii, 169.

the constituents of red clover flowers, 1910, T., 231; P., 10.

Power, Frederick Belding, and Arthur Henry Salway, chemical examination of watermelon seed, 1910, A., ii, 337.

chemical examination of pumpkin seed. 1910, A., ii, 338.

the constituents of Withania somnifera. 1911, T., 490; P., 53.

constituents of Iris versicolor rhizome. 1911, A., ii, 143,

chemical examination of the bark of Erythrophlæum guineense, 1912, A.,

Power, Frederick Belding, and Frank Tutin, a lævorotatory modification of quercitol, 1904, T., 624; P., 87. examination of Gymnema leaves, 1904, A., ii, 763.

the relation between natural and synthetical glycerylphosphoric acids, 1905, T., 249; P., 72.

the constituents of the essential oil from the fruit of Pittosporum undulatum, 1906, T., 1083; P., 170. examination of Athusa cynapium,

1906, A., ii, 192.

chemical and physiological examination of the fruit of Chailletia toxicaria (a West African poison), 1906, A., ii, 794.

examination of Eriodictyon, 1906,

A., ii, 885.

examination of Grindelia, 1906, A.,

ii, 885; 1908, A., ii, 526. the constitution of homoeriodictyol: a crystalline substance from Eriodictyon leaves, 1907, T., 887; P., 133, 243.

the constituents of olive leaves, 1908. T., 891; P., 117.

the constituents of olive bark, 1908, T., 904; P., 117.

Lippia scaberrima (beukess boss), 1908, A., ii, 59.

"oleuropein" from olive leaves, 1909, A., ii, 427.

Power, Frederick Belding. See also Marmaduke Barroweliff.

Powis, Frank. See Harry Medforth Dawson.

Poyneer, Lois E., and H. Leroy Duffin, the fruit of Medeola virginica and Ampelopsis quinquefolia, 1909, A., ii. 389.

Poynton, Frederick John, addition of sodium citrate to cows' milk in infant feeding, 1904, A., ii, 625.

Poynton, Frederick John, and William Vernon Shaw, relation of Staphylococcus pyogenes aureus to rheumatic fever, 1904, A., ii, 633.

Pozzi, G. B. See Temistocle Jona.

Pozzi-Escot, Marius Emmanuel, diastatic hydrolysis of salol, 1903, A., i. 590.

reducing enzymes, 1903, A., i, 670. separation of manganese from cobalt

and nickel, 1903, A., ii, 107. elimination and estimation of manganese in certain products, 1903.

A., ii, 392. formation of hydrogen sulphide by organic extracts and proteins, 1904, A., i, 130.

azo-dyes from 3:3'-dihydroxy-2:2'dinaphthyl, 1904, A., i, 789.

conversion of nitrobenzene into aniline by means of philothion and yeast reductases, 1904, A., i, 792.

study and synthetical preparation of some s-arylthiocarbamides, 1904,

A., i, 869.

the simultaneous existence in the living cell of oxidising and reducing diastases; the oxidising property of reductases, 1904, A., ii, 272.

colour reactions of molybdic acid,

1904, A., ii, 294.

Nicloux's process for estimating very small quantities of alcohol, 1904, A., ii, 450.

apparatus for removing volatile matters by a current of steam, 1904, A., ii,

554.

formation of hydrogen sulphide by alcoholic fermentation, 1904, A., ii, 580.

yeast from the cane sugar of Nicaragua, 1904, A., ii, 580.

poisonous action of chromium compounds on lower fungi, especially Saccharomycetæ, 1904, A., ii, 764.

azo-derivatives of 3:3'-dihydroxy-2:2'dinaphthyl and 3:3'-dihydroxy-1:1'dinaphthyl, 1905, A., i, 101.

study and synthetical preparation of arylthiohydantoins, 1905, A., 159.

new characteristic reaction of cobalt, 1905, A., ii, 423.

synthesis of tertiary amidines [isodiphenylcarbamidoacetanilide], 1907, A., i, 355.

crystalline double iodide of bismuth and strychnine, 1907, A., i, 868.

double iodide of bismuth and cocaine, 1907, A., i, 868.

action of phenylhydrazine on molybdates, 1907, A., ii, 401.

detection and colorimetric estimation of traces of gold by means of phenylhydrazine, 1907, A., ii, 403.

Pozzi-Escot, Marius Emmanuel, some new ureometers, 1907, A., ii, 414; 1909, A., ii, 276.

vanillin as a test for soluble ferments.

1907, A., ii, 516.

application of microchemical analysis to the reaction of alkaline earths with heavy metals the oxides of which are soluble in ammonia; mixed calcium salts, 1907, A., ii, 653.

modification of Regnard's ureometer,

1907, A., ii, 724.

microscopic detection of very small quantities of bromine, 1907, A., ii, 810.

a new very sensitive method for the detection of nickel, 1907, A., ii,

detection of nickel as double nickel ammonium molybdate, 1908, A., ii, 133.

separation and estimation of cobalt and nickel, 1908, A., ii, 229.

detection and estimation of nickel in presence of cobalt, iron, and manganese, 1908, A., ii, 229.

estimation of nickel in the presence of a very large excess of cobalt, 1908.

A., ii, 324.

method for the rapid estimation of nickel in the presence of cobalt, 1908, A., ii, 539.

separation and estimation of nickel in the presence of cobalt and all other elements which are not precipitated by hydrogen sulphide in acid solution, 1908, A., ii, 540.

use of phenolphthalein as indicator in the titration of acids in the presence of sulphurous acid, 1908, A., ii,

628.

estimation of nickel, 1908, A., ii, 635. rapid estimation of nickel in the presence of all elements of groups 4, 5, and 6, 1908, A., ii, 635.

absorption bulbs for use with bottles containing standard solutions, etc.,

1908, A., ii, 729.

estimation of tartaric acid in argol and wine lees, 1908, A., ii, 740.

detection of sucrose, 1908, A., ii, 740. qualitative and quantitative separation of metals, 1908, A., ii, 892.

detection and estimation of nickel and cobalt, 1908, A., ii, 899.

detection of chromium, 1908, A., ii,

new method of estimating the fixed and volatile acids in wine, 1908. A., ii, 904.

Pozzi-Escot, Marius Emmanuel, detection of cobalt in the presence of large quantities of nickel, 1908, A., ii, 988.

method of estimating succinic acid in fermented liquids containing other fixed and volatile acids, 1908, A., ii,

molybdates of nickel and cobalt, 1908, A., ii, 1042.

apparatus for the estimation of carbon dioxide, etc., 1908, A., ii, 1071.

estimation of malic acid, 1908, A., ii,

preparation of absolute alcohol, 1909, A., i, 126.

organic analysis with sodium peroxide, 1909, A., ii, 188.

phenolphthalein as a reagent for blood,

1909, A., ii, 195. separation of iron from the elements of groups IV and V and detection of the rare earths in arable soils, 1909, A., ii, 350.

separation of chromium, iron, aluminium, and zinc in a mixture,

1909, A., ii, 621.

reaction of cobalt: microchemical nickel and cobalt dimethylaminobenzeneazobenzenesulphonates, 1909, A., ii, 705.

estimation of alkali phosphates by direct titration, 1909, A., ii, 759. some precipitation reactions with p-

sulphobenzeneazodimethylaniline, 1909, A., ii, 760.

cuvette arrangement for the estimation of nitrates by Schloesing's process, 1909, A., ii, 935.

detection of sucrose and sugars in

general, 1909, A., ii, 946. detection of nitrates in presence of

(chlorates, oxidising substances bromates) and iodides and bromides. 1909, A., ii, 1051.

reduction of nitric nitrogen to ammonia; new process for the estimation of nitrates, 1910, A., ii, 71.

alcoholic fermentation in the presence of sulphurous acid, 1910, A., ii, 148.

a new sensitive indicator; dimethylbrown, 1910, A., ii, 153.

estimation of nitrogen in nitrates by reduction with the system aluminium-mercury, 1910, A., ii, 155.

separation of vanadium, molybdenum, chromium, and nickel in special steels, 1910, A., ii, 160.

estimation of phosphates by direct titration, 1910, A., ii, 345.

Pozzi-Escot, Marius Emmanuel, new rectification tubes, 1911, A., ii, 256. laboratory muffle furnace, 1911, A., ii,

rapid detection of elements furnishing sulphides insoluble in dilute acids,

1911, A., ii, 940.

extraction apparatus which prevents the formation of emulsions, 1911, A., ii, 975.

Pozzi-Escot, Marius Emmanuel. See also Keijiro Aso.

Prabhakar, Moreshwar, See August Darapsky.

Prachfeld, Fr. See B. Erben. Prade, Rudolf. See Paul Pfeiffer.

Praetorius, Artur, hydrolysis of methyl benzenesulphonate, 1905, A., i. 186; 1906, A., i, 736. hydrolysis of benzenesulphonic esters

in alcohol, 1907, A., i, 835. Praetorius, Artur. See also Max Bamberger.

Praetorius, Paul, and Franz Korn, action of light on unsaturated ketones in presence of uranyl salts, 1910, A., i, 859.

Walter, Praetorius. See Arthur Hantzsch.

Prager, Bernhardt, action of p-nitrobenzaldehyde on ethyl phenylazoacetoacetate, 1903, A., i, 540.

fatty aromatic aminoazo-compounds. III., 1903, A., i, 540.

azo-derivatives of ethyl oxalocrotonate, 1905, A., i, 391.

Prager, Bernhardt. See also Claude Flamand.

Prager, Hermann, See Friedrich Kehrmann.

Prager, W. L., esterification. II., 1909, A., ii, 33.

Prager, W. L. See also Martin Andre Rosanoff.

Prandi, Oreste, apparatus for the continuous extraction of liquids, 1907, A., ii, 946.

Prandi, Oreste, and Angelo Civetta, manganese in wine, 1911, A., ii, 648. Prandtl, Wilhelm, the spitting of alkali

vanadates, 1905, A., ii, 170.

Prandtl, Wilhelm, and Benno Bleyer, preparation of vanadium and other metals by the thermite method, 1909, A., ii, 1022.

the atomic weight of vanadium, 1910,

A., ii, 134.

the atomic weight of vanadium. II. The chlorine content of vanadium oxytrichloride and the ratio V₂O₅: V₂O₃, 1910, A., ii, 718.

Prandtl, Wilhelm, and Benno Bleyer, preparation of vanadium, 1910, A., ii, 1075.

Prandtl, Wilhelm, and Paul Borinski, pyrosulphuryl chloride, S2O5Cl2, 1909, A., ii, 310.

of pyrosulphuryl chloride. action SoOsClo, on sulphur, selenium, and tellurium, 1909, A., ii, 566.

Prandtl. Wilhelm, and Maurice Humbert, hetero-poly-acids containing vanadic

acid, 1912, A., ii, 167.

Prandtl, Wilhelm, and Fritz Lustig, complex compounds of quinquevalent vanadium with quadrivalent elements, 1905, A., ii, 395.

vanadium selenium compounds, 1907,

A., ii, 477.

Prandtl, Wilhelm, and Hermann Manz, the action of calcium fluoride on vanadium pentoxide, 1911, A., ii, 990; 1912, A., ii, 561.

Prandtl, Wilhelm, and Hans Murschhauser, spitting of the acid vanadates of univalent metals, 1908, A., ii, 46;

1909, A., ii, 149.

Prandtl, Wilhelm, and Oskar Rosenthal, complex compounds of quinquevalent vanadium and quadrivalent elements. II. Compounds of sodium stannate with sodium orthovanadate, sodium orthophosphate, and sodium orthoarsenate, 1907, A., ii, 476.

Pratolongo, Ugo, citrophosphate solutions. I. Homogeneous equilibrium in aqueous solution studied by the cryoscopic method, 1911, A., ii, 865. adsorption compounds (Van Bemmelen),

1911, A., ii, 1069.

citrophosphate solutions, 1912, A., i, 412.

Prats Aymerich, José, hydrolite [calcium hydride], 1907, A., ii, 543.

azo-dyes as indicators, 1907, A., ii, 573. Pratt, David Shepard, a new melting-

point apparatus, 1912, A., ii, 625 Pratt, David Shepard. See also Emile Monnin Chamot, Harry Drake Gibbs, and William Ridgely Orndorff.

Pratt, Gilbert H. See Frederic B. Forbes. Pratt, Lionel. See Frederick Mollwo Perkin.

Pratt, Lester A., and Charles James, yttrium potassium oxalate, 1911, A., i, 353.

new rare earth compounds, 1911, A., ii,

Pratt, Lester A. See also Charles James. Pratt, T. M. See Henry V. Arny. Prause, Georg. See Otto Fischer. Prausnitz, Wilhelm. See Karl Helle.

Praxmarer, Anton, catecholcarboxylic acids, 1907, A., i, 216.

Prebble, William Clarence. See Frederick Mollwo Perkin.

Precht, Heinrich, oxidation of ferrous chloride by water with evolution of hydrogen, 1906, A., ii, 91.

Precht, Julius, energy of radiation from

radium, 1907, A., ii, 3.

Precht, Julius, and Chiri Otsuki, radiation from hydrogen peroxide, 1905, A., ii, 296.

sensitiveness of photographic action due to hydrogen peroxide, 1905, A., ii, 495.

Precht, Julius, and Erich Stenger, fundamental principles of three-colour photography, 1905, A., ii, 566.

energy of chemical radiation through three-colour filters, 1905, A., ii, 566. radiation-sensitiveness of silver bromide

gelatin for white, green, and orange light, 1905, A., ii, 566.

Precht, Julius. See also Carl Runge. Pregl. Fritz, isolation of deoxycholic and cholic acids from fresh ox-bile and oxidation products of the acids, 1903, A., i, 318,

carboxyhæmochromogen, 1905, A., i, 622. cause of the fluorescent reaction of bile acids with sulphuric acid, 1905,

A., i, 728.

estimation of carbon and hydrogen in organic compounds, 1905, A., ii, 420.

the cleavage products of the egg-shell of Scyllium stellare, 1908, A., ii, 609. the monoamino-acids of paramucin, 1909, A., i, 124.

common constitution of the three specific biliary acids, 1910, A., i, 321.

Pregl, Fritz, and Hans Buchtala, isolation of the individual acids in bile. 1911, A., ii, 1009.

Pregl, Fritz. See also Emil Abderhalden. and Karl Berthold Hofmann.

Preis, Hans, See Hermann Thoms.

Preiss, J. See Anton Skrabal.

Preiswerk, Ernst, 1-methyl-2:3:3-trimethylenetricarboxylic acid, 1903, A., i, 459.

Preiswerk, Ernst. See also Fritz Fichter. Preiswerk, Heinrich, sodalite-trachyte from Pico de Teyde, Teneriffe, 1909, A., ii, 678.

Preller, I. See O. Kallauner.

Prenntzell, Wilhelm. See Theodor

Prentice, Bertram, the constitution of pyrazolidone derivatives; B-phenylazoisovaleric acid and s-B-phenylhydrazinobutyric acid, 1904, T., 1667; P., 220.

Prentice, James. See George Gerald Henderson.

Prescher, Johannes, estimation of manganese in drinking waters, 1907, A., ii. 55.

Prescott, Basil, ilvaite from Shasta Co., California, 1908, A., ii, 705.

Prescott, William George, and Samuel Smiles, the interaction of aromatic disulphides and sulphuric acid, 1911,

T., 640; P., 65. a synthesis of "thioindigo"; liminary note, 1911, P., 317.

Preston, H. L., Reed City meteorite,

1903, A., ii, 492.

Preston, Richard William Dades, and Humphrey Owen Jones, the rate of reaction of alkyl haloids with certain tertiary bases, 1912, T., 1930; P., 229.

Preti, Luigi, action of salts on the fermenting power of different diastatic ferments, 1907, A., i, 668.

autolysis, 1907, A., ii, 897.

spontaneous separation of casein compounds from milk, 1907, A., ii, 899.

influence of lead salt on autolysis, 1909, A., ii, 329.

action of salts on autolysis, 1909, A., ii, 596.

uric acid formation. IV., 1909, A.,

ii, 909. action of lead hydrosol and lead acetate on metabolism, 1909, A., ii, 1032.

muscular work and its relation to ketone formation, 1911, A., ii, 628.

the catalytic action of lead on the formation and destruction of uric acid, 1912, A., ii, 1076.

Preti, Luigi. See also Carlo Bezzola,

and Giuseppe Franchini.

Prettner, August, estimation of nickel in nickel steels by the electrolytic method and the methods of Brunck and Grossmann, 1909, A., ii, 441.

estimation of carbon in steel by means of Allihn's filter tube, 1910, A., ii, 653.

August. See also Alfred Prettner. Einhorn.

Pretzell, Carl. See Wilhelm Auten-

Pretzfeld, Charles Joseph, estimation of mercury, 1903, A., ii, 335.

Preuner, Gerhard, the dissociation constant of water and the electromotive force of the gas element, 1903, A., ii, 51.

the isotherm of the dissociation of sulphur at 448°, 1903, A., ii, 644.

Preuner, Gerhard, equilibrium between iron, ferrosoferric oxide, hydrogen, and water vapour, 1904, A., ii.

discharge of the anion of acetic acid. 1907, A., ii, 665.

dissociation of hydrogen sulphide. 1907, A., ii, 861.

Preuner, Gerhard, and Johannes Brockmöller, gas pressure measurements by means of a quartz-glass spiral manometer: isotherms of selenium, sulphur, arsenic, phosphorus; dissociation of copper sulphide and of hydrogen selenide, 1912, A., ii, 1145.

Preuner, Gerhard, and Ernest Bowman Ludlam, decomposition potential of acetic acid and propionic acid, 1907.

A., ii, 665.

Preuner, Gerhard, and Wilhelm Schupp. dissociation of hydrogen sulphide, 1909, A., ii, 977.

dissociation isotherms of sulphur between 300° and 850°, 1910, A., ii,

118.

Preuner. Wilhelm. See August Michaelis.

Preuss, Georg, apparatus for the estimation of sulphur in iron and steel, 1909, A., ii, 933; 1910, A., ii, 238, 893.

estimation of silicon in high-grade ferrosilicon, 1910, A., ii, 346.

apparatus for the estimation of carbon, arsenic, and sulphur in iron and steel, 1910, A., ii, 1109.

gas generation apparatus, 1911, A., ii, 975.

an absorption vessel for the Orsat gas apparatus, 1912, A., ii, 983.

apparatus for the estimation of carbon, 1912, A., ii, 1210.

Prianischnikoff, Dmitri N., Ritthausen's classification of vegetable proteins, 1904, A., i, 638.

action of 4 per cent. sulphuric acid on legumin, 1904, A., i, 702.

production of asparagine, 1904, A., ii, 434.

manurial experiments with lime, 1904, A., ii, 586.

effects of ammonium salts on the assimilation of phosphoric acid by higher plants, 1905, A., ii, 413.

root secretions, 1906, A., ii, 45.

potassium felspar and mica as [manures], 1906, A., ii, 47.

relative value of different phosphates, 1906, A., ii, 796,

physiological characterisation ammonium salts, 1909, A., ii, 259. Prianischnikoff, Dmitri N., influence of calcium carbonate and ammonium sulphate on the assimilation of phosphoric acid from different sources, 1911, A., ii, 432.

Prianischnikoff, Dmitri N., and Schuloff, synthetic production asparagine in plants, 1910, A., ii,

885.

Pribram, Bruno O., modification of Fischer's ester method, 1910, A., i,

the esterification method and its use in experiments on metabolism, 1911,

A., ii, 623.

the utilisation of B-hydroxybutyric acid and the meaning of acetoacetic acid in the normal and diabetic livers. I., 1912, A., ii, 661. estimation of l-\beta-hydroxybutyric acid

in urine and blood, 1912, A., ii,

700.

Přibram, Egon, occurrence of bromine in normal human organs, 1907, A., ii, 111.

See also Otto Porges. Přibram, Egon.

Přibram, Ernst, physiological action of carbocyclic acids, 1904. 757.

cocaine hæmolysis, 1911, A., 125.

disastase. II., the preparation of pure diastase and its properties, 1912, A., i, 927.

Přibram, Ernst. See also Ernst Mayer-

hofer, and Otto Porges.

Přibram, Hugo, fate of cholesterol and its esters in the animal organism, 1907, A., ii, 105.

Pribram, Hugo, and Julius Löwy, the lipolytic enzyme of the urine, 1912, A., ii, 370.

Přibram, Hugo. See also Emil Abderhalden.

Pribram, Richard, optical rotation of iodonium tartrate, 1907, A., ii, 207.

Pribram, Richard, and Adolf Franke, condensations with ultra-violet light, 1911, A., i, 420; 1912, A., i, 412.

Price, (Miss) Gwynnedd Mary. See

James Frederick Spencer.

Price, Thomas Slater, the composition of Caro's acid, 1903, T., 543; P.,

Caro's permonosulphuric acid, 1905,

P., 299; 1906, T., 53.

depression of the freezing point of aqueous solutions of hydrogen peroxide by potassium persulphate and other compounds, 1907, T., 531; P., 75.

Price. Thomas Slater, and Arthur du Pré Denning, influence of persulphates on the catalytic decomposition of by means of hydrogen peroxide colloidal platinum, 1904, A., ii, 247.

Price, Thomas Slater, and John Albert Newton Friend, the effect of colloidal platinum on mixtures of Caro's persulphuric acid and hydrogen peroxide,

1904, T., 1526; P., 187. rice, Thomas Slater, and Thomas Price, Clement Humphreys, apparatus used in rapid methods of electroanalysis; analysis of brass, 1909, A., ii, 342. rapid electroanalysis with stationary

electrodes, 1910, A., ii, 446.

Price, Thomas Slater, and Alfred William Tovey Hyde, adaptation of the tap-funnel to rapid electroanalysis with stationary electrodes, 1911, A., ii, 539.

Price, Thomas Sluter, and Lionel Manfred Jones, the preparation of diselenides; dibenzyl diselenide; preliminary

note, 1908, P., 134.

the benzyl and nitrobenzyl selenosulphates and the benzyl and nitrobenzyl diselenides, 1909, T., 1729; P., 234.

Thomas Slater, and Douglas Price. Frank Twiss, the electrolytic preparation of dialkyl disulphides; preliminary note, 1906, P., 260.

the electrolytic preparation of disulphides. Part I. Dibenzyl disulphide and diethyl disulphide,

1907, T., 2021; P., 263.

the preparation of disulphides. Part II. The action of alkalis on sodium alkyl thiosulphates, 1908, T., 1395; P., 179.

the preparation of disulphides. III. The nitrobenzyl disulphides, 1908, T., 1401; P., 185; 1909, P.,

the preparation of disulphides. Part IV. Esters of dithiodiglycollic and dithiodilactylic acids, 1908, T., 1645; P., 198.

the preparation of disulphides. Part V. Diethyl esters of a-dithiodibutyric, a-dithiodi-isobutyric, and a-dithiodi-isovaleric acids, 1909, T., 1050; P., 165.

the preparation of disulphides. Part VI. Note on a new method of preparing disulphides, 1909, T., 1489;

P., 211.

the preparation of disulphides. Part VII. The nitrobenzyl mercaptans and disulphides, 1909, T., 1725; P., 232.

Price. Thomas Slater, and Douglas Frank Twiss, action of alkalis on sodium alkyl thiosulphates, 1909, A., i, 81.

the action of sodium or potassium hydroxides on sodium alkyl thiosulphates and on disulphides, 1910, T.,

1175, P., 136.

the refractivity of sulphur in various aliphatic compounds, 1912, T., 1259; P., 159.

Price, William B., manganic periodates,

1903, A., ii, 652.

Prideaux, Edmund Brydges Rudhall, note on the fluorides of selenium and tellurium, 1905, P., 238; discussion, P., 239.

note on bromine fluoride, 1905, P.,

240.

some reactions and new compounds of fluorine, 1906, T., 316; P., 19.

production of ozone by electrolysis of alkali fluorides, 1906, A., ii, 741.

the atomic volumes of phosphorus, 1907, T., 1711; P., 207.

the atomic volumes of phosphorus. Part II. Phosphorus and bromine, 1908, P., 214; 1909, T., 445.

the vapour pressures and molecular volumes of the mercuric haloids and the relations between atomic volumes of elements before and after combination, 1910, T., 2032; P., 207.

relation between composition and conductivity in solutions of metaand ortho-phosphoric acids, 1910,

A., ii, 12.

the second and third dissociation constants of orthophosphoric acid, 1911,

T., 1224; P., 121.

relations between critical temperature, boiling point, and expansion coefficient of phosphorus pentachloride, 1911, A., ii, 368.

the sodium phosphate standards of

acidity, 1911, A., ii, 1129. Prideaux, Edmund Brydges Rudhall. See also Clive Cuthbertson.

Priess, Hans W., lactones as fish poisons, 1911, A., ii, 638.

constituents of Fagara xanthoxyloides, 1911, A., ii, 646.

Priess, Hans W. See also Carl Mannich, and H. Strunk. Priestley, John Gillies. See John Scott

Haldane, and Siegfried Ruhemann. Priestley, Joseph Hubert. See Francis Lawry Usher.

Prigent, Georges. See Fernand Malengreau.

Priglinger. J. See Zdenko Hanns Skraup.

Prileschaeff, Nicolaus Alexanderovitsch, oxoctenol, 1904, A., i, 795.

comparative oxidation of di-isobutyl ene by means of potassium and magnesium permanganate, 1907. A...

action of acetic anhydride on di-isobutylene glycol, 1907, A., i, 816.

oxidation of unsaturated compounds with organic peroxides, 1910, A., i. 86, 295; 1911, A., i, 255.

oxidation of unsaturated compounds with organic peroxides. II. Oxidation of derivatives of unsaturated hydrocarbons with one double linking, 1911, A., i, 604.

oxidation of unsaturated compounds with organic peroxides. III. Oxidation of derivatives of unsaturated compounds with two double link-

ings, 1912, A., i, 633.

Primavera, Arturo, a simple method for estimating fat in human milk, 1907, A., ii, 410.

Primot, Charles, vanillin as a test for antipyrine and kryogenine; detection of antipyrine in pyramidone, 1910, A., ii. 83.

Pring, John Norman, the reduction of metallic oxides by aluminium carbide, 1905, T., 1530; P., 230. the formation of some carbides, 1908,

T., 2101; P., 240.

the direct union of carbon and hydrogen at high temperatures. II., 1910, T., 498; P., 55.

Pring, John Norman, and Dorian Macefield Fairlie, the synthesis of hydrocarbons at high temperatures, 1911, T., 1796; P., 217.

the methane equilibrium, 1911, P.,

305 ; 1912, T., 91.

Pring, John Norman, and William Fielding, the preparation at high temperatures of some refractory metals from their chlorides, 1909, T., 1497; P., 215.

Pring, John Norman, and Robert Salmon Hutton, the direct union of carbon and hydrogen at high temperatures, 1906, T., 1591; P., 260.

Pring, John Norman, and Albert Parker, ionisation produced by carbon at high temperatures, 1912, A., ii, 115.

Pring, John Norman. See also Walter Hayhurst.

Pringal, Erich, influence of traces of nitrous gases on the condensation of water vapour, 1908, A., ii, 798,

Pringle, Harold, the presence of secretin during feetal life, 1911, A., ii, 745.

Pringle, Harold, and Wilhelm Cramer. assimilation of protein introduced enterally, 1908, A., ii, 709.

Pringle, Harold, and John Tait, anticoagulants and frog's blood, 1910, A., ii 735 1911 A ii 730

ii, 725; 1911, A., ii, 739. Pringle, Harold. See also Wilhelm

Cramer, and Albrecht Kossel. Pringsheim, Ernst. See Hans Hugo

Pringsheim.
Pringsheim, Hans Hugo, rapid estimation of chlorine, bromine, and iodine in organic compounds by means of sodium peroxide, 1904, A., ii, 146.

analysis of organic substances with the help of sodium peroxide, 1904, A.,

ii, 447, 516.

use of sodium peroxide in analysis,

1904, A., ii, 775.

coloured and colourless di-imines, 1905, A., i, 934.

fusel oil, 1905, A., ii, 274.

origin of fusel oil; an alcohol-producing bacterium, 1905, A., ii, 848.

formation of fusel oil in fermentation by means of "acetondauerhefe,"

1906, A., ii, 880.

influence of the chemical constitution of the nitrogenous food material on the fermenting power of yeast, 1907, A., ii, 44.

nitrogenous nutrition of yeast, 1907,

A., ii, 287.

the influence of the chemical constitution of the nitrogenous nutriment on the fermentative action and growth of certain fungi, 1908, A., ii, 316.

formation of fusel oil by certain fungi,

1908, A., ii, 316.

the depression of fusel oil formation, and the part played by bacteria in the formation of the higher alcohols during fermentation, 1908, A., ii, 723.

de-amidising ferments of fungi, 1908,

A., ii, 773.

the use of sodium peroxide for the quantitative analysis of organic compounds. III., 1909, A., ii, 93.

the part played by bacteria in the formation of fusel oil, 1909, A., ii, 334.

studies on the amount of oxydases in the expressed juice of fungi, 1909, A., ii, 1045.

natural occurrence of d-asparagine, 1910, A., i, 303.

Pringsheim, Hans Hugo, cellulose as source of energy in the assimilation of atmospheric nitrogen, 1910, A., ii, 230.

hydrolysis of racemic amino-acids by

fungi, 1910, A., ii, 437.

the assimilation of atmospheric nitrogen by thermophilic bacteria, 1911, A., ii, 916.

fermentative degradation of cellulose,

1912, A., ii, 587.

fermentative decomposition of the hemicelluloses. I. A trisaccharide as intermediate product of the hydrolysis of mannan, 1912, A., i, 833.

Pringsheim, Hans Hugo, and James A. Gibson, use of sodium peroxide in the analysis of organic substances. II., 1905, A., ii, 609.

Pringsheim, Hans Hugo, and Alfred Langhans, crystallised polysaccharides from starch, 1912, A., i, 832.

Pringsheim, Hans Hugo, and Ernst Pringsheim, agar-agar as source of energy in the assimilation of atmospheric nitrogen, 1910, A., ii, 230.

Pringsheim, Hans Hugo, and Géza Zemplén, enzymes which produce cleavage of polysaccharides in the expressed juice of fungi, 1909, A., ii, 1045.

Pringsheim, Hans Hugo. See also Emil Abderhalden.

Pringsheim, J., the preparation and chemical properties of the xanthoma substance, with some investigations of the fat-like, doubly-refracting substance in large, white kidneys, 1909, A., ii, 74.

Pringsheim, Josef, tolerance to alcohol,

1908, A., ii, 767.

Pringsheim, P. See J. Franck, and Robert Pohl. Prins, Ada, liquid mixed crystals in

binary systems, 1909, A., ii, 869. critical phenomena of the ternary system, ethyl ether, anthraquinone, and naphthalene, 1910, A., ii, 1050.

mixed crystals in liquid-crystalline systems and the phase rule, 1911, A., ii, 196.

Prins, Ada. See also Ernst Hendrik Büchner.

Prins, H. J., a filtering apparatus for low temperatures, 1912, A., ii, 38. vacuum sublimation apparatus, 1912, A., ii, 533.

Prins, H. J. See also Jacob Böeseken. Prinsen Geerligs. See Geerligs. Prior, Eugen, barley, 1905, A., ii, 277. relation of the amount of nitrogen to the character of barley, 1906, A., ii, 135.

relations between the amounts of nitrogen and the character of Austrian barleys to the yield of extract and to the friability of the

malt, 1906, A., ii, 135.

Prior, George Thurland, connexion between the molecular volume and chemical composition of some crystallographically similar minerals, 1903, A., ii, 377.

tealite, a new sulphostannite from Bolivia, and its relations to frankeite and cylindrite, 1904, A., ii, 743.

dundasite from North Wales, 1906, A., ii, 456.

meteoric stone from Simondium, Cape Colony, 1910, A., ii, 315.

analysis of seligmannite, zinciferous tennantite, and fuchsite from Binn, Switzerland, 1910, A., ii, 781.

Prior, George Thurland, and Ananda K. Coomara-Swamy, serendibite, a new boro-silicate from Ceylon, 1903, A., ii, 380.

Prior, George Thurland, and Ferruccio Zambonini, strüverite and its relation to ilmenorutile, 1908, A., ii, 398.

Prior, George Thurland. See also George Frederick Herbert Smith, Leonard James Spencer, and Ferruccio Zambonini.

Pritze, Max, estimation of nickel and cobalt according to Rosenheim-Huldschinsky, 1909, A., ii, 705.

Pritze, Max. See also Arthur Rosenheim.

Přiwoznik, Eduard, aqua regia, 1911, A., ii, 484.

bismuth ores, 1911, A., ii, 991.

device for the complete precipitation of gold, 1912, A., ii, 562.

Prjewalsky, Eugene, preparation of amethyladipic acid, 1903, A., i, 728.

Probeck, Eugene G. See Roger Frederick Brunel.

Probst, Hans. See Fritz Fichter.

Prochnow, Adolf, estimation of the xanthine bases in cocoa and chocolate, 1910, A., ii, 166.
estimation of fat in cocoa and choco-

late, 1910, A., ii, 556. Prochnow, Adolf. See also Julius

Tröger.

Procter, Henry Richardson, the action of dilute acids and salt solutions on gelatin, 1911, A., i, 342.

theory of muscle contraction, 1912,

A., ii, 784.

Procter, Henry Richardson, and Hugh Garner Bennett, barium and calcium salts of gallic, protocatechuic, and digallic acids, 1906, A., ii, 405.

Procter, Henry Richardson, and William Ewart Holmes, the oxidation of oils,

1906, A., i, 136.

Procter, Henry Richard, and Douglas John Law, diffusion of chromium, iron, and aluminium salts through gelatin jelly, 1909, A., ii, 485.

Procter, Henry Richardson, and Douglas McCandlish, estimation of ammonia in used lime liquors, 1906, A., ii, 392.

Procter, Henry Richardson, and Richard Arnold Seymour-Jones, acids in tan liquors, 1911, A., ii, 76.

the estimation of soluble mercuric salts at great dilutions, 1911, A., ii,

541.

Proctor, Charles, the estimation of saccharin, 1905, T., 242; P., 62.

Pröscher, Fr., protein-free diphtheria antitoxin, 1903, A., ii, 317.

Profilo, C. See Marussia Bakunin.

Profilo, S. C., action of sodium and potassium hydroxides on the optical behaviour of dextrose in solution, 1911, A., i, 769.

Prohatzka, N. See Herman Decker.
Prokopeczko, Alexander. See Ernst von
Bandrowski.

Promsy, (Mlle.) G., influence of acidity on germination, 1911, A., ii, 322.

Pros, E. See Paul Pfeiffer.

Proske, Heinrich, condensation of 4-picoline, 2:6-lutidine, and 2:4:6-trimethylpyridine with cinnamaldehyde and anisaldehyde, 1909, A., i, 413.

Proske, Heinrich. See also Hans Rupe. Proskurjakoff, R. See Nicolai M.

Kijner.

Prost, A. See Philippe Barbier.

Prost, Eugène, the influence of lime on the sulphur content of roasted blendes, 1911, A., ii, 283.

Prost, Eugène, and Maurice Ubaghs, influence of metallic carbonates occurring in coals on the estimation of the volatile matter, 1912, A., ii, 810.

Prost, Eugène. See also Gustave Perrier.
Prothière, Eugène, preparation of hydrogen sulphide in the dry way, 1903,
A., ii, 284.

Prothière, Eugène, and Anna Revaud, preservation of standard solutions of sodium sulphide, 1903, A., ii, 182.

Protz, Ludwig, dependence of the cubic compressibility of potassium and sodium on the temperature, 1910, A., ii, 187. Proumen. Henri Jacques, slow neutralisation of the ions produced in certain chemical reactions, 1910, A., ii,

slowness of recombination of the ions produced in certain chemical reactions, 1910, A., ii, 479.

Prout, William, presentation of photograph of portrait of, by the Rev. T. J. Prout, 1904, P., 2.

Prouzergue, Rémy, new method of determining the melting points of fats, 1912, A., ii, 307.

Provenzal, Giulio, See Rosario Spallino. Prschevalsky, Evgenij Stepanowitsch, researches in the hexene and heptene series, 1909; A., i, 449.

oxidation of hexoic and heptoic acids by dilute permanganate solutions, 1911, A., i, 947.

Prschevalsky, Evgenij Stepanowitsch. See also Nicolai D. Zelinsky.

Prucha, M. J. See Alfred W. Bosworth. Prud'homme, Maurice, oxidation by chromic acid in presence of other acids, 1903, A., ii, 430.

chemical equilibrium between hydroferrocyanic and hydroferricyanic acids, 1904, A., i, 21.

chemical equilibrium between potassium ferrocvanide and ferricvanide in presence of alkali hydroxides, 1904, A., i, 21.

new reagents for aldehydes, 1904, A.,

ii, 687.

action of formaldehyde and sodium hydrogen sulphite on aromatic di-

amines, 1905, A., i, 548. constitution of hyposulphites, 1905,

A., ii, 157.

reduction products of hydroxyanthraquinones, 1906, A., i, 193.

conversion of aromatic ketones into the corresponding imides, 1906, A., i. 866.

new dyes obtained from triphenylmethane, 1907, A., i, 561.

relations between the molecular conductivity of electrolytes and the dilution, 1907, A., ii, 527. semi-electrolytes, 1908, A., ii, 20.

osmotic pressure, 1911, A., ii, 1071; 1912, A., ii, 24.

solubility of sparingly soluble salts, 1911, A., ii, 1073.

Prud'homme, Maurice, and A. Colin, formation of p-nitroaniline-red, 1909, A., i, 684.

Prunier, Georges, esterification of phosphoric acid by glycerol, 1908, A., i, 2.

Prunier, Georges, quinoline sulphosalicylate, 1910, A., i, 586.

Prussak, (Mlle.) Gustava, mercury and hirudin, 1910, A., ii, 229.

Prussia, L. See Carlo Grimaldi.

Prym, Oscar, spleen and pancreas. 1905, A., ii, 404.

Prym, Oscar. See also Emil Abderhalden.

Prytz, Peter Kristian, freezing points of solutions as steady temperatures, 1904, A., ii, 383.

Prytz, Peter Kristian. See also Hans Jansen.

Przedborski. See Erich Frank.

Przemyski, S. See Kasimir Jabłczyński. Przibram, Hans, grasshopper-green not · chlorophyll, 1907, A., i, 330.

Przibram, Karl, measurements of the [electric] charge on fog particles, 1911, A., ii, 363.

mobility of ions in gases and mixtures of gases, 1912, A., ii, 618.

Przibylla, Karl, specific gravity of sylvite, bischofite, and carnallite; origin of bischofite, 1904, A., ii, 416.

Przibylla, Karl. See also Wilhelm

Przyluska, Marie, molecular weights of liquid diphenylamine, triphenylamine, and aniline hydrochloride, 1910, A., i,

Pschorr, Robert [Franz], stable quaternary salts of apomorphine, 1905, A., i, 658.

thebainone: a ketone obtained by reduction of thebaine, 1905, A., i,

9-ethylphenanthrene, 1906, A., i, 820. constitution of apomorphine; constitution of morphine, 1907, A., i, 635.

Pschorr, Robert, and Hans Busch, synthesis of 3:4:8-trimethoxyphenanth-

rene, 1907, A., i, 636.

Pschorr, Robert, and F. Dickhäuser, morphine series. VI. Transformation of chloromethylmorphimethine into the quaternary salt of a cyclic base derived from phenanthrene, 1910, A., i, 425.

replacement of the halogen in chloroa-methylmorphimethine by hydr-

oxyl, 1912, A., i, 578.

methylation of the alcoholic hydroxyl in the codeines. II. Methylation of iso- and \(\psi\-\)-codeine, 1912, A., i, 578.

Pschorr, Robert, F. Dickhäuser, and C. D'Avis, methylation of the alcoholic hydroxyl group in morphine, codeine, and the methylmorphimethines, 1911, A., i, 908.

Pschorr, Robert, F. Dickhäuser, and C. D'Avis, constitution of morphine; conversion of the methyl ethers of α- and ε-methylmorphimethine into 3:4:8-trimethoxyphen-3:4:6- and anthrene respectively, 1912, A., i, 720.

Pschorr, Robert, F. Dickhäuser, Wilhelm Koch, O. Treidel, and Fritz Zeidler, synthesis of 3:4:5-trimethoxyphenanthrene obtained from morphenol,

1912, A., i, 766.

Pschorr, Robert, and Hans Einbeck, 2-B-aminoethylphenol and its methyl

ether, 1905, A., i, 589.

constitution of morphine and of hydroxymethylmorphimethine, 1907, A., i. 547.

the action of ozone on thebaine, 1907,

A., i, 958.

Pschorr, Robert, Hans Einbeck, and Otto Spangenberg, transformation of apomorphine into 3:4:8-trimethoxyphenanthrene, 1907, A., i, 635.

Pschorr, Robert, and Wilhelm Haas,

resolution of thebaine by benzoyl

chloride, 1906, A., i, 204.

Pachorr, Robert, and Walter L. Halle, constitution of morphothebaine, 1907,

A., i, 636.

Pschorr, Robert, Robert Hofmann, Joan Popovici, Fritz Quade, Max Schütz, and Hans Tappen, syntheses and properties of some new phenanthrene derivatives, 1906, A., i, 848.

Pschorr, Robert, and Gerhard Hoppe, morphine series. III. Ethylthiomorphides, 1910, A., i, 423.

o-aminobenzyl cyanide [o-aminophenylacetonitrile] and its conversion into 2-aminoindole and indole, 1910, A.,

Pschorr, Robert, Bernhard Jaeckel, and Hermann Fecht, constitution of apo-

morphine, 1903, A., i, 193.

Pschorr, Robert, and Walther Karo, constitution of apomorphine, 1906, A., i, 878.

preparation and hydrogenation of 1methyl-B-naphthindole, 1906, A., i,

Pschorr, Robert, and Georg Knöffler, constitution of morphothebaine. Synthesis of the tetramethoxyphenanthrene derived from morphothebaine, 1911, A., i, 669.

Pschorr, Robert, Wilhelm Koch, W. Selle, H. Stoof, and O. Treidel, bromination of m-hydroxybenzaldehyde, vanillin, and homovanillic acid, 1912, A., i, 775.

Pschorr, Robert, and Rudolph Krech, morphine series. II. 8-Ethylthiocodide, 1910, A., i, 421.

Pschorr, Robert, and Erich Kuhtz, constitution of a-naphthindole, 1905, A.,

i, 236.

Pschorr, Robert, Erich Kuhtz, Heinrich Roth, and Hermann Vogtherr, halogen derivatives of morphine and codeine, and their degradation, 1906, A., i, 877.

Pschorr, Robert, Heinrich Loewen, and Hans Rettberg, morphine series. IV. Constitution of morphothebaine and thebenine, 1910, A., i, 423.

Pschorr, Robert, and Cornelius Massaciu, constitution of thebenine, 1904, A., i,

767.

Pschorr, Robert, and Adolf Rollett, morphine series. I. Ethylthiocodides,

1910, A., i, 419.

Pschorr, Robert, Heinrich Roth, and Fohann Tannhäuser, transformation of a-methylmorphimethine into the β-compound by heat; crystallographic behaviour of the two isomerides, 1906, A., i, 204.

Pschorr, Robert, Curt Sevdel, and Walter Stöhrer, constitution of thebaol, 1903,

A., i, 167.

Pschorr, Robert, and Max Silberbach, distillation of guaiacol with lead oxide, 1904, A., i, 581.

Pschorr, Robert, and Otto Spangenberg, oxidation of tribenzoylapomorphine,

1907, A., i, 635.

Pschorr, Robert, Max Stählin, and Max Silberbach, conversion of papaverine into an isoquinoline base derived from phenanthrene, 1904, A., i, 611.

Pschorr, Robert, and Walter Stöhrer, nitro-derivatives of isovanillin, 1903,

A., i, 175.

Pschorr, Robert, and Hermann Vogtherr, synthesis of acetylmethylmorphol-

quinone, 1903, A., i, 183.

Pschorr, Robert, and Fritz Zeidler, morphine series. V. Synthesis of 3:4-dimethoxy-8-ethoxyphenanthrene obtained by the degradation of thebenine, 1910, A., i, 425.

Pschorr, Robert. See also Peter Bergell, Herman Decker, and Ludwig Knorr

Psilanderhielm, B. See Bror Holmberg.

Puaux, calculi from the prostate, 1903, A., ii, 444.

Puccianti, Luigi, fluorescence of sodium vapour, 1905, A., ii, 131. viscosity of Lehmann's liquid crystals,

1907, A., ii, 533. Puchta. See K. Friedrich.

930

Puckner, William August, sodium hydrogen carbonate in iodometry, 1905, A., ii, 415.

estimation of acetanilide, 1905, A., ii,

estimation of caffeine, 1905, A., ii, 872. detection of formaldehyde in witch

hazel, 1906, A., ii, 59. estimation of caffeine in the presence

of acetanilide, 1906, A., ii, 60. Puckner, William August, and Willis Stose Hilpert, detection and estimation of hexamethyleneamine in pharma-

ceutical mixtures, 1908, A., ii, 996. Pudofkin, A. See Nikolai Schiloff.

Pudschies, Paul. See Volkmar Kohlschütter.

Püschel, A., preparation of a sensitive and stable litmus solution, 1911, A., ii, 147.

Pütz. Paul. See Friedrich Wüst.

Pugh, Robert, blood changes in epilepsy,

1903, A., ii, 307.

Pugliese, Angelo, the composition of blood, urinary excretion, and lymph formation after the intravenous injection of solutions of colloids alone and in conjunction crystalloids, 1910, A., ii, 637.

muscular work and protein metabo-

lism, 1911, A., ii, 624.

Pugliese, Domenico, and Giambattista Selvaggi, action of isophthalic and terephthalic acids on p-aminophenols, 1909, A., i, 105.

Pugliese, Domenico. See also Arnaldo

Piutti.

Pukall. Wilhelm, advances in the domain of the ceramic industry, 1910, A., ii, 780.

Pulman, Oscar Stoddard, jun., estimation of uranium and uranyl phosphate by the zinc reductor, 1903, A., ii, 761.

Pulsifer, H. B., estimation of small amounts of ferric iron by acetylacetone, 1904, A., ii, 683.

new method for the estimation of sulphur in irons and steels, 1904, A., ii, 841.

Pulst, Carl, power of resistance of some mould fungi towards metallic poisons, 1903, A., ii, 746.

Pulvermacher, Georg. See Leopold

Kuttner, and Walther Löb.

Pummerer, Rudolf, preparation of benzenesulphonyl chloride, 1909, A., i, 465, 561.

bromides of arylthioglycollic [arylthiolacetic] acids, 1909, A., i, 580.

Pummerer, Rudolf, phenylsulphoxyacetic acid, 1909, A., i, 580; 1910, A., i, 468.

pyrone derivatives, 1909, A., i, 949. isatinanils. II. Derivatives of thionaphthenquinone, 1910, A., 510.

tautomerism of amidines, 1911, A., i,

non-existence of ψ -diphenyleneketone [\psi-fluorone]; a new red hydrocarbon, 1912, A., i, 181.

Pummerer, Rudolf, and Kurt Brass, vat dyes from a-naphthaquinone, 1911,

A., i, 654.

Pummerer, Rudolf, and Gustav Dorfmüller, isophthalanil, 1912, A., i, 191.

Pummerer, Rudolf, and Maximilian Göttler, isatinanils. I. Isatindimethylamino-2-anil; its formation, hydrate, and salts, 1910, A., i. 77.

isatinanils. III. Leuco-compounds,

1910, A., i, 511.

indirubinanils: substances with reactive carbon double bonds, 1911, A., i, 231.

Pummerer, Rudolf, and Franz Grube, isatinanils. · VI. Cases of desmotropism, 1911, A., i, 231.

Pummerer, Rudolf. See also Richard

Willstätter.

Pungs, Ernst. See Max Busch. Punkin, Z. See Sergei Salaskin.

Puppe, Georg, investigations of the oxygen content of the blood by Haldane's method in stabbing, 1912, A., ii, 952.

Purdie, Thomas, and Paul Seidelin Arup. action of Grignard reagents on methyl 1-methoxysuccinate, methyl maleate, and maleic anhydride, 1910, T., 1537; P., 199.

Purdie, Thomas, and Robert Currie Bridgett, trimethyl a-methylglucoside and trimethylglucose, 1903, T., 1037;

P., 193.

Purdie, Thomas, and James Colquhoun Irvine, the alkylation of sugars, 1903, T., 1021; P., 192.

the stereoisomeric tetramethyl methylglucosides and tetramethyl glucose,

1904, T., 1049; P., 173. synthesis from glucose of an octamethylated disaccharide; methylation of sucrose and maltose, 1905, T., 1022; P., 215.

Purdie, Thomas, and George Ballingall Neave, optically active methoxysuccinic acid from malic acid, 1910, T., 1517; P., 198.

Purdie, Thomas, and David McLaren Paul, the alkylation of d-fructose, 1907, T., 289; P., 33.

Purdie, Thomas, and Robert Evstafieff Rose, the alkylation of l-arabinose, 1906, T., 1204; P., 201.

Purdie, Thomas, and Charles Robert Young, the alkylation of rhamnose, 1906, T., 1194; P., 201.

optically active derivatives of l-methoxy- and d-dimethoxysuccinic acids, 1910, T., 1524; P., 198.

Purgotti, Attilio, modifications in the systematic detection of the bases, 1912, A., ii, 984.

Purgotti, Attilio, and Claudio Lunini, derivatives of 2-chloro-3:5-dinitrobenzoic acid. III., 1904, A., i, 315.

Purgotti, Attilio, and Nestore Monti, new derivatives of salol, 1904, A., i, 585.

Purgotti, Attilio, and Luigi Zanichelli, catalysis of hydrazine, 1904, A., ii, 329

Puriewitsch, Konstantin A., protein synthesis in the lower plants, 1912, A., ii, 192.

Purkert, Karl. See Georg Grasser.

Purrmann, C., and Paul Verbeek, apparatus for the generation of carbon dioxide, 1911, A., ii, 878.

Pursel, R. C. See M. H. Webster. Purucker, Georg. See Albert Reichard.

Purvis, John Edward, influence of great dilution on the absorption spectra of highly concentrated solutions of the nitrates and chlorides of didymium and erbium, 1904, A., ii, 4.

method of estimating the amounts of the oxides of didymium and erbium by means of the absorption bands of their solutions, and its application to other solutions, 1904, A., ii,

the influence of very strong electromagnetic fields on the spark spectra of ruthenium, rhodium and palladium, 1905, P., 241; 1907, A., ii, 2.

influence of very strong electromagnetic fields on the spark spectra of (1) vanadium, and (2) platinum and iridium, 1906, A., ii, 421.

band spectrum of nitrogen in a strong magnetic field, 1907, A., ii, 1.

influence of a strong magnetic field on the spark spectra of titanium, chromium, and manganese, 1907, A., ii, 210. Purvis, John Edward, the influence of a strong magnetic field on the spark spectra of lead, tin, antimony, bismuth, and gold, 1907, A., ii, 919.

absorption spectra of some compounds obtained from pyridine and collidine,

1908, A., ii, 745.

the relationship between the constitution and absorption spectra of pyridine and various derivatives, 1909, T., 294; P., 14.

absorption spectra of some compounds of pyridine, 1909, A., ii, 5.

radiation of various spectral lines of neon, helium, and sodium in a magnetic field, 1909, A., ii, 281.

absorption spectra of concentrated and diluted solutions of chlorophyll,

1909, A., ii, 531.

absorption spectra of mesitylene and trichloromesitylene, 1909, A., ii,

the absorption spectra of p-toluidine, m-xylidene, and of their condensation products with acetaldehyde, 1910, T., 644; P., 56.

the absorption spectra of pyridine and some of its derivatives at different temperatures and pressures, 1910,

T., 692; P., 45.

the absorption spectra of nicotine, coniine, and quinoline as vapours, liquids, and in solution, 1910, T., 1035; P., 113.

the absorption spectra of aniline and its homologues as vapours, as liquids, and in solution, 1910, T., 1546;

P., 194.

the absorption spectra of furan, furfuraldehyde, thiophen, and pyrrole under different conditions, 1910, T., 1648; P., 201.

the absorption spectra of various diketopyrroline compounds, 1910,

T., 2535; P., 297.

the absorption spectra of some derivatives and isomerides of 1:2-diketo-Δ³-cyclopentene, 1910, P., 327; 1911, T., 107.

influence of dilution on the colour and the absorption spectra of various permanganates, 1910, A., ii, 3.

the absorption spectra of chlorobenzene and bromobenzene as vapours, as liquids, and in solution, 1911, T., 811; P., 71.

the absorption spectra of various chlorine and bromine derivatives of benzene and toluene as vapours, in solution and in thin films, 1911, T., 1699; P., 218. Purvis, John Edward, the absorption spectra of triketohydrindene hydrate and certain derivatives, 1911. T., 1953; P., 242.

the absorption spectra of various iodine derivatives of benzene and toluene as vapours, in solution and in thin films, 1911, T., 2318; P., 280.

the absorption spectra of the vapours of some sulphur compounds, 1911,

A., ii, 560.

the absorption spectra of various derivatives of naphthalene in solution and as vapours, 1912, T., 1315; P., 157.

Purvis, John Edward, and Richard Minton Courtauld, limitations of the copper-zinc couple method in estimating

nitrates, 1908, A., ii, 776.

William Purvis, John Edward, and Henry Foster, absorption spectra of collidine and nonachlorocollidine, 1908, A., ii, 244.

Purvis, John Edward, and (Miss) Annie Homer, absorption spectra of solid tetramethylpicene and of its solutions,

1909, A., ii, 531. Purvis, John Edward, Humphrey Owen Jones, and Hubert Sanderson Tasker, the colour and absorption spectra of some sulphur compounds, 1910, T., 2287; P., 234.

Purvis, John Edward, and Nial Patrick McCleland, the absorption spectra of some substances containing two benzene nuclei, 1912, T., 1514; P.,

the absorption spectra of simple aliphatic substances in solutions. vapours, and thin films. Part I. Saturated aldehydes and ketones, 1912, T., 1810; P., 233.

Purvis, John Edward. See also (Miss)

Annie Homer.

Pusch, H., sodium hypochlorite; properties of the electrolytic bleaching solution, 1908, A., ii, 492.

Pushee, Harold B. See Arthur A.

Blanchard. Pushin, Nicolai Antonovitsch, alloys of

mercury, 1903, A., ii, 212. co-ordinates of the melting-point

curve, change of volume and heat of crystallisation of Cd (NO₃)₂, 4H₂O in relation to pressure, 1905, A., ii, 587. quantitative separation of tin from

manganese, iron, and chromium by electrolysis, 1907, A., ii, 304.

electrical potential and nature of alloys, 1907, A., ii, 325, 618, 774,

837.

Pushin, Nicolai Antonovitsch, and E. G. Dishler, electrical conductivity of copper-arsenic alloys, 1912, A., ii, 320.

Pushin, Nicolai A., and I. V. Grebentschikoff, application of the pyrometric method to the investigation of equilibria at high pressures, 1912, A., ii, 330.

influence of pressure on equilibria, in binary systems, 1912, A., ii,

331.

Pushin, Nicolai A., and P. N. Laschtschenko, nature of the platinum-lead

alloys, 1909, A., ii, 322.

Pushin, Nicolai A., and M. S. Maximenko, relation between electrical conductivity and thermo-electric power of alloys of silver with zinc, 1909, A., ii. 539.

Pushin, Nicolai A., and N. P. Paschsky, nature of palladium-lead alloys, 1908,

A., ii, 860.

Pushin, Nicolai A., and R. M. Trechzinsky, methods of electro-analysis.

1905, A., ii, 607.

quantitative electrolytic separation of tin from nickel and cobalt, and of copper from antimony, 1906, A., ii, 199.

Pushin, Nicolai A. See also Nicolai S. Kurnakoff.

Putte, L. van de. See Edouard Nihoul. Puttkammer, Georg. See Julius Tröger. Puxeddu, Ernesto, isomerism among the

hydroxyazo-compounds: 5-azoisoeugenols, 1906, A., i, 774.

reductions with phenylhydrazine. I. New method of preparing 5-aminosalicylic acid, 1906, A., i, 957.

reduction of azo-derivatives of aromatic hydroxy-acids by phenylhydrazine. 1906, A., i, 995.

action of diazo-salts on vanillin, 1907, A., i, 882.

condensation of aminohydroxy-acids with aromatic aldehydes, 1908, A., i, 286; 1909, A., i, 238, 720.

diisoeugenol, 1909, A., i, 225.

constitution of disoeugenol, 1912, A., i, 185.

chemical action of light on vanillin and its ethers, 1912, A., i, 193.

isomerism among the ethers of diisoeugenol, 1912, A., i, 255.

Puxeddu, Ernesto, and Matteo Comella, nitroisoeugenol, 1906, A., i, 950.

Puxeddu, Ernesto, and Enrico Maccioni, azo-derivatives of certain cresotic [hydroxytoluic] acids, 1907, A., i, 798.

Puxeddu, Ernesto. See also Luigi Francesconi, and Giuseppe Oddo.

Pyhälä, Ewald, the naphthenic acids and their reaction with ferrous salts, 1912,

A., ii, 1007.

Pyman, Frank Lee, calmatambin, a new glucoside, 1907, T., 1228; P., 183.

relation between chemical constitution and physiological action in certain substituted aminoalkyl esters, 1908, T., 1793; P., 208.

isoquinoline derivatives. Part I. Oxidation of laudanosine, 1909, T.,

1266; P., 190.

isoquinoline derivatives. Part II. The constitution of the reduction products of papaverine, 1909, T., 1610; P., 217.

isoquinoline derivatives. Part III. The oxidation of substituted 1benzyltetrahydroisoguinolines, 1909,

T., 1738; P., 230.

isoquinoline derivatives. Part IV. o-Dihydroxy-bases; the conversion 1-keto-6:7-dimethoxy-2-alkyltetrahydroisoquinolines into 3:4dihydroxyphenylethylalkylamines. 1910, T., 264; P., 21; discussion,

the tautomerism of glyoxalines and the constitution of pilocarpine,

1910, T., 1814; P., 211.

a new synthesis of 4(or 5-)-\beta-aminoethylglyoxaline, one of the active principles of ergot, 1911, T., 668; P., 91.

the synthesis of histidine, 1911, T.,

1386; P., 206.

isoquinoline derivatives. Part neoOxyberberine, 1911, T., 1690; P., 215.

aminoalkylglyoxalines, 1911. 2172; P., 275.

the synthesis of r-histidine: prelimi-

nary note, 1911, P., 92.

the synthesis of glyoxaline derivatives allied to pilocarpine, 1912, T., 530; P., 47.

pilosine: a new alkaloid from Pilocarpus microphyllus, 1912,

2260; P., 267.

Pyman, Frank Lec, and Frederic George Percy Remfry, isoquinoline deriva-tives. Part VII. The preparation of hydrastinine from cotarnine, 1912, T., 1595; P., 228.

Pyman, Frank Lee, and William Colebrook Reynolds, aromatic arsonic and arsinic acids, 1908, T., 1180; P., 143;

discussion, P., 144.

Pyman, Frank Lee, and William Colebrook Reynolds, meteloidine, a new solanaceous alkaloid, 1908, T., 2077; P., 234.

isoquinoline derivatives. Part V. The constitution of the reduction products of papaverine (continued).

1910, T., 1320; P., 180. Pyman, Frank Lee. See also Eugen Bamberger, Marmaduke Barrowcliff, Arthur James Ewins, and Hooper Albert Dickinson Jowett.

Pyne, Francis R., melting points of some cryolite-alumina mixtures, 1907,

A., ii, 469.

Quade, Fritz. See Robert Pschorr. Quadflieg, L. See Karl Bernhard Leh-

mann.

Quadrat, Otto. See Josef Hanus, and Juroslav Milbauer.

Quantz, Wilhelm B. See Burt Laws Hartwell.

Quagliariello, G., modifications in the chemico-physical properties of bloodserum by heating at 55-60°, 1909, A., ii, 1030.

chemico-physical investigations on the crystalline lens, 1909, A., ii, 1036;

1910, A., ii, 56.

the influence of sodium glycocholate on tryptic digestion, 1910, A., ii,

imbibition of the intestinal mucous membrane with sodium chloride and sulphate solutions of different concentrations, 1910, A., ii, 974.

chemico-physical investigations animal liquids. IV. Technique of the electrometric method for the study of the reaction of the liquids of the organism, 1911, A., ii, 962.

physico-chemical investigations on animal liquids. VI. Chemical reaction of lymph, 1911, A., ii, 1114.

physico-chemical investigations on animal liquids. VII. Chemical reaction of bile, 1911, A., ii, 1114.

the change in hydrogen ion concentration during heat coagulation of proteins, 1912, A., i, 921.

reaction of the blood-serum of some mammals studied by the electrometric method, 1912, A., ii, 61.

physico-chemical researches on animal liquids. VIII. Chemical reaction of urine, 1912, A., ii, 185.

Quagliariello, G., the hydroxyl ion concentration of the blood in hyperthermia produced by heat piqure, 1912, A., ii, 1064.

Quagliariello, G. See also E. D' Agos-

Quartaroli, Alfredo, velocity of polyphase reactions, 1903, A., ii, 720. thermochemical considerations, 1904, A., ii, 538.

velocity of reaction in aqueous solutions near the point of maximum

density, 1904, A., ii, 607. gradual dissociation of mellitic acid,

1905, A., i, 652.

action of vegetable acids on phos-

phates, 1905, A., ii, 549.

equilibrium among certain bases in simultaneous contact with phosphoric acid, 1905, A., ii, 821; 1907, A., ii, 673.

lithium orthophosphate, 1907, A., ii,

mode of combination of mineral and organic acids in wine, 1909, A., ii,

phosphates, their isomerism and the transformations they undergo in soil,

1909, A., ii, 480.

energy of the elements and the part remaining in combinations; energy theory of isomerism, 1910, A., ii, 491.

basic citrates and tartrates of barium,

1911, A., i, 176.

an insoluble sodium phosphate and complex compounds of ammonium citrate with alkaline earths, 1911, A., ii, 489.

case of autocatalysis and simultaneous negative catalysis, 1911, A., ii,

1079.

new method for the preparation of nitrous oxide and its application to the analysis of nitrates, 1911, A., ii, 1085.

analysis of nitrates, 1911, A., ii, 1132. citrophosphate solutions, 1912, A., i,

238, 605,

Quasebart, Karl, iron and calcium, 1906, A., ii, 229.

Quayle, William O. See Charles Frederic Mabery.

Quenda, Enrico. See Icilio Guareschi. Quennessen, L., gas burner, 1903, A., ii,

absorption of hydrogen by rhodium,

1905, A., ii, 42.

comparative absorption of hydrogen by rhodium and palladium, 1905, A., ii, 172.

Quennessen, L., separation of platinum and iridium, 1905, A., ii, 615. potassium iridochloronitrite, 1905, A.,

ii, 640.

the attack of platinum by sulphuric acid, 1906, A., ii, 551.

Quennessen, L. See also Emile Leidié. Quensel, P. D., formation of quartz in silicate fusions, 1907. A., ii. 34.

formation of quartz and tridymite in silicate fusions, 1907, A., ii, 101.

Quensell, Hermann, glycerol esters of stearolic and behenolic acids, 1909, A., i, 548.

Quercigh, Emanuele, the equilibrium diagram of the silver-sodium alloys, 1910, A., ii, 1062.

oxysulphides of antimony, 1912, A.,

ii, 562.

the identity of synchysite and parisite. 1912, A., ii, 773.

the supposed penta-iodides of arsenic and antimony, 1912, A., ii, 937.

Quercigh, Emanuele. See also Giuseppe Bruni, and Giovanni Pellini.

Quinan, Clarence, specific erythrolysis, 1904, A., ii, 354.

critical hydroxyl ion concentrations in diastatic hydrolysis, 1909, A., i, 346. estimation of urea, 1909, A., ii, 527.

Quincke, Gustav. See Alfred Heiduschka.

Quincke, G. A., a new extraction apparatus, 1911, A., ii, 877.

Quincke, Georg Hermann, foam structure [cellular structure] of sulphur and its influence on double refraction, dichroism, electrical properties, and formation of crystals, 1908, A., ii, 823.

Quinet, P., formation of compounds in solutions of tartaric acid and sodium molybdate, 1908, A., i, 713.

molybdotartrates, 1910, A., i, 218. Quitmann, Eugen. See Oskar Piloty.

Quoos. Fritz. See Karl Andreas Hofmann.

R.

Raab, H., and Leo Wessely, estimation of manganese as sulphide, 1903, A., ii, 697.

Raab, Karl. See Ferdinand Henrich. Raab, Oscar, action of fluorescent substances [on infusoria], 1903, A., ii, 166.

Raabe, Felix. See Ludwig Knorr.

Raalte, A. van, solubility of lead sulphate in a hydrochloric acid solution of stannous chloride, 1904, A., ii, 212.

Raalte, A. van, alcoholic potash, 1909. A., ii, 400.

fat extraction apparatus, 1910, A., ii,

Raaschou, C. A. See Ivar Bang.

Raaschou, Peter E., micro-chemical estimation of mercury, 1910, A., ii, 350.

Rabak, Frank, resin oil of Pinus longifolia, 1905, A., i, 911.

relation of the odorous constituents of certain plants to plant metabolism. 1911, A., ii, 819.

Rabaut, [Pierre] Charles. See Jules

Rabe, Franz, preparation of alcoholic potassium hydroxide solution which will keep, 1908, A., ii, 689.

estimation of chlorides in [commercial] bromides, 1911, A., ii, 765.

Rabe, Otto, oxides of thallium, 1906. A., ii, 285, 672; 1907, A., ii, 769; 1908, A., ii, 498.

Rabe, Paul [Carl Ludwig], the supposed separation of the two desmotropic forms of ethyl acetoacetate, 1903, A., i, 62.

synthesis of a dicyclic bridged-ring

system, 1903, A., i, 268.

syntheses of bridged dicyclic systems. III. Addition of ethyl acetoacetate to methylcyclohexenone, 1904, A., i. 509.

transformation of narcotine into nornarceine; the cinchona-toxines, 1907, A., i, 790.

ephedrine and ψ -ephedrine, 1911, A.,

i, 396.

XV. Partial cinchona alkaloids. synthesis of cinchonine, 1911, A., i, 742.

[rearrangement of cinchonine and quinine into their poisonous isomerides, cinchotoxine and quinotoxine], 1912, A., i, 488.

Rabe, Paul, and Ernst Ackermann, derivatives of cincholeupone, 1907,

A., i, 546.

action of nitric acid on cinchonine,

1907, A., i, 546.

Rabe, Paul, Ernst Ackermann, and Wilhelm Schneider, cinchona alkaloids. VII. A new oxidation product of cinchonine, 1907, A., i, 954.

Rabe, Paul, and Adolf Billmann, explanation of tautomeric phenomena. II. Desmotropic-isomeric cyclic ketonic esters, 1904, A., i, 749.

Rabe, Paul, and Fritz Braasch, cinchona XI. Identity of methylalkaloids. cinchonine and methylcinchonidine, 1909, A., i, 408,

Rabe, Paul, and Otto Buchholz, cinchona alkaloids. VIII. Constitution of cinchonine, 1908, A., i, 100.

Rabe, Paul, and William Denham. decomposition of methiodides in acid

solution, 1904, A., i, 511.

Rabe, Paul, and Richard Ehrenstein, isomeric forms of 3-methylcyclohexenone, 1907, A., i, 626.

Rabe, Paul, Richard Ehrenstein, and Max Jahr, 1:5-diketones. III., 1908,

A., i, 553.

Rabe, Paul, Fritz Elze, and Fritz Rahm, 1:5-diketones. II., 1904, A., i, 747.

Rabe, Paul, and Eberhard Felle, peculiar relation between the strengths of acids and their activity. II., 1912, A., i, 1014.

Rabe, Paul, and Julius Hallensleben. formation of an ethylene oxide from the ammonium base of hydroxydiphenylethylamine, 1910, A., i, 317.

formation of an ethylene oxide from the quaternary base of phenylmethylhydroxyethylamine,

A., i, 841.

Rabe, Paul, Theodor Hunnius, Ernst Milarch, Richard Pasternack, and Peter Rieper, cinchona alkaloids. XVI. Preliminary synthetic experiments, 1912, A., i, 718.

Rabe, Paul, Erich Kuliga, Oswald Marschall, Wilhelm Naumann, and William Fraser Russell, cinchona alkaloids. XII., 1910, A., i, 417.

Rabe, Paul, and Andrew McMillan, gnoscopine (r-narcotine), 1910, A.,

narcotine and hydrastine, 1911, A., i,

peculiar relation between the strengths

of acids and their activity, 1911, A., ii, 33. Rabe, Paul, and Oswald Marschall,

cinchona alkaloids. XIII. Fluorescence phenomena with cinchona alkaloids, 1911, A., i, 741.

Rabe, Paul, and Ernst Milarch, cinchona alkaloids. XIV. Decomposition of oximinoquinotoxine, 1911, A., i,

741.

Rabe, Paul, Wilhelm Naumann, and Erich Kuliga, cinchona alkaloids. IX. Oxidation of cinchona alkaloids to ketones, 1909, A., i, 252.

cinchona alkaloids. X. Fission of the ketones from cinchona bases, 1909,

A., i, 407.

Rabe, Paul, and Ernest Pollock, supposed isomerism in the case of methyl- A1cyclohexen-3-one, 1912, A., i, 987.

Rabe, Paul, and Fritz Rahm, constitution of the so-called Hagemann's ester, 1905, A., i, 348.

Rabe, Paul, and Karl Ritter, derivatives of meroquinine. I., 1905, A., i, 811. cinchona alkaloids. I., 1907, A., i,

Rabe, Paul, and Charles Smart Roy, mutarotation and electrical conductivity of carbohydrates. I. Dextrose, 1911, A., i, 14.

Rabe, Paul, Wilhelm Schneider, and Fritz Braasch, acid properties of amino-ketones, 1908, A., i, 361.

1:2-hydramines. I. \(\beta\)-Piperidyl-a-phenylethyl alcohol, 1909, A., i, 413.

Rabe, Paul, and David Spence, tautomerism. III. Apparent case of desmotropy, 1906, A., i, 89.

Rabe, Paul, David Spence, and Richard Ehrenstein, tautomerism. IV., 1908,

A., i, 530.

Rabe, Paul, and Karl Weilinger, condensation of ethyl acetoacetate with carvoue in presence of sodium ethoxide, 1903, A., i, 268.

condensation of ethyl acetoacetate with carvone in presence of hydrogen chloride, 1903, A., i, 269.

syntheses of bridged dicyclic systems.

II. Addition of ethyl acetoacetate
to carvone, 1904, A., i, 509.

Rabe, Wilhelm Otto, and Hermann Steinmetz, thallium oxalates, 1903, A., i, 146.

oxalates of tervalent thallium, 1904, A., i, 140.

Raben, Emil, direct estimation of phosphoric acid as ammonium phosphomolybdate, 1908, A., ii, 896.

Rabinowitsch, A. G. See Efim Semen London.

Rabinowitsch, Jacob. See Stanislaus von Kostanecki.

Rabischong, Julien, action of tetrazoic chlorides on ethyl oxalacetate, 1903, A., i, 55.

action of diazochlorides on oxalacetic esters, 1904, A., i, 272.

action of diazochlorides on oxalacetic esters in presence of alkalis, 1904, A., i, 273.

action of diazobenzene chloride on substituted hydroxyfumaric esters, 1904, A., i, 278.

Rabtsevitsch-Zubkovsky, I. L., action of alkyloxides on esters of inorganic acids, 1912, A., i, 233.

Rabtsevitsch-Zubkovsky, I. L. See also Vetchesláv E. Tistschenko. Raby, L., variations in the rotatory power of oil of turpentine, 1905, A., ii, 423.

Race, Joseph, estimation of alcohol and extract in spirits by means of the refractometer, 1908, A., ii, 738.

Raciborski, Marian, oxidising and reducing properties of living cells. I. Oxidising power of the absorbent surfaces of the roots of flowering plants, 1906, A., ii, 45.

oxidising and reducing properties of the living cell. II. Extracellular

oxydases, 1906, A., ii, 700.

oxidising and reducing properties of the living cell. III. The iodide reaction of Aspergillus niger, 1906, A., ii, 700.

assimilation of nitrogen compounds by fungi, 1907, A., ii, 384.

botanical micro-chemistry, 1907, A.,

ii, 415.

Rackmann, Karol, diguanide and compounds derived from it, 1910, A., i,

896.

Rackwitz, H. See Alexander Tschirch.

Racky, Georg. See Wilhelm Schlenk. Racovitza, Nicolas. See Fritz Ullmann. Raczkowski, Sig. de. See Fréd. Bordas. Rada. See Díaz de Rada.

Radcliffe, Lionel Guy, constants of carnauba wax, 1907, A., ii, 59.

examination of carbon tetrachloride, 1909, A., ii, 438.

Radcliffe, Lionel Guy, and John Allan, the constants of jasmine flower wax, 1909, A., iî, 427.

Radcliffe, Lionel Guy, and W. H. Maddocks, the constants of bog-butter found in the peat in Ireland, 1907, A., ii, 140.

Rademacher, Otto. See August Michaelis. Radik, Julius. See Carl Adam Bischoff.

Radlberger, Leopold, salts of guanidine, dicyanodiamide, and melamine with acid dyes, 1908, A., i, 1001.

compounds of acid dyes with various organic bases, 1910, A., i, 760. application of Busch's "nitron"

method to the analysis of Chili saltpetre, 1911, A., ii, 69.

Radoševic, Radoslav. See Adolf Kauf-

Radulescu, Dan, a characteristic colour reaction of morphire, 1906, A., ii, 638.

muconic acid derivatives; constitution of dichloromuconic acid, 1908, A., i, 604.

action of phosphorus pentachloride on anthraquinone, 1909, A., i, 37. Radulescu, Dan, new preparation of spirocyclanes, 1909, A., i, 652.

synthesis of spirocyclic compounds, 1911, A., i, 458.

nomenclature of the spirans, 1911, A.,

i, 497. spirans. IV. History and theory, 1912, A., i, 51.

manometer, 1912, A., ii, 37.

Radulescu, Dan. See also Hermann Leuchs.

Radwańska, (Mme.) Wanda, the influence of adrenaline on muscular activity, 1911, A., ii, 312.

Radziszewski, Bronislaw, M. Beiser, H. Bukowska, A. Jakalo, J. Rohm, S. Stenzel, and Br. Wysoczanski, glyoxalines, 1909, A., i, 422.

Raffa, Ercole, precipitation of magnesium as ammonium magnesium phosphate,

1909, A., ii, 183.

precipitation of magnesium as ammonium magnesium arsenate, 1909, A., ii, 347.

Raffo, Mario, colloidal sulphur, 1908,

A., ii, 683.

Raffo, Mario, and G. Foresti, chemical and viscosimetric investigations on animal fats, 1910, A., ii, 360.

new method of estimating margarine in butter, 1910, A., ii, 360.

Raffo, Mario, and J. Mancini, colloidal sulphur, 1911, A., ii, 878. Raffo, Mario, and A. Pieroni, velocity of

the reaction between colloidal sulphur and silver sulphate, 1910, A., ii, 839.

Raffo, Mario, and Giuseppe Rossi, colloidal acetate of penta-mercuriacetanilide, 1912, A., i, 931.

colloidal sulphur and iodic acid, 1912,

A., ii, 752.

influence of colloidal sulphur on the electrical conductivity of certain electrolytes, 1912, A., ii, 1037.

Rafsky, H. R. See Henry Augustus Torrey.

Ragg, Manfred, xanthic acid, 1908, A., i, 804.

xanthic acid and dixanthogen [ethyl dioxythiocarbonate]. II., 1910, A., i, 154.

Rahe, Alfred H. See Bertram Henry Buxton.

Rahm, Fritz. See Paul Rabe.

Rahn, Otto, sensitiveness of putrefactive and lactic acid bacteria towards poisons, 1905, A., ii, 189.

decomposition of fats, 1905, A., ii, 647. mould fungus which decomposes paraffin, 1906, A., ii, 479.

Rahts, W. See Carl Liebermaun.

Raichstein, V., synthesis and properties of \$-hydroxy-ab-dimethylheptoic acid, 1907, A., i, 822.

Raiford, Lemuel Charles, chloroiminoquinones, 1911, A., i, 993.

chemical examination of woody aster. 1911, A., ii, 820.

Raiford, Lemuel Charles, and Frederick William Heyl, replacement of halogen by the nitro-group. I. and II., 1910. A., i, 373, 730.

Raiford, Lemuel Charles. See also Fred-

erick William Heyl.

Raikow, Paul Nikolaivitsch, dependence of the acidity of phenols on their composition and structure, 1903, A., i, 754.

orienting action of light on the sublimate produced in sunlight, 1903,

A., ii, 49.

interdependence of acidity and structure of polycyclic phenols, 1904, A.,

composition of bear's fat, 1904, A., ii, 356.

state of combination of sulphur in proteins, 1905, A., i, 725.

action of carbon dioxide on the hydroxides and carbonates of the metals of the alkalis and alkaline earths, 1905, A., ii, 85.

detection of nitrous and nitric acids when occurring together and their approximate estimation by means of diphenylamine, 1905, A., ii, 283.

the existence in wool of sulphur united with oxygen, 1907, A., i, 666. action of carbon dioxide on metallic hydroxides, 1907, A., ii, 170, 171.

Raikow, Paul Nikolaivitsch, and O. Goworuchin-Georgiew, behaviour of aqueous salt solutions towards iron

powder, 1904, A., ii, 38. Raikow, Paul Nikolaivitsch, and Chr. Külümow, action of Nessler's solution on antipyrine, pyramidone, antifebrin, and exalgin, 1906, A., i, 112.

Raikow, Paul Nikolaivitsch, and Iw. N. Momtschilow, influence of substituents in the nucleus on the stability of alkali phenoxides towards carbon dioxide at the ordinary temperature, 1903, A., i, 162.

Raikow, Paul Nikolaivitsch, and P. Tischkoff, behaviour of esters of organic acids when heated with orthophosphoric acid, 1906, A., i, 83.

the influence of the composition and structure of organic acids on the stability of their carboxyl group, 1911, A., i, 445.

Raikow, Paul Nikolaivitsch, and P. Tischkoff, estimation of manganese as manganous oxide, manganomanganic oxide, and manganese sesquioxide, 1911, A., ii, 936.

Raikow, Paul Nikolaivitsch, and (Frl.) E. Urkewitsch, detection and estimation of nitrotoluene in nitrobenzene and of toluene in benzene, 1906, A., ii,

Rainer, Josef, the aldol from synthetic isopropylacetaldehyde [isovaleraldehydel, 1905, A., i, 16.

nitrobenzoylbenzoic acids, 1908, A., i,

m-nitro-o-benzovlbenzoic acid, 1908, A., i, 647.

Raisch. R., anode and cathode falls of potential and the minimum potential in chlorine, 1912, A., ii, 122.

Raiziss, Gdalja. See Emil Fromm.

Raken, Hermanus Wilhelmus Reinierus, transformation of diphenylnitrosoamine into p-nitrosodiphenylamine, 1904, A., i, 155.

Rakitin, L. See Wladimir N. Ipatieff. Rakoczy, A., the milk-curdling and proteolytic action of the gastric infusion of ox and calf and of natural gastric juice, 1910, A., i, 801.

further observations on rennin and pepsin in the gastric juice of the

calf, 1911, A., i, 827.

plastein formation, 1911, A., i,

Rakowski, Adam Vladimirovitsch, kinetics of successive reactions of the first order, 1907, A., ii, 74.

chemical softening of water, 1907, A., ii, 987.

dimorphism of potassium calcium chromate, 1908, A., ii, 674.

adsorption. I. Chemical hysteresis of starches, 1911, A., ii, 470.

II. Chemical hysteresis, adsorption. 1911, A., ii, 470.

adsorption. III., 1911, A., ii, 471. adsorption. IV. Thermodynamics of irreversible processes and chemical

hysteresis, 1912, A., ii, 237. adsorption. V. Adsorption by starch of substances soluble in water, 1912,

A., ii, 743.

VI. Kinetics of the adsorption. hydration and dehydration colloids, 1912, A., ii, 913.

Rakowski, Adam Vladimirovitsch. See also Antony G. Doroschewsky.

Evgenij Vladimirovitsch. Rakowsky, See Alexander Pavlovitsch Sabanéeff.

Rakshit, Jitendra Nath. See Prafulla Chandra Rây.

Rakusin, Michael A., optical investigation of naphtha and of its distillation products, 1904, A., i, 641; 1905, A., ii, 358.

apparatus for determining the specific gravity of solid fats and waxes, 1905, A., ii, 303.

synthesis of naphtha and its origin,

1905, A., ii, 328.

behaviour of Pennsylvanian naphtha and its products towards polarised light, 1905, A., ii, 398.

optical activity of the more important vegetable oils, 1905, A., ii, 619.

modified Gintl pyknometer, 1905, A., ii, 802.

amount of cholesterol in fats and mineral oils and their probable genetic relationships, 1906, A., i, 951.

optical behaviour and some other properties of the most important animal fats, 1907, A., ii, 139.

optical investigation of the naphtha from the Holy Isle, 1907, A., ii,

882.

investigation of optical Berekei naphtha, 1907, A., ii, 883.

optical investigation of the Bibi-Eibat naphtha, 1907, A., ii, 883; 1908, A., ii, 115; 1909, A., ii, 586.

optical investigation of Ramanin naphtha, 1908, A., ii, 394.

optical and certain other properties of

Grosny naphtha, 1909, A., i, 281. optical properties of Cheleken ozoker-

ite, 1909, A., i, 281.

influence of centrifugal force on the optical and other properties of naphtha, 1909, A., ii, 153.

optical investigation of Sakhalin naphtha, 1909, A., ii, 246.

paraffin content of mineral oils as criterion for judging their relative geological age, 1909, A., ii, 490.

optical activity of mineral oils in an optically transparent state, 1909,

A., ii, 586.

the need for a systematic study or optically active petroleums, 1910, A., ii, 45.

optical investigation of Argentine petroleum, 1911, A., i, 761.

optical investigation of petroleum from southern Bolivia, 1911, A., i,

quantitative chemical analysis of mixtures by means of differences in density, 1911, A., ii, 774.

Rakusin, Michael A., and Ernst Laszlo, optical investigation of Hungarian naphtha, 1912, A., i, 741.

Ramage, Hugh, abnormal changes in some lines in the spectrum of lithium, 1903, A., ii, 193.

boiling points of homologous compounds, 1904, A., ii, 467.

Ramann, Emil, [colloids in relation to agriculture], 1911, A., ii, 52.

migration of mineral substances on the death of leaves in autumn, 1912, A., ii, 378.

migration of mineral substances when leaves are frozen, 1912, A., ii, 379.

Ramart-Lucas, (Mlle.) Pauline, fission of phenyl aryl ketones and phenyl naphthyl ketones by sodamide, 1909, A., i, 488.

action of organo-magnesium derivatives on trialkylacetophenones, 1910, A.,

.i, 378.

dehydration of alkyl- and benzylphenyl-tert.-butylcarbinols, A., i, 636.

action of magnesium phenyl bromide on methylpinacolin, 1912, A., i,

dehydration of diphenyl-\psi-butylcarbinol, 1912, A., i, 449.

diphenylisopropylacetic [aa-diphenyl-B-methylbutyric] acid, 1912, A., i, 566.

synthesis of a-phenyl-a\beta-dimethylhydrocinnamic acid [aß-diphenyl-amethylbutyric acid], 1912, A., i, 623.

Rambach, F. See Sergius F. Schemtschuschny.

Ramberg, Ludwig, antimony derivatives of thioglycollic acid, 1906, A., i,

platinous salts of certain organic acids containing sulphur, 1906, A., i,

active components of a-bromopropionic acid, 1906, A., i, 923.

ethylthioglycollic [ethylthiolacetic] acid, 1907, A., i, 586.

platinum compounds of phenylcarbylamine and of benzonitrile, 1907, A., i, 604.

cuprous sulphites of Etard and of Rogojski, 1909, A., ii, 1013.

a-bromopropionic acid, 1910, A., i, 4. photo-transformation of an internal complex salt, 1910, A., i, 218.

Ramberg, Ludwig, and Sten Kallenberg, tetrasulphaminoplato-salts, 1912, A., ii, 651.

Rameau. See Blanc.

Rammstedt, Otto, estimation of the acidity of milk, 1912, A., ii, 102.

the gluten-content and the baking quality of flour; estimation of the gluten-content, 1912, A., ii, 820.

See also Hermann Rammstedt, Otto. Matthes.

Ramón y Cajal, Santiago, heliochromic decoloration process; stable positives with methylene-blue, 1912, A., ii, 407.

Ramsauer, Carl, the actions of very short-waved ultra-violet light on gases, 1912, A., ii, 5.

analogies in the behaviour of moving electrons and atoms towards stationary atoms, 1912, A., ii, 1029.

Ramsauer, Carl, W. Hausser, Robert Oeder, actino-dielectric action in the phosphorescence of the alkalineearth sulphides, 1911, A., ii, 238.

Ramsay, Arthur Alexander, formation of formaldehyde in solutions of sugar,

1908, A., ii, 994.

Ramsay, Arthur Alexander. See also Frederick Bickell Guthrie.

Ramsay, Clarence F., a new and accurate method for determining the tryptic value of pancreatin, 1912, A., ii, 707.

Ramsay, Henrik, preparation of glycocyamines or guanino-acids. I. and II., 1909, A., i, 88, 367.

crystals of juniperol, 1909, A., i, 399. Ramsay, Wilhelm, and Johan Henrik Leonard Borgström, meteorite Bjurböle, 1904, A., ii, 671.

Ramsay, William, etching fluid for micro-metallurgy, 1903, A., ii, 547.

Ramsay, (Sir) William, attempt to estimate the relative amounts of krypton and xenon in atmospheric air, 1903, A., ii, 476.

properties and changes of radium emanation, 1904, A., ii, 529.

occurrence of thorium in Ceylon, 1904, A., ii, 745.

decomposition of water by radium, 1905, A., ii, 665.

a new element, radiothorium, the emanation of which is identical with that of thorium, 1905, A., ii, 789.

determination of the amounts of neon and helium in atmospheric air, 1905, A., ii, 817.

the chemical action of the radium emanation. Part I. Action on distilled water, 1907, T., 931; P., 132; discussion, P., 132.

selenium hexafluoride, 1907, A., ii,

540.

Ramsay, (Sir) William, presidential address, 1908, T., 774; P., 87; 1909. T., 624.

percentage of the inactive gases in the atmosphere; a correction to previous calculations, 1908, A., ii, 688.

search for possible new members of the inactive series of gases, 1908, A., ii, 840.

instability of radium bromide, 1909,

A., ii, 7.

action of niton (radium emanation) on thorium salts, 1911, A., ii, 843.

Moissan memorial lecture, 1912, T., 477. the formation of neon as a product of radioactive change, 1912, T., 1367; P., 182; discussion, P., 183. monatomicity of neon, krypton, and

xenon, 1912, A., ii, 251.

the mineral waters of Bath, 1912,

A., ii, 417.

Ramsay, (Sir) William, and (Miss) Emily Aston, molecular surface-energy of some mixtures of liquids, 1903, A., ii, 133.

Ramsay, (Sir) William, and Alexander Thomas Cameron, lithium in radioactive minerals, 1908, A., ii, 247.

Ramsay, (Sir) William, (Miss) Harriette Chick, and Frank Collingridge, chemical behaviour of gutta-percha, 1903, A., i, 190.

Ramsay, (Sir) William, and John Norman Collie, spectrum of the radium emana-

tion, 1904, A., ii, 529.

Ramsay, (Sir) William, and Frederick Soddy, experiments in radioactivity and the production of helium from radium, 1903, A., ii, 622.

further experiments on the production of helium from radium, 1904, A., ii,

Ramsay, (Sir) William, and James Frederick Spencer, chemical and electrical changes induced by ultra-violet

light, 1906, A., ii, 715.

Ramsay, (Sir) William, and Bertram Dillon Steele, vapour densities of some carbon compounds; an attempt to determine their exact molecular weight, 1903, A., ii, 635.

Ramsay, (Sir) William, and Francis Lawry Usher, action of radium emanation on the elements of the carbon

group, 1909, A., ii, 850.

Ramsay, (Sir) William, and Robert Whytlaw-Gray, the density of the radium emanation, 1910, A., ii, 767.

Ramsay, (Sir). William. See Alexander Thomas Cameron, James Irvine Orme Masson, and Robert Whytlaw-Gray.

Ramsbottom, John Edwin. See Kurt Brand, Samuel Chadwick, and David

Leonard Chapman.

Ramsden, Walter, separation of solids in the surface layers of solutions and suspensions; (observations on surface membranes, bubbles, emulsions, and mechanical coagulation), 1904, A., ii, 323.

Ramsden, W. B., two new aldehyde reactions, 1905, A., ii, 770.

Ramseyer, Louis. See Amé Pictet. Ramstedt, Eva, the solubility of the emanation of radium in organic liquids, 1911, A., i, 842.

Rana Bahadur. See Bahadur.

Ranc, Albert. See Henri Bierry, and Victor Henri.

Rancken, Dodo, the action of massage on protein metabolism, 1910, A., ii, 521.

Randall, David Lindsey, behaviour of ferric chloride in the zinc "re-

ductor", 1906, A., ii, 308. titration of mercurous salts with potassium permanganate, 1907, A., ii, 303.

the behaviour of molybdic acid in the zinc reductor, 1907, A., ii, 912.

reaction between hydriodic acid and bromic acid in the presence of a large amount of hydrochloric acid, 1910, A., ii, 542.

Randall, Harrison M., ultra-red line spectra; (spectra of silver, copper, cæsium, rubidium, strontium, barium), 1910, A., ii, 1014.

Randall, Merle.

See Gilbert Newton Lewis.

Randolph, C. P. See James R. Bailey, and Eugene Paul Schoch.

Ranfaldi, Francesco, crystallographic study of new organic compounds, 1906, A., i, 664.

crystallography of certain double salts of hydrazine, 1906, A., ii, 664.

crystallographic examination of some nitrophenylmethylacrylic derivatives, 1911, A., i, 129.

Ranfaldi, G. See Pasquale Bertolo. Ranken, Clerk, and William White

Taylor, physical property of mixed solutions of independent optically active substances, 1907, A., ii, 921. viscosity of solutions. I., 1908, A., ii, 87.

Ranken, Clerk. See also William

White Taylor.

Rankin, Allan Coats, germicidal action of metals and its relation to the production of peroxide of hydrogen, 1910, A., ii, 232.

Rankin, Daniel J., potential energy of the elements, 1908, A., ii, 680; 1909, A., ii, 368.

Rankin, George Atwater, action of light on sulphur, 1907, A., ii, 254.

Rankin, George Atwater, and Frederic Eugene Wright, Portland cement clinker; the hypothetical compound 8CaO, Al₂O₃, 2SiO₂, 1912, A., ii, 554.

Rankin, George Atwater. See also

Earnest Stanley Shepherd.

Rankin, Irvine Giles, and Sidney Montague Revington, the sulphides and oxysulphides of silicon, 1908, P., 131; discussion, P., 131

Rankin, Irvine Giles. See also Otto Flaschner, and Sidney Montagu Rev-

ington.

Rankine. Alexander Oliver, a method of determining the viscosity of gases, especially those available only in small quantities, 1910, A., ii,

viscosities of the gases of the argon

group, 1910, A. ii, 409. variation with temperature of viscosities of gases of the argon group,

1910, A., ii, 829.

the relation viscosity between and atomic weight for the inert gases; with its application to the case of the radium emanation, 1911, A., ii, 87.

viscosities of gaseous chlorine and bromine, 1912, A., ii, 332.

See Alexander Gut-Ransohoff, Fritz. bier.

Ransom, C. C. See Henry Drysdale Dakin.

Ransom, Fred, muscle enzymes, 1910, A., ii, 524.

action of caffeine on muscle, 1911, A.,

the effects of caffeine on the germination and growth of seeds, 1912, A., ii. 286.

Ransome, Frederick Leslie, [goldfieldite and famatinite from Goldfield, Nevada], 1912, A., ii, 264.

Ransome, Frederick Leslie. See also Waldemar Theodore Schaller.

Ranson, Georges. See André Brochet. Rantscheff, D. See Walther Borsche.

Ranwez, Fernand, new hydrogen su!phide apparatus, 1907, A., ii, 80.

Raoult, François. See Maurice Hanriot. Rap, Edoardo, synthesis of benzopyrone, 1903, A., i, 49.

Rapalje, Walter S. See John Charles Olsen.

Rapalski, G. See Karl Dziewónski.

Raper, Henry Stanley, formation of fatty acids from lactic acid when fused with alkali hydroxides, 1905, A., i, 405.

the condensation of acetaldehyde and its relation to the biochemical synthesis of fatty acids, 1907, T., 1831:

P., 235.

peptones from albumins. II. Peptones derived from blood albumin and precipitated by potassium mercury iodide, 1907, A., i, 266.

occurrence of caprylic (n-octoic) acid in the butyric fermentation; the constitution of the hexoic acid in butter fat, 1907, A., ii, 371.

the fate of ingested fat in the animal

body, 1912, A., ii, 365.

Raper, Henry Stanley, John Thomas Thompson, and Julius Berend Cohen, the action of sodium hypochlorite on the aromatic sulphonamides, 1904, T., 371; P., 55.

Raper, Henry Stanley. See also Julius Berend Cohen, and J. H. Elliott.

Rapin, A. See Heinrich Brunner. Rapiport, Jos. See Alfred Werner.

Rapoport, Leo, glycolysis, 1906, A., ii, 40. Rapp, Rudolf, influence of light on organic substances, with special reference to the automatic purification of streams, 1904, A., ii, 68.

disinfectant value of the three isomeric

cresols, 1907, A., ii, 982.

Rappenecker, Karl, viscosity-coefficients of vapours and their variation with temperature, 1910, A., ii, 590.

Rappeport, H. See Paul Dutoit.

Raquet, Désiré Alphonse, estimation of mustard oil in mustard, 1912, A., ii,

Raquet, Désiré Alphonse. See also Hubert Caron.

Rasch, Ewald, combustion of nitrogen in the arc between conductors of the second class, 1907, A., ii, 947.

Rasch, Ewald, and Friedrich Willy Hinrichsen, a relation between ionic mobility and temperature-coefficient, 1908, A., ii, 148.

a relation between electrical conductivity and temperature, 1908, A., ii,

149.

Raschig, Fritz, estimation of sulphuric acid by means of benzidine, 1908, A., ii, 572, 691.

new reagents for titration purposes; notes on iodometry, 1904, A., ii,

theory of the lead chamber process. II., 1905, A., ii, 23, 700.

Raschig, Fritz, [volumetric] estimation of phosphoric acid, 1905, A., ii, 284, 553.

estimation of nitrous acid, 1906, A.,

ii, 50.

new hydroxylaminesulphonic acids, 1906, A., ii, 159. estimation of sulphur in pyrites, 1906,

A., ii, 305.

estimation of [combined] sulphuric acid in drinking water, 1906, A.,

the lead chamber process and the oxides of nitrogen, 1907, A., ii,

Testimation of oxides of nitrogen and theory of the lead chamber process,

1907, A., ii, 863.

lecture experiments with inorganic nitrogen compounds, 1908, A., ii,

estimation of m-cresol in cresol mixtures, 1908, A., ii, 233. preparation of hydrazine, 1908, A., ii,

1029.

chlorine azide [chloroazoimide], NaCl, 1909, A., ii, 41.

chloroamine, 1909, A., ii, 232.

preparation of coumarin, 1910, A., i,

preparation of alkaline-earth hydroxylaminedisulphonates, 1910, A., ii, 411.

preparation of anhydrous hydrazine, 1910, A., ii, 706.

the separation of p-chloro-m-cresol (CH3:OH:Cl=1:3:6) from mixtures of m- and p-cresol, 1911, A., i, 537.

preparation of hydroxybenzyl alcohol, hydroxybenzaldehyde, and hydroxybenzoic acids, 1911, A., i, 636.

nitrosulphonic acid: "blue acid". 1911, A., ii, 200.

chemistry of the lead chamber process, 1911, A., ii, 272.

nitrogen hexa-oxide, NO3, 1912, A., ii, 346.

Rasenack, Paul, sweet substances from Eupatorium rebaudianum and liquorice, 1908, A., i, 818.

Rasetti, Georges. See Fritz Ullmann. Rasetti, P., constitution of hexyl iodide from mannitol, 1905, A., i, 558.

methylbutylacetic [a-methylhexoic] acid, 1905, A., i, 561.

ethylpropylacetic [a-ethylvaleric] acid, 1905, A., i, 562.

Raske, Karl, the action of ammonium cyanide (potassium cyanide and ammonium chloride) on chlorinated aldehydes, 1912, A., i, 334.

Raske, Karl. See also Emil Fischer. Raspe, Fritz. See Ernst Erdmann.

Rassbach, Wilhelm. See Rudolf Schenck. Rassenfosse, André, electrolytic conductivity of fluorescent solutions, 1910, A., ii, 89.

coloration of salts, 1910, A., ii, 210.

formation of colloidal copper, 1911, A., ii, 41.

Rassmann, Wilhelm. See August Michaelis.

Rassow, Berthold, and R. Bauer, action of zinc or magnesium on mixtures of esters of oxalic and of a-brominated fatty acids; new syntheses of asdialkylmalic and dialkyloxalacetic esters, 1908, A., i. 316.

synthesis of unsymmetrical dialkylmalic esters and diethyloxalacetic

esters, 1909, A., i, 631.

preparation of esters of a-halogenated fatty acids, 1909, A., i, 758.

Rassow, Berthold, and Otto Baumann, hydrazo-compounds. IV. Reactions of hydrazobenzene with aliphatic aldehydes and with benzoyl chloride, 1910, A., i, 79.

Rassow, Berthold, and Arno Becker, hydrazo-compounds. VII. Methylhydrazotoluene, methyltolidine, and ethylbenzidine, 1911, A., i, 932.

Rassow, Berthold, and Kurt Berger, hydrazo-compounds. VI. Methylhydrazo-compounds. hydrazobenzene and methylbenzidine, 1911, A., i, 821.

Rassow, Berthold, and Waldemar von Bongé, action of anhydrous nitric and sulphuric acids on cellulose, 1908, A., i, 394.

Rassow, Berthold, and Fritz Burmeister. hydrazo-compounds. V. Reaction of hydrazobenzene with mixed aldehydes, 1911, A., i, 820.

a-chloro-B-phenyl-lactic acid and phenylacetaldehyde, 1912, A., i, 32.

Rassow, Berthold, and Otto Reuter, condensation of alkyl-o-toluidines with carbonyl chloride, 1912, A., i,

some homologues of auramine and crystal-violet, 1912, A., i, 586.

Rastelli, A. See Angiolo Funaro.

Ratcliff, Frank Darby, mineral acids in vinegar, 1907, A., ii, 311.

Ratcliffe, William Henry. See John Theodore Hewitt.

Rath, C. See Carl Mai.

Rath, Julius, hydrolytic fission of acetylated hydroxycarboxylic acids, 1908, A., ii, 94.

Rathgen, P., lecture experiment on the extinction of burning light petroleum, etc., 1911, A., ii, 385.

Rathje, Arnold, oils from lycopodium, ergot, areca nut, and Aleurites cordata seed, 1909, A., ii, 86.

composition of Amapa latex, 1909.

A., ii, 258.

Rathke, [Heinrich] Bernhard, odour of heated selenium, 1903, A., ii, 287. selenium sulphide, 1903, A., ii, 287.

Rathsmann, E. See Emil Abderhalden. Ratner, Ch., estimation of tin and its separation from antimony, 1903, A., ii, 109.

Ratner, S., mobility of radioactive atom-ions in gases, 1912, A., ii, 884.

Ratz, Florian, action of nitrous acid on the amide of malonic acid and its homologues, 1904, A., i, 298, 857. nicotine and its specific rotation.

I., 1906, A., i, 103,

nitroacetamide, 1906, A., i, 238.

Ratzlaff, Ernst. See August Michaelis. Rau, Hans, observations on canal rays, 1906, A., ii, 642.

Raubitschek, Else, erepsin, 1908, A.,

ii, 517.

Rauchwerger, Dora. See Carl Neuberg. Rauert, Dietrich. See Emil Bose. Rauff, Georg. See Richard Anschütz.

Raulin, Gaston, rapid estimation of nickel in steel, 1911, A., ii, 1034.

analysis of technical ferro-boron, 1912,

A., ii, 207.

Raumer, Ed. von, influence of feeding with sucrose and starch syrup on the composition of honey, 1903, A., ii, 32.

occurrence of iron and manganese in service water, 1904, A., ii, 90.

use of fermentation methods for the analysis of starch syrup, 1905, A., ii. 618.

Rausch von Traubenberg. See Trauben-

Rauschenphat, G. von. See Karl Bornemann.

Raveau, C., elementary demonstration of the phase rule, 1904, A., ii, 313. state of matter in the neighbourhood of the critical point, 1905, A., ii, 628.

Ravenna, Ciro, and Vincenzo Babini, formation of the alkaloids in tobacco, 1912, A., ii, 83.

presence of free hydrocyanic acid in plants. II., 1912, A., ii, 798.

Ravenna, Ciro, and Gaetano Bosinelli, action of some aromatic substances in the cyanogenesis of plants, 1912, A., ii, 1084.

Ravenna, Ciro, and Gaetano Bosinelli. presence of hydrogen eyanide in plants. III., 1912, A., ii, 1084.

Ravenna, Ciro, and O. Cereser, origin and physiological function of pentosans

in plants, 1909, A., ii, 1046.

Ravenna, Ciro, and A. Maugini, behaviour of plants towards lithium salts. II., 1912, A., ii, 1084.

Ravenna, Ciro, and O. Montanari, origin and physiological function of pentosans II., 1910, A., ii, 993. in plants.

Ravenna, Ciro, and Arrigo Peli, hydrogen cyanide and the assimilation of nitrogen in green plants, 1908, A., ii, 217.

Ravenna, Ciro, and Giacomo Pighini, metabolism of moulds; Aspergillus fumigatus. I., 1910, A., ii, 994.

Ravenna, Ciro, and Mario Tonegutti, the hydrogen cyanide in Sambucus, 1910, A., ii, 442.

the presence of free hydrogen cyanide in plants, 1910, A., ii, 884.

Ravenna, Ciro, and C. Vecchi, formation of hydrogen cyanide in the germination of seeds, 1912, A., ii, 194.

Ravenna, Ciro, and M. Zamorani, physiological function of hydrogen cyanide in Sorghum vulgare, 1909, A., ii, 1048.

behaviour of plants towards lithium salts, 1910, A., ii, 235.

utilisation of tricalcium phosphate by cruciferous plants, 1910, A., ii, 741. importance of mucilages in the germ-

ination of seeds, 1910, A., ii, 991. formation of hydrogen cyanide in the germination of seeds, 1910, A., ii,

1099. Ravenna, Ciro. See also Giacomo Luigi Ciamician, and Giuseppe A. Plancher.

Ravin, carbon nutrition of phanerogams by means of certain organic acids and their potassium salts, 1912, A., ii,

Ravold, A., and William Homer Warren, a case of alcaptonuria, 1910, A., ii, 733.

Rawdon, Henry S. See Edward DeMille Campbell.

Rawson, Christopher, analysis of indigo, 1906, A., ii, 820.

Ray, Burton Justice. See William Ridgely Orndorff, and William Alphonso Withers.

Rây, Prafulla Chandra, dimercuriammonium nitrate, 1903, A., ii, 148. mercuric nitrite and its decomposition by heat, 1904, T., 523; P., 57;

discussion, P., 58.

Rây, Prafulla Chandra, theory of the production of mercurous nitrite and of its conversion into various mercury nitrates, 1904, P., 217; 1905, T. 171

the nitrites of the alkali metals and metals of the alkaline earths and their decomposition by heat, 1904,

P., 240

the sulphate and the phosphate of the dimercurammonium series, 1904, P., 249; 1905, T., 9.

mercurous hyponitrite, 1907, T., 1404;

P., 89.

eupric nitrite, 1907, T., 1405; P.,

double nitrites of mercury and the alkali metals, 1907, T., 2031; P., 165.

silver-mercuroso-mercuric oxynitrates and the isomorphous replacement of univalent mercury by silver, 1907, T., 2033; P., 165.

molecular volumes of the nitrites of silver, mercury, and the alkali metals, 1908, T., 997; P., 75.

lithium nitrite and its decomposition

by heat, 1908, P., 75.

molecular volumes of the nitrites of barium, strontium, and calcium, 1908, P., 240; 1909, T., 66.

the decomposition and sublimation of ammonium nitrite, 1909, T., 345;

P., 56.

the double nitrites of mercury and the metals of the alkaline earths, 1910, T., 326; P., 7.

the double nitrites of mercury and the bases of the tetra-alkylammonium

series, 1910, P., 172.

influence of minute quantities of ferric salts and of manganese nitrate on the rate of solution of mercury in nitric acid, 1911, T., 1012; P., 4.

Rây, Prafulla Chandra, and Rasik Lal Datta, nitrites of the benzylammonium series; benzylammonium nitrite and dibenzylammonium nitrite and their sublimation and decomposition by heat, 1911, T., 1475; P., 127.

benzylmethyl-, benzylethyl-, and allylammonium nitrites, 1912, P., 258.

isomeric allylamines, 1912, A., i, 835.

Rây, Prafulla Chandra, and Nilratan Dhar, the molecular conductivities of potassium nitrite, mercuric nitrite, and potassium mercurinitrite, 1912, T., 965; P., 102. Rây, Prafulla Chandra, and Nilratan Dhar, chlorides of the mercurialkyland mercurialkylaryl-ammonium series, and their constitution as based on conductivity measurements, 1912, P., 292.

molecular conductivity and ionisation

of nitrites, 1912, P., 319.

Rây, Prafulla Chandra, Nilratan Dhar, and Tincowry De, the vapour density of ammonium nitrite, 1912, T., 1185; P., 151.

1185; P., 151. nitrites of the mercurialkyl- and mercurialkylaryl-ammonium series. Part II., 1912, T., 1552; P., 185.

Rây, Prafulla Chandra, and Atul Chandra Gañguli, the nitrites of the alkali metals and metals of the alkaline earths and their decomposition by heat, 1905, T., 177.

the constitution of nitrites. Part I.

Two varieties of silver nitrite, 1905,

P., 278.

Fischer's salt and its decomposition by heat, 1906, T., 551; P., 40.

the decomposition of mercurous and silver hyponitrites by heat, 1907, T., 1899; P., 89.

the decomposition of hyponitrous acid in presence of mineral acids, 1907,

T., 1866; P., 184.

Rây, Prafulla Chandra, and Atul Chandra Ghosh, decomposition of ammonium platinichloride and ammonium platinibromide by heat, 1909, A., ii, 898.

decomposition of dimercurammonium nitrite by heat, 1910, T., 323; P., 6.

Rây, Prafulla Chandra, and Satish Chandra Mukerji, ionisation of the nitrites as measured by the cryoscopic method; preliminary note, 1910, P., 173.

Rây, Prafulla Chandra, and Pañchānan Neogi, the interaction of the alkyl sulphates with the nitrites of the alkali metals and metals of the alkaline earths, 1906, T., 1900; P., 259.

preparation of aliphatic nitro-compounds by the interaction of the alkyl iodides and mercurous nitrite, 1907, P., 246.

Rây, Prafulla Chandra, and Jitendra Nath Rakshit, methylammonium nitrite, 1911, T., 1016; P., 22.

nitrites of the alkylammonium bases: ethylammonium nitrite, dimethylammonium nitrite, and trimethylammonium nitrite, 1911, T., 1470; P., 71, 122.

Rây, Prafulla Chandra, and Jitendra Nath Rakshit, trimercuridiethylammonium nitrite, 1911, T., 1972; P., 220.

nitrites of the alkylammonium series. Part III. Triethylammonium nitrite and its decomposition and sublimation by heat, 1911, P., 264; 1912,

T., 216.

nitrites of the alkylammonium series.

Part II. Propylammonium nitrite
and butylammonium nitrite and
their decomposition by heat, 1911,
P.. 291: 1912. T., 141.

nitrites of the alkylammonium series. Part IV. Isobutyl-, diethyl-, dipropyl-, and tripropyl-ammonium nitrites, 1912, T., 612; P., 41.

nitrites of the alicyclic ammonium series. Part I. Nitrosopiperazin-

ium nitrite, 1912, P., 102.

Rây, Prafulla Chandra, Jitendra Nath Rakshit, and Rasik Lal Datta, nitrites of the mercurialkyl- and mercurialkylaryl-ammonium series, 1912, T., 616; P., 41.

Rây, Prafulla Chandra, and Jatindra Nath Sen, decomposition of mercurous nitrite by heat, 1903, T., 491; P.,

78; discussion, P., 78.

Rây, Prafulla Chandra, and Hemendra Kumar Sen-Gupts, tetramethylammonium hyponitrite and its decomposition by heat, 1911, T., 1466; P., 121.

the decomposition of tetramethylammonium nitrite by heat, 1911,

P., 4.

Rây, Priyada Ranyan, and Hemendra Kumar Sen-Gupta, the action of hydrazine and hydroxylamine on ferricyanides, and a new method for the estimation of hydrazine and ferricyanides, 1912, Å., ii, 817.

Ray, Rames C. See Morris William

Travers.

Raydt, U., gold silver alloys, 1912, A.,

ii, 562.

Rayleigh, [John William Strutt] (Lord), distillation of binary mixtures, 1903, A., ii, 59.

proportion of argon in the vapour rising from liquid air, 1903, A., ii, 542.

compressibilities of oxygen, hydrogen, nitrogen, and carbon monoxide between one atmosphere and half an atmosphere of pressure, and on the atomic weights of the elements concerned, 1904, A., ii, 313.

density of nitrous oxide, 1904, A.,

ii, 726.

Rayleigh, [John William Strutt] (Lord), compressibility of gases between one atmosphere and half an atmosphere of pressure, 1905, A., ii, 232, 373.

Dr. Johnston Stoney's logarithmic law of atomic weights, 1911, A., ii,

874.

Raymond, Edgard, volumetric estimation of manganese in iron and steel, 1908, A., ii, 323.

apparatus for the estimation of sulphur in iron and steel, 1908, A., ii,

628.

burette with automatic filling arrangement, 1910, A., ii, 648.

siphon for use with carboys, 1910, A., ii, 892.

Raynaud, Albert, solubility of uranous oxide in certain acids, 1912, A., ii,

density of uranous oxide and its solubility in nitric acid and aqua regia, 1912, A., ii, 948.

Raynaud, Albert. See also William Echsner de Coninck.

Rayner, Ernest A., the fruit of Solomon's seal (Polygonatum bistorum), 1912, A., ii, 802.

1912, A., ii, 802. Rdultowsky, Wladimir. See Alexei

Vasilevitsch Saposhnikoff.

Re, Filippo, hypothesis of the nature of radioactive substances, 1903, A., ii, 522.

Rea, (Miss) Florence Williamson. See Cecil Reginald Crymble.

Reach, Felix, digestion and absorption in the stomach, 1903, A., ii, 664.

ethyl alcohol and ethyl esters in the animal body, 1907, A., ii, 282.

fate of glycerol in the body, 1909, A., ii, 73.

the behaviour of the liver to foreign proteins, 1909, A., ii, 416.

the physiology of winter sleep, 1910, A., ii, 787.

carbohydrate metabolism, 1911, A., ii, 743.

the resorption of gelatin from the small intestine, 1911, A., ii, 1109. Reach, Felix, and Viktor Widakowich,

Reach, Felix, and Viktor Widakowich, the behaviour of the fat of torpedo during pregnancy, 1912, A., ii, 580.

Read, Arthur Avery. See John Oliver Arnold.

Read, Henry Lewis. See Frank Austin Gooch.

Read, John, the condensation of pentaerythritol with aldehydes, 1912, T., 2090; P., 240. Read. John. See also William Jackson

Read, Maurice Rex, chromium trioxide,

1907, A., ii, 475. Read, T. T., and C. W. Knight, reformation of soda-leucite, 1906, A., ii,

Reale, G., conversion of paraffins into alcohols and fatty acids during the saponification of spermaceti, 1904, A., i, 283.

Rebenstorff, H., a differential "araeo-picnometer", 1904, A., ii, 704.

hydrometer with a centigram scale, 1906, A., ii, 423.

simplified measurement and reduction of gases, 1906, A., ii, 487.

acidimetry by measurement of hydrogen, 1906, A., ii, 893.

estimation of carbon dioxide, 1906,

A., ii, 901.

preparation of normal hydrochloric acid with gaseous hydrochloric acid, 1908, A., ii, 221.

currents in water due to the dissolution of carbon dioxide, 1908, A., ii, 490.

application of a deduction from the Boyle-Mariotte law, 1908, A., ii, 565.

use of the colour thermoscope. III. [Silver-mercury iodide], 1909, A., ii, 146.

demonstration of the expansions of gases and vapours, 1909, A., ii, 307.

methods of demonstrating the properties of liquid air; the collection of atmospheric nitrogen; and the action of sodium on water], 1910, A., ii, 604.

Reber, Emil. See Eugen Bamberger. Rebière, Georges, chemical composition of colloidal silver produced electric-

ally, 1909, A., ii, 312.

properties and chemical composition of electrically prepared colloidal silver precipitated from its solutions by electrolytes, 1912, A., ii, 642.

Reboul, G., application of the kinetic theory to the metals, 1908, A., ii,

electro-capillary action and discharge in rarefied gases, 1909, A., ii, 290. chemical actions and ionisation, 1910,

A., ii, 822.

conductibility accompanying chemical reactions, 1911, A., ii, 692.

the Hertz-Halwachs effect and photochemical actions, 1912, A., ii, 512.

Reboul, G., and Armand Gautier, chemical action and ionisation, 1909, A., ii, 718.

Reboul, G., and E. Grégoire de Bollemont, the emission of positive charges by heated metals, 1912, A., ii, 115.

Rebuffat, Orazio, purification of waters containing silica and magnesia,

1903, A., ii, 69.

calcium thioaluminates and the decomposition of maritime structures made of Portland cement. 1903, A., ii, 76.

latex of Euphorbia candelabra, 1903,

A., ii, 95.

analysis of atmospheric air, 1903, A., ii, 99.

dicalcium silicate in Portland cement, 1903, A., ii, 146.

properties of radium salts, 1904, A., ii, 800.

Recchi, Vincenzo, acenaphthenequinone, 1903, A., i, 261.

evaluation of commercial calcium carbide, 1903, A., ii, 757.

Rech, Wilhelm, absorption spectra of neodymium and praseodymium chlor-

ide, 1906, A., ii, 410.

Rechenberg, C. von, a source of error but little considered in the determination of boiling points under diminished pressure, 1909, A., ii,

Krafft's boiling-point estimations and his theory of volatilisation, 1910,

A., ii, 101.

fall of temperature in vapours of high molecular complexity at small pressures, 1911, A., ii, 95.

Rechenberg, C. von, and W. Weisswange, distillation of liquids which are mutually insoluble, 1906, A., ii, 72.

Reckleben, Hans, action of antimony hydride on dilute silver solutions, 1909, A., ii, 489.

simple device for use in fitting up a series of absorption flasks, etc., 1911, A., ii, 268.

Reckleben, Hans, and A. Güttich, [estimation of antimony hydride, 1910, A., ii, 352.

Reckleben, Hans, and Georg Lockemann, reactions and estimation of arsenic hydride, 1906, A., ii, 251.

action of arsenic hydride on solutions of halogens, halogen acids, and other oxidising agents, 1908, A., ii, 176.

estimation of arsenic hydride in gaseous mixtures, 1908, A., ii,

purification of hydrogen from arsenic, 1908, A., ii, 271.

Reckleben, Hans, Georg Lockemann, and Alfred Eckhardt, action of arsine on solutions of some metallic salts. 1908, A., ii, 36.

Reckleben, Hans, Johannes Scheiber. and K. Strauss, the recognition of solid arsenic hydride, 1911, A., ii, 390.

the recognition of a solid antimony hydride, 1911, A., ii, 404.

Reckleben, Hans, See also Johannes Scheiber.

Recklinghausen, Max von. See Victor Henri.

Reclaire, August, hydrazones of sugars, 1908, A., i, 1013; 1909, A., i, 421.

Reclaire, August. See also Walther Borsche.

Record, Frederick, apparatus for simultaneously extracting a solid and filtering the solution so obtained, 1908, A., ii, 575; 1909, A., ii, 223.

Recoura, Albert, aluminium chlorosulphate, 1903, A., ii, 79.

compound of ferric sulphate and sulphuric acid, 1903, A., ii, 599.

ferrisulphuric acid and ethyl ferrisulphate, 1903, A., ii, 600.

basic ferric sulphate, 1905, A., ii,

hydrolysis of concentrated solutions of ferric sulphate, 1905, A., ii,

transformations of hydrated ferric sulphate, 1905, A., ii, 590.

ferric sulphate, 1907, A., ii, 552. different molecular states of anhydrous and hydrated ferric sulphate, 1907,

A., ii, 693. colloidal barium sulphate, 1908, A.,

cuprous sulphate, 1909, A., ii, 579. estimation of copper as anhydrous

cupric sulphate, 1910, A., ii, 899. a compound of ferric sulphate and

alcohol; constitution of ferric sulphate, 1912, A., ii, 165.

complex ferric compounds; ferric fluoride, 1912, A., ii, 353.

Recusani, Giacomo. See Luigi Mascarelli.

Redard, William, See Louis Pelet-Jolivet.

Reddelien, Gustav, preparation of benzophenoneimine derivatives, 1910, A., i, 118.

nature of the catalytic action of zinc chloride by the condensation of aromatic ketones with amines, 1910, A., i, 746.

Reddelien, Gustav, zinc chloride as condensing agent, 1912, A., i, 363.

a colour reaction of unsaturated ketones, 1912, A., i, 986.

Reddelien. Gustav. See also Hans Stobbe.

Reddick, Guy A. See James Bert Garner. Redeker. See Athenstaedt.

Redfield, Harry Westfall. See Emile Monnin Chamot, and Clarence Frederic

Redgrove, Herbert Stanley, calculation of physico-chemical constants, 1907, A., ii, 446, 604, 929.

constitution of the carbon molecule from the standpoint of thermochemistry, 1908, A., ii, 177.

calculation of thermochemical constants, 1908, A., ii, 463, 564.

thermochemical evidence for von Baeyer's strain theory, 1908, A., ii,

calculation of thermo-chemical constants. V. Calculation of the thermal constants of aromatic substances, 1908, A., ii, 812,

quadrivalency of oxygen, 1909, A., ii, 308.

note on the usually-adopted method of calculating additive physico-chemical constants, 1910, P., 99.

calculation of optico-chemical con-

stants, 1910, A., ii, 669. thermochemistry of benzene, 1912, A., i, 956.

Redlich, Alfred. See Richard Möhlau. Redlich, Karl A., two new magnesite occurrences in Carinthia, 1909, A., ii, 410.

Redpath, George C. See Hugh Salvin Pattinson.

Redwood, (Sir) Boverton, n'hangellite from Portuguese East Africa, 1907, A., ii, 699.

Redwood, Theophilus Horne, obituary notice of, 1910, T., 680.

Reeb, Emile. See Frédéric Schlagdenhauffen.

Reeb, M. See Wolfgang Heubner.

Reed, Burleigh B., the fruit of Pyrus arbutifolia, 1909, A., ii, 696.

Reed, Harry S., detection and estimation of benzoic acids in ketchups, fruits, and ciders, 1908, A., ii, 74.

Reed, Howard Sprague, relation of magnesium and phosphorus to growth of fungi, 1909, A., ii, 510.

chemical and mycological studies on a corn rot having possible relation to the etiology of Pellagra, 1910, A., ii, 744.

Reed, Howard Sprague, effect of chemical reagents on the respiration and growth of wheat seedlings, 1911, A., ii, 1127.

Reed, Howard Sprague, and H. S. Stahl, the erepsins of Glomcrella rufomaculans and Sphæropsis malorum, 1911, A., ii, 916.

oxydases in certain fungi pathogenic to plants, 1912, A., ii, 381.

Reed, Howard Sprague. See also Oswald Schreiner.

Reed, Lester, approximate estimation of starch by iodine, 1912, A., ii, 102.

Reed, Walter William, and Kennedy Joseph Previté Orton, the wandering of bromine in the chlorination of bromoanilines, 1907, T., 1543; P., 210.

Reed, Walter William. See also Kennedy Joseph Previté Orton.

Reeder, Grant S. See A. A. Wells. Reeders, Johan Christiaan. See Philipp Kohnstamm.

Reemlin, E. B. See Emil Abderhalden. Reese, Heinrich. See Gustav Embden, and Max Plaut.

Reesema, N. H. Siewertsz van. See Willem Paulinus Jorissen.

Reformatsky, Alexander Nikolaivitsch, synthesis of alcohols of the series $C_nH_{2n}-{}_5OH$, 1909, A., i, 2.

Reformatsky, J. N., E Grischkewitsch-Trochimowsky, and A. Sementsoff, Δακ-undecadiene and Δαο-hexadecadiene, 1911, A., i, 597.

Reformatsky, Sergius Nikolaivitsch, the capacity of methoxyl and ethoxyl groups for replacement by [alkyl] radicles; synthesis of polybasic acids, 1906, A., i, 136.

Reformatsky, Sergius Nikolaivitsch. See also L. Baidakowsky, W. Jaworsky, and Joseph Zeltner.

Regaud and Fouilland, electric thermoregulator, 1909, A., ii, 379.

Regel, Karl, estimation of potassium by means of chloroplatinic acid in presence of sulphates, 1906, A., ii, 631.

Regener, Erich, the decay-constant of polonium, 1912, A., ii, 118.

Regener, Erich. See also Emil Warburg.

Regensburger, P. See C. Bleisch.
Regnier, P. See Alexandre Desgrez.
Reh, Alfred, autolysis of lymph glands,

1903, A., ii, 439.
polypeptidephosphoric acid (paranucleic acid) from caseinogen, 1908, A., i, 69.

Rehfuss, M. E., and Philip Bouvier Hawk, Nylander's reaction, 1909, A., ii, 524. Rehländer, Paul, binaphthylenethiophen and trinaphthylenebenzene, 1903, A., i, 571.

Reich, Albert, action of acid amides on aldehydes, 1905, A., i, 35.

Reich, Alfred. See Albert Stutzer.

Reich, Julius A., preparation of alkali hydroxides by means of alkali silicofluorides, 1906, A., ii, 228.

Reich, Max, action of acetamide on aldehydes, and of formamide on acetophenone, 1905, A., i, 35.

the iron in the urine of domestic animals, 1911, A., ii, 1013.

test for blood, 1912, A., ii, 399. Reich, Otto. See Martin Krüger.

Reich, Paul. See Hermann Leuchs.

Reich, R., estimation of essential oils in spices, 1908, A., ii, 1075.

estimation of essential oil and eugenol in cloves, 1909, A., ii, 944.

Reich, Siegmund, and J. Pinezewski, 2:6-dinitrobenzaldehyde, 1912, A., i, 361.

Reich, Siegmund, Otto Wetter, and Max Widmer, 2:4:6-trinitrobenzyl bromide and its derivatives, 1912, A., i, 958.

Reichard, Albert, amount of tannin contained in barley, malt, and worts to which hops have not been added, 1904, A., ii, 585.

action of formaldehyde on starch, 1908, A., i, 606.

the tannin in the seed coverings of barley, 1912, A., ii, 592.

Reichard, Albert, and Georg Purucker, estimation of extract in barleys, 1905, A., ii, 428.

Reichard, C., evaluation of opium, 1903, A., ii, 117.

action of sodium ortharsenite on the solutions of salts of metals, 1903, A., ii, 140.

reduction of titanic, vanadic, tungstic, and molybdic acids by means of nascent hydrogen in molecular and quantitative proportions, 1903, A., ii, 217.

detection of cobalt in presence of nickel, 1903, A., ii, 245.

influence of alkali tungstates and molybdates on the hydrogen peroxide-chromic acid reaction, 1903, A., ii, 245.

detection of morphine, 1903, A., ii, 458; 1909, A., ii, 194.

the phosphomolybdate reaction, 1903, A., ii, 692.

action of tartaric acid and its salts on lead sulphate, 1903, A., ii, 727.

Reichard, C., detection and estimation of ammonia by means of sodium

picrate, 1903, A., ii, 754.

detection of strontium in the presence of calcium by means of potassium chromate and ammonia, 1903, A., ii, 757.

action of potassium thiocyanate on ammonium heptamolybdate. I.,

1904, A., i, 20. acid reaction of ammonium salts

towards blue litmus, 1904, A., ii, 30. qualitative separation of barium, strontium, and calcium by means of potassium dichromate and ammonia, 1904, A., ii, 88.

reactions of barium peroxide with titanosulphuric acid; detection of

peroxides, 1904, A., ii, 146.

use of antipyrine in analysis [nitrite reactions], 1904, A., ii, 367.

new reactions for the detection of

cocaine, 1904, A., ii, 374. the sensitiveness of the sodium nitroprusside reaction, 1904, A., ii, 443. action of alkali nitrites on nickel salts,

1904, A., ii, 488, 741. action of sodium nitroprusside on

alkalis, carbonates, hydrogen carbonates, and ammonia, 1904, A., ii, 514. action of sodium picrate on sodium

carbonate solutions, 1904, A., ii,517. reactions for brucine and strychnine.

I. Brucine, 1904, A., ii, 791.

alkaloid reactions, 1904, A., ii, 792; 1905, A., ii, 659.

a new bismuth reaction, 1904, A., ii,

844. alkaloid reactions. III. Atropine, 1904,

A., ii, 847.

tests for strychnine and brucine. [II. Strychnine], 1904, A., ii, 848.

alkaloid reactions; morphine, 1905, A., ii, 68.

reactions of cocaine and morphine, 1905, A., ii, 127.

alkaloid reactions; quinine and cinchonine, 1905, A., ii, 561, 659.

alkaloid reactions; nicotine and coniine, 1905, A., ii, 563.

alkaloid reactions; sparteine, coniine, nicotine, 1905, A., ii, 563.

detection and estimation of sodium in presence of lithium by means of hydrofluosilicic acid, 1905, A., ii, 653.

alkaloid reactions; amorphous aconitine, 1905, A., ii, 777.

alkaloid reactions; veratrine (puriss. German Pharmacopœia IV), 1905, A., ii, 871. Reichard, C., new test for nickel, 1906, A., ii, 495.

phenanthrene reaction. II., 1906, A., ii. 500.

new reaction of terpineol, 1906, A., ii, 503.

a characteristic reaction for borax, 1906, A., ii, 579.

new tests for cocaine, 1906, A., ii, 589, 817.

a reaction for morphine, 1906, A., ii, 637.

two new, colour reactions for nitric acid, 1906, A., ii, 704,

new reaction of tin, 1906, A., ii, 806. alkaloid reactions; berberine, 1906, A., ii, 817.

alkaloid reactions; quinoidine, 1906, A., ii, 818.

glucoside reactions; arbutin, 1906, A., ii. 818.

alkaloid reactions [codeine], 1906, A., ii, 909.

alkaloid reactions [thebaine], 1906, A., ii, 909.

reactions of boric acid with opium alkaloids, 1907, A., ii, 142.

reactions of santonin, 1907, A., ii, 316. alkaloid reactions [narcotine], 1907, A., ii, 319.

new tests for halogens in alkali haloids, 1907, A., ii, 391.

alkaloid reactions [narceine], 1907. A., ii, 414.

alkaloid reactions [papaverine], 1907, A., ii, 592.

alkaloid reactions [pilocarpine], 1907, A., ii, 658.

action of metallic aluminium on insoluble or sparingly soluble mercury compounds, 1907, A., ii, 691.

fluorescence of cocaine and tropacocaine, 1907, A., ii, 914.

reactions of scopolamine, 1907, A., ii, 915.

alkaloid reactions [yohimbine], 1907, A., ii, 915.

alkaloid reactions [tropacocaine], 1908, A., ii, 643.

the importance of hygroscopy in general analysis, 1908, A., ii, 891.

alkaloid reactions; eserine [physostigmine], 1909, A., ii, 526.

production of a volatile aromatic substance from solutions of morphine salts, 1910, A., i, 187.

colour reactions of proteins, 1910, A., ii, 363.

application of the "aluminium reaction" in the analysis of mercury compounds, 1910, A., ii, 655.

Reichard, C., chemical colour reactions, 1910, A., ii, 746.

new reactions for salicylic acid, 1910, A., ii, 906.

reactions of carbohydrates. I. Sucrose, 1910, A., ii, 1117.

saponin reactions, 1911, A., ii, 235. glucoside reactions; convallamarin

and convallarin, 1911, A., ii, 345. some causes of the formation of colour in inorganic compounds, 1911, A., ii, 561.

alkaloid reactions; arecoline, 1911,

A., ii, 778.

estimation of silicon in iron containing much graphite, 1911, A., ii, 929.

estimation of phosphorus in iron and steel, 1912, A., ii, 90.

alkaloid reactions [hydrastinine],

1912, A., ii, 106.

the formation of lead carbonate from metallic lead in presence of metallic aluminium, 1912, A., ii, 162.

reactions of lactic acid, 1912, A., ii,

305.

Reichard, Paul. See Carl Dietrich Harries.

Reichard, R., an inorganic indicator for use in the volumetric estimation of alkalis and carbonates, 1912, A., ii,

Reichardt, C. J., preliminary testing of urine, 1907, A., ii, 144.

iodine compounds and gold solutions, 1909, A., ii, 262.

detection of reducing substances in urine, 1910, A., ii, 163.

urine colorations, 1910, A., ii, 912. estimation of indican in the presence of iodides, and their estimation. 1911, A., ii, 554.

estimation of uric acid by means of iodine and the action of iodine on

creatinine, 1912, A., ii, 103. Reichel, H., and Karl Spiro, ferment action and ferment loss, 1904, A., i, 1071; 1906, A., i, 127.

action of rennin. I., 1906, A., i, 127. Reichel, Heinrich, the theory of disinfection; the disinfecting action of phenol,

1909, A., ii, 1045; 1910, A., ii, 61. Reichel, Johannes, the behaviour of Penicillium in the presence of acetic acid and its salts, 1911, A., ii, 144.

Reichel, Johannes. See also Karl Au-

Reichenau, Karl. See Leon Asher. Reichenbach, Ernst. See Theodor Pfe-

Reichenburg, W. See Ferdinand Hen-

rich.

Reichenheim, Otto, conduction of electricity in electronegative vapours and A1-rays, 1909, A., ii, 460.

spectra of anode rays, 1910, A., ii,

Reichenheim, Otto. See also Ernst Gehrcke, and Johann Georg Koenigsberger.

Reicher, Karl, and E. H. Stein, the physiology and pathology of carbohydrate metabolism [colorimetric estimation of small amounts of sugar, 1912, A., ii, 99.

Reicher, Karl. See also Julius Citron.

and Carl Neuberg.

Reicher, Lodewyk Theodorus, a simple automatic stirrer for use with the depressimeter, 1911, A., ii, 93.

Reicher, Lodewyk Theodorus, and F. C. M. Jansen, refractometric determination of the strength of formaldehyde solutions, 1912, A., ii, 304.

Reicher, Lodewyk Theodorus. Willem Paulinus Jorissen.

Reichert, Edward Tyson, crystallisation of hæmoglobin, 1903, A., i, 543.

Reichinstein, David, kinetics of rapid chemical and ionic reactions investigated by the oscillograph, 1909, A., ii, 960.

oscillographic investigation of some electrolytic processes. III., 1910, A., ii, 1028.

rate of discharge of galvanic cells. I., 1911, A., ii, 249.

Reichinstein, David, A. Bürger, and A. Zieren, influence of the acid content of the electrolyte on the chemical polarisation of the reversible electrode Cu|Cu, 1912, A., ii, 1037.

Reichinstein, David. See also Max

Le Blanc.

Reid, Ebenezer Emmet, an electricallycontrolled gas regulator, 1909, A., ii,

the alcoholysis or esterification of acid amides 1909, A., ii, 650.

preparation of nitriles, 1910, A., i,

esterification: esterification of thiolbenzoic acid by alcohol and of benzoic acid by mercaptan, 1910, A., i, 481.

between ammonium equilibrium benzoate, henzamide, and water,

1910, A., ii, 701.
esterification of benzamide and the preparation of N-substituted benzamides, 1911, A., i, 199.

hydrolysis of acid amides, 1911, A., ii, 477.

Reid, Ebenezer Emmet, esterification.

IV. Interdependence of limits as exemplified in the transformation of esters, 1911, A., ii, 477.

the electrical method of Morse and Gray for the simultaneous estimation of carbon, hydrogen, and sulphur in organic compounds, 1912, A., ii, 602.

the estimation of halogens in organic compounds, including a device for the combustion of volatile substances, 1912, A., ii, 990.

Reid, Ebenezer Emmet. See also Horace

Greeley Byers.

Reid, Edward Waymouth, osmotic pressure of proteins, 1904, A., ii, 830. osmotic pressure of hæmoglobin solutions, 1905, A., i, 846.

Reid, F. R. See Oswald Schreiner, and

Michael Xavier Sullivan.

Reid, Herbert J. See Paul Duden. Reif, John Fountain. See Alfred

Archibald Boon.

Reif, Georg, 1-methylindole-2:3-dicarboxylic acid and 2-amino-1-methylindole-3-carboxylic acid, 1909, A., i, 833.

Reif, Georg. See also Emil Fischer.
Reif, Jean, action of organo-magnesium compounds on crotonaldehyde, 1906,

A., i, 394.

action of organo-magnesium compounds on crotonaldehyde and the optical behaviour of the products, 1908, A., i, 847.

Reif, Jean. See also Victor Grignard. Reiff, Hermann J., measurement of high vacua in chemical distillation, 1905,

A., ii, 808.

measurement of pressures during vacuum distillations, 1907, A., ii, 927.

pressure regulator for vacuum distillation, 1909, A., ii, 642.

Reifferscheid, Karl. See Karl Grube. Reigrodski, J., and Josef Tambor, synthesis of 2:3-dihydroxyflavone, 1910, A., i, 578.

Reijst, J. J., cocoanut oil, 1906, A., ii, 403.

Reijst, J. J. See also H. P. Wijsman. Reik, Richard, ammonium salts, 1903, A., i, 308.

Reilly, Joseph. See Gilbert Thomas

Morgan.

Reimann, Gustav, tourmaline from Brazil, 1907, A., ii, 183.

Reimer. See Haarmann.

Reimer, C. L., occurrence of dierucin in rape oil 1907, A., i, 176.

Reimer, (Miss) Marie, reactions of organic magnesium compounds with cinnamylidene esters. I. Reactions with methyl cinnamylidenemalonate, 1907, A., i, 852.

action of light on esters of a-cyanocinnamylideneacetic acid, 1911, A.,

i, 447.

Reimer, (Miss) Marie, and (Miss) Grace Potter Reynolds, reactions of organic magnesium compounds with cinnamylidene esters. II. Reactions with methyl α-phenylcinnamylideneacetate, 1908, A., i, 988.

reaction between organo-magnesium compounds and cinnamylidene esters. IV. Reactions with methyl a-methylcinnamylideneacetate,

1912, A., i, 769.

Reimer, (Miss) Marie. See also Friedrich Willy Hinrichsen, and Elmer Peter Kohler.

Reimers, F., estimation of cantharidin in cantharides and its tincture, 1911, A., ii, 669.

Reinbach, Hans. See Theodor Zincke. Reinbeck, Martin. See Otto Diels.

Reinbold, Béla, the Molisch-Udránszky a-naphthol sulphuric acid reaction, 1904, A., ii, 787.

Reinbold, Béla. See also Emil Abderhalden, and Gustav von Hüfner.

Reinders, Willem, chemical equilibrium between silver amalgams and a solution of silver and mercury nitrates, 1906, A., ii, 219.

photo-haloids. I., 1910, A., ii, 1062;

1911, A., ii, 39, 490.

influence of the acidity of aqueous solutions on the surface tension of the system: water and oil, 1911, A., ii, 373.

constitution of the photohaloids, 1911, A., ii, 490; 1912, A., ii, 450.

Reinders, Willem, and A. Cats, oxidation of nitrogen to nitrogen oxides, 1912, A., ii, 248.

Reinders, Willem, and C. J. van Nieuwenburg, gelatin and other colloids as retarders in the reduction of silver chloride, 1912. A., ii, 254.

silver chloride, 1912, A., ii, 254.
Reinecke, Ernst. See Emit Knoevenagel.
Reiner, Friedrich. See Richard Möhlau.
Reiner, P., crystallographical examination of inactive crnithine mono-

picrate, 1911, A., i, 815.
Reinfeld, F. See Carl Adam Bischoff.
Reinganum, Max, question of the accurate determination of molecular weight from the vapour density, 1904, A.,

ii, 645.

Reinganum, Max, determination of the density of chlorine at high temperatures, 1905, A., ii, 810.

molecular dimensions on the basis of the kinetic theory of gases, 1909,

A., ii, 223.

Stokes's formula, 1911, A., ii, 104. ionic mobility in gases. I., 1911, A., ii, 788, 837.

variation with temperature of the viscosity of gases of the argon group, 1911, A., ii, 858.

Reinhard, A., the action of salts on the respiration of plants, 1911, A., ii, 141.

Reinhard, A. See also W. Zaleski. Reinhardt, Johannes. See Max Busch.

Reinhardt, K. See Georg Lunge.

Reinhardt, Richard, and Ernst Seibold. the response of the colostral milk of cows to the Schardinger reaction, 1911, A., ii, 307.

the Schardinger enzyme in the milk of cows with diseased udders, 1911,

A., ii, 418.

Reinhold, B., hydration of ions calculated from transference numbers and electromotive forces, 1909, A., ii, 17.

Reinhold, B. See also Ernst Hermann

Riesenfeld.

Reinicke, Gustav, action of ethyl sodiomalonate on sodium salts of unsaturated acids, 1905, A., i, 787.

Reinighaus, Dietrich. August See

Michaelis.

Reinisch, Reinhold Josef, astrolite, a new

mineral, 1904, A., ii, 268.

Reinitzer, Friedrich, the enzymes of gum-acacia and certain other gums, 1909, A., i, 751.

the enzymes of gum acacia, 1910, A., i, 290.

Reinking, Karl, Erich Dehnel, and Hans P. Labhardt, constitution of aldehydesulphurous acid and hyposulphurous acid, 1905, A., i, 261.
Reinoso, E. A. See Philip Anderson

Shaffer.

Reinsberg, Willy. See Robert Behrend. Reinthaler, F., volumetric estimations of mercury based on the reduction to metal, 1911, A., ii, 660.

the oxidation of arsenious acid by the oxygen of the air, 1912, A., ii, 755.

Reintke, Eugen. See Augustin Bistrzycki.

Reis, Alfred, flames containing ammonia and nitric oxide, 1911, A., ii, 483. Reis, Felix. See Emil Erlenmeyer, jun.

Reis, Friedrich, calcium cyanamide and some compounds prepared from it, 1910, A., i, 465.

Reis, Friedrich, physiological action of calcium cyanamide, and compounds derived from it, 1910, A., ii, 801.

Friedrich. See also Albert Stutzer.

See Leopold Rosenthaler. Reis, R.

Reisch, Rudolf, production of acetic acid in alcoholic fermentation, 1905, A., ii, 548.

production of glycerol in alcoholic fer-

mentation, 1907, A., ii, 499.
Reischle, Ferdinand. See Rudolf Friedrich Weinland.

Reise, Adolf. See Max Dittrich.

Reiser, Otto, rapid steam generator, 1906, A., ii, 531.

Reismann, Wilhelm. See Josef Herzig. Reiss, Emil, refraction coefficient of serum proteins, 1903, A., ii, 659. estimation of albumin in serums, 1904,

A., ii, 303.

behaviour of ferments towards colloidal solutions, 1905, A., i, 956.

the catalase of milk, 1905, A., ii,

excretion of optically active aminoacids in the urine, 1906, A., ii, 785.

Reiss, Rudolf, insoluble basic aluminium acetate, 1905, A., i, 852.

Reissert, [Carl] Arnold, condensation of aromatic nitro-compounds with compounds containing reactive methylene groups, 1904, A., i, 389.

anilides of oxalic acid containing sulphur and their transformation pro-

ducts, 1904, A., i, 990.

introduction of the benzovl group into tertiary cyclic bases, 1905, A., i, 472,

mercury derivatives of o-nitrotoluene, 1907, A., i, 908.

preparation of o-nitrobenzaldehyde,

1907, A., i, 1046. mercury compounds from nitrotoluenes,

1907, A., i, 1103. some oximes of the o-nitrotoluene series and their changes, 1908, A.,

i, 983. N-hydroxyindole derivatives from o-

nitrophenylacetic acid, 1909, A., i,

isomeric azoxy-compounds, 1909, A., i, 435.

chlorination of a-naphthol, 1911, A., i, 368.

a new method for obtaining acenaphthenequinone from acenaphthene, 1911, A., i, 729.

Reissert, Arnold, and Walter Engel. dibenzoylethane-2:2'-dicarboxylic acid and its anhydride, 1905, A., i, 898.

Reissert, Arnold, and Georg Goll, quinoxaline and benziminazole compounds 4-nitro-2-aminodiphenylamine, 1905, A., i, 247.

Reissert, Arnold, and Franz Grube, o-aminobenzonitrile, 1909, A., i, 923. Reissert, Arnold, and Hans Heller, re-

duction products of ethyl 2:4-dinitrophenylacetoacetate, 1905, A., i, 59.

Reissert, Arnold, and Hermann Holle, derivatives of phthalic acid containing sulphur and nitrogen, 1911, A., i, 981.

Reissert, Arnold, and Arnold Moré, sulphur derivatives of the anilides of malonic, succinic, and phenylacetic acids and their transformation products, 1906, A., i, 826.

Reissig, Joseph, ultra-microscopic obser-

vations, 1908, A., ii, 933.

Reiter, Hans Heribert, silicate fusions, 1906, A., ii, 865.

Reiter, K. See Ludwig Weiss.

Reitinger, Josef. See Eugen Hussak.

Reitmair, Otto, experiments on the treatment of farmyard manure with lime, 1903, A., ii, 177.

amount of protein in barley, and potassium manuring, 1906, A., ii, 484.

Reitter, Hans, and Friedrich Bender, phenylhydrazine derivatives of aconic acid, 1905, A., i, 669.

Reitter, Hans, and Edgar Hess, preparation of some aliphatic ethers of ortho-ketones; preparation of esters of ortho-acids, 1907, A., i, 667.

Reitter, Hans, and Anton Weindel, attempts to prepare esters of ortho-acids,

1907, A., i, 748.

Reitz, Hans Hermann. See Martin Freund.

Reitzenstein, Fritz, some pyridine compounds of metallic salts of organic acids, 1903, A., i, 111. formation of betaines, 1903, A., i,

action of 1-chloro-2:4-dinitrobenzene on bases, 1903, A., i, 815.

preparation of azoxy-compounds, 1910, A., i, 702.

Reitzenstein, Fritz, and Gottlieb Bönitsch. the colour and absorption of the dirosanilidines of B-hydroxyacraldehyde and formic acid, 1912, A., i,

colour and absorption of the dirosanilidines of formic acid, 1912, A., i,

action of the acetal of propargaldehyde on mercuriated amines, 1912, A., i, 740.

Reitzenstein, Fritz, and Wilhelm Breuning, combination of triphenylmethane dyes with the indigotin group, 1910, A., i, 439.

the action of sulphites on pyridine,

1910, A., i, 876.

rupture of the pyridine ring, 1911, A., i. 225.

Reitzenstein, Fritz, and Julius Rothschild, influence of methyl groups on the shade of dyes containing two triphenylmethane groups joined by a glutaconic aldehyde group, 1906, A., i, 316.

action of pyridine on 1:5-dichloro-2:4-dinitrobenzene, 1906, A., i, 454.

Reitzenstein, Fritz, and Otto Runge, influence of the position of methyl and nitro-groups relatively to the methane carbon atom on the colours of triphenylmethane dyes, 1905, A., i, 300.

Fritz, Walther Reitzenstein, and Schwerdt, relations between the constitution, colour, and absorption spectra of the triphenylmethane dyes, 1907, A., i, 648.

Reitzenstein, Fritz, and Georg Stamm, action of 1-chloro-2:4-dinitrobenzene on pyridine bases, 1910, A., i,

283.

of dinitrophenylpyridinium chloride on mercuriated amines,

1910, A., i, 348.

Janovsky's reaction for dinitro-compounds, and Bitto's reaction for aldehydes and ketones with aromatic compounds, 1910, A., ii, 358. Rekate, H. See Paul Pfeiffer.

Remeaud, Octave, composition of tamarind

pulp, 1906, A., ii, 483.

Remelé, A., chemically active electrical

radiation, 1909, A., ii, 9.

Remfry, Frederic George Percy, the condensation of aromatic aldehydes with nitromethane, 1911, T., 282; P., 20.

chemical constitution and hypnotic action; acid amides and products of the condensation of malonamides and malonic esters, 1911, T., 610; P., 72.

Remfry, Frederic George Percy, and Herman Decker, quinoline derivatives. III. Phenyl quinolyl ketone, 1908,

A., i, 364.

Remfry, Frederic George Percy, and Jocelyn Field Thorpe, constitution of ethyl cyanoacetate; condensation of ethyl cyanoacetate with its sodium derivative, 1903, P., 241.

Remfry. Frederic George Percy. See also Harold Baron, Marmaduke Barrowcliff, Herman Decker, and Frank Lee Pyman.

Remmert, E. W. See Eugen Bamberger. Remmler, Hans, absorption of arsenic by beetroots, 1911, A., ii, 919.

Remmler, Hans. See also Karl Löffler. Remondini, Giuseppe, estimation of copper in pyrites, 1908, A., ii, 323.

Remsen, Ira, Robert Montgomery Bird, Friend Ebenezer Clark, Willis Boit Holmes, and Robert Edmund Humphreys, isomeric chlorides of o-sulphobenzoic acid, 1903, A., i, 822.

Remy, E. See Gottfried Kümmell, and August Michaelis.

Remy, Eduard, estimation of benzoic

acid, 1912, A., ii, 102. Remy, Emil, analysis of a mixture of

sucrose, dextrose, and lævulose, 1904, A., ii, 687.

Remy, Theodor, approximate estimation of the bitter principle and aroma of hops, 1903, A., ii, 251.

action of calcium cyanamide different kinds of soils, 1908, A., ii,

accumulation of nitrogen in relation to soil conditions, 1909, A., ii, 340.

Remy, Theodor, and Georg Rösing, the biological stimulative action natural humus, 1911, A., ii, 758.

Renard, Theodore, and Philippe Auguste Guye, measurement of surface tension in contact with air, 1907, A., ii, 334. Renault, L., detection of albumin in

urines, 1904, A., ii, 599. Rendle, Theodore. See Arthur Robert

Renezeder, Heinrich. See Max Bamberger.

Etienne, action of carbon Rengade. dioxide on the metalloammoniums, 1904, A., ii, 333.

cæsium methylamide, 1905, A., i, 174. action of ethylamine and isobutylamine on cæsium, 1905, A., i, 634. cæsamide, 1905, A., ii, 388.

action of oxygen on cæsium-ammonium, 1905, A., ii, 521; 1906, A., ii, 851.

direct oxidation of cæsium; some properties of casium peroxide, 1906, A., ii, 444.

action of oxygen on rubidium-ammonium, 1906, A., ii, 539.

cæsium oxide, 1906, A., ii, 850.

the anhydrous oxides of the alkali metals, 1907, A., ii, 83.

Rengade, Etienne, some properties of the alkali protoxides, 1907, A., ii, 457. higher oxides of rubidium, 1907, A.,

heats of formation of the alkali oxides, 1907, A., ii, 737.

heats of dissolution of the alkali metals, and the heats of formation of their protoxides, 1908, A., ii,

modified bomb calorimeter, 1908, A., ii, 255.

sub-oxides of cæsium, 1909, A., ii, 573. theoretical cooling curves of binary mixtures, 1910, A., ii, 16.

theoretical form of the cooling curves of binary mixtures; the case of solid solutions, 1910, A., ii, 17.

Rengade, Etienne. See also Alfred Lacroix.

Renger, Georg, lead alkyl compounds from methyl ethyl ketone and diethyl ketone, 1911, A., i, 188.

Renner, O., baeumlerite, a new potashsalt mineral, 1912, A., ii, 357. Renner, V. See Josef Herzig.

Rennie, Edward Henry, and William Ternent Cooke, the interaction of copper and nitric acid in presence of metallic nitrates. Part II., 1911, T., 1035; P., 42.

Rennie, Edward Henry, Alfred James Higgin, and William Ternent Cooke, the interaction of copper and nitric acid in presence of metallic nitrates considered with reference to the existence of hydrates in solution, 1908, T., 1162; P., 141; discussion,

Renning, Julius. See Wilhelm Schlenk. Renouf, (Miss) Nora. See Arthur William Crossley.

Renschler, Eugen, electrolytic preparation of tervalent vanadium salts, 1912, A., ii, 356.

Renshaw, Roemer Rex, preparation of choline and some of its salts, 1910, A., i, 226.

Renshaw, Roemer Rex, and K. N. Atkins, bactericidal properties of lecithins and

choline salts, 1910, A., ii, 332. Renshaw, Roemer Rex, F. G. Flood, and B. M. MacBride, some derivatives of choline, II., 1912, A., i, 948.

Renshaw, Roemer Rex, and F. C. Ware, action of heat on milk, 1910, A., ii,

Renshaw, Roemer Rex. See also Marston Taylor Bogert.

Rentschler, Mahlon. See Otto Wallach. Rentschler, O. See Heinrich Frerichs.

Renz, Carl, compounds of metallic haloids with organic bases, 1903, A., i,

indium oxide, 1903, A., ii, 548.

solubility of the hydroxides of aluminium, beryllium, and indium in ammonia and amines, 1903, A., ii,

indophthalone, 1904, A., i, 534.

[separation of indium and zinc]; correction, 1904, A., ii, 149.

indium, 1904, A., ii, 487.

preparation of titanium tetrachloride and of tin tetrachloride, 1906, A., ii. 173.

Renz, Carl, and Martin Hoffmann, condensation products from thalline and cotarnine, 1904, A., i, 610.

Renz, Carl, and Karl Loew, 2-methyl-

indole, 1904, A., i, 190. condensations of cinnamaldehyde and protocatechualdehyde, 1904, A., i, 191.

Repetto, Angelo. See Guido Pellizzari, and Luigi Rolla.

Répin, Ch., radioactivity of certain goitrigenic springs, 1908, A., ii, 796, 1058.

Repiton, Fernand, a [probable] case of formation of nitrogen chloride, 1907, A., ii, 342.

estimation of chlorine in urines, 1907,

A., ii, 391.

analysis of lithopones, 1907, A., ii, 398. Joulie's process for estimating the acidity of urine, 1907, A., ii, 409; 1908, A., ii, 644.

titration of ziuc, 1907, A., ii, 580. estimation of dextrose by the Causse-Bonnans method, 1907, A., ii, 990.

volumetric estimation of phosphoric oxide by uranium, 1908, A., ii, 320,

universal volumetric method for the estimation of magnesium, 1908, A., ii, 632.

detection of free acids in organic liquids, 1908, A., ii, 781.

iodometric estimation of uric acid [in

urine], 1909, A., ii, 100. the estimation of mineral acids in

vinegar, 1909, A., ii, 706. volumetric estimation of sulphuric acid or sulphates, 1911, A., ii, 331.

estimation of the acidity of wine, 1912, A., ii, 102.

estimation of acids in wine with a view to discover adulteration, 1912, A., ii, 211.

Report of the Committee on Indicators, 1903, A., ii, 389.

Report of the Committee on uniformity in analysis. I., 1905, A., ii, 197.

on graduated vessels at the Sixth International Congress for Applied Chemistry at Rome, 1906, A., ii,

as to the nomenclature of the proteins. 1907, P., 55.

Report of the American Sub-committee on zinc ore analysis, 1907, A., ii, 505.

Report of a Joint Committee of the American Physiological Society and the American Society of Biological Chemists on protein nomenclature, 1908, A., i, 301.

Report of the Committee of the British Association on the study of hydroaromatic substances, 1906, A., i, 941; 1907, A.; i, 1018; 1908, A., i, 328; 1909, A., i, 372; 1910, A., i, 549; 1911, A., i, 725; 1912, A.,

on the transformation of aromatic nitroamines and allied substances, and its relation to substitution in benzene derivatives, 1906, A., i, 943; 1907, A., i, 1027; 1908, A., i, 332; 1909, A., i, 374; 1910, A., i, 551; 1911, A., i, 713; 1912, A., i, 619.

on wave-length tables of the spectra of the elements and compounds, 1906, A., ii, 821; 1907, A., ii, 918; 1908, A., ii, 334; 1909, A., ii,

453.

on the present position of the chemistry of the gums, 1907, A., i, 1012.

on the present position of the chemistry of rubber, 1907, A., i, 1063.

on dynamic isomerism, 1907, A., ii, 941; 1908, A., i, 351; 1909, A., i, 397; 1910, A., ii, 672; 1911, A., ii, 786; 1912, A., ii, 508.

on the applications of Grignard's reac-

tion, 1908, A., i, 305.

on the study of isomorphous sulphonic derivatives of benzene, 1908, A., i, 330; 1910, A., i, 549; 1911, A., i, 713; 1912, A., i, 616.

on colloid chemistry, 1909, A., ii, 473. on gaseous explosions, 1910, A., ii,

687; 1911, A., ii, 792. on anæsthetics, 1910, A., ii, 735; 1911, A., ii, 814.

on electroanalysis, 1910, A., ii, 754; 1911, A., ii, 824; 1912, A., ii, 603. on solubility, 1911, A., ii, 794.

on gaseous combustion, 1911, A., ii, 799.

on electromotive phenomena in plants, 1911, A., ii, 817.

Report of the Committee of the British Association on the influence of carbon and other elements on the corrosion of steel, 1912, A., ii, 559.

Report of the Committee of the German Chemical Society on atomic weights, 1903, A., ii, 68; 1904, A., ii, 20;

1905, A., ii, 155, 308.

Report of the International Committee on atomic weights, 1903, P., 2; A., ii, 473; 1904, P., 2; 1905, P., 2; 1906, P., 2; 1907, P., 2; 1908, P., 2; 1909, T., 2216; P., 3, 253; 1910, T., 1861; P., 190; 1911, T., 1867; P., 202; 1912, T., 1829; P., 214.

Repossi, Emilo, minerals from the granite of S. Fedelino (Lake Como),

1906, A., ii, 621.

crystalline forms of some benzene derivatives, 1909, A., i, 464.

Reppert, Rudolf. See Hugo Erdmann. Requier, Paul, researches on scammonin,

1904, A., i, 908.

the presence of sucrose in scammony root; the presence of sucrose in the fresh scammony root, 1906, A., ii, 45.

Resch, Franz, preservation of standardised liquids, 1906, A., ii, 576.

Resenscheck, Friedrich, the action of the electric current on yeast-juice, 1908, A., i, 491.

action of colloidal ferric hydroxide on expressed yeast-juice, 1909, A.,

i, 74.

Resenscheck, Friedrich. See also Alexander Gutbier, and Karl Andreas Hofmann.

Ressèguier, B. de., cyclohexylallylene [cyclohexylpropylene] and cyclohexyl-

propinene, 1910, A., i, 467.

Retschinsky, Tscheslaw, influence of temperature and of the state of aggregation on the absorption spectra of molten salts, 1908, A., ii, 910.

of molten salts, 1908, A., ii, 910. Retschinsky, Tscheslaw. See also

Eduard Riecke.

Rettberg, Hans. See Robert Pschorr.

Rettger, Leo Frederick, chemical products of Bacillus coli communis and Bacillus lactis aerogenes, 1903, A., ii, 168.

studies on putrefaction, 1906, A., ii, 791; 1908, A., ii, 215.

coagulation of blood, 1909, A., ii, 680.
Rettinger, J. See Léon Marchlewski.
Retzlaff, Friedrich, Herba gratiolae,
1903, A., i, 107.

Retzlaff, Friedrich, See also Julius Schmidt.

Reudler, (Miss) J., Sydney Young's law of distillation, 1904, A., ii, 467.

Reuning, Ernst, magnesium-pectolite from the diabase of Burg, Hesse-Nassau, 1908, A., ii, 201.

Nassau, 1908, A., ii, 201.
Reuss. Anton. See Alfred Heiduschka, and Theodor Paul.

Reuss, August (Ritter) von. See Friedrich Hamburger.

Reuss, Fritz. See Hans Stobbe.

Reuss, Hans, and Ernst Weinland, the chemical composition of young eels under various conditions, 1912, A., ii, 1193.

Reuter, Camille, nitrogenous constituents of fungi, 1912, A., ii, 593.

Reuter, Camille. See also Ernst Winterstein.

Reuter, Ferd. See Emil Fischer.

Reuter, Max, amalgam potentials, 1903, A., ii, 51.

Reuter, Max. See also Richard Stoermer.

Reuter, Otto. See Berthold Rassow.

Reuter, Rudolf. See Franz Feist.

Reuthe, Felix. See Wilhelm Wislicenus.

Reutt, Charles, and Bronislaw von Pawlewski, condensation of oximes with hydrazines and the properties of hydrazones, 1904, A., i, 99.

Reutter, analysis of a resin from an Egyptian sarcophagus, 1911, A., i,

897.

Reutter, Louis. See Alexander Tschirch. Revaud, Anna. See Eugène Prothière. Reverdin, Frédéric, p-chloro-o-nitro-

anisole, 1903, A., i, 556. 3-nitro-4-dimethylaminobenzoic acid.

1907, A., i, 620.

methyl m-amino-p-dimethylaminobenzoate, 1907, A., i, 925.

3:5-dinitro-4-hydroxybenzoic acid, 1908, A., i, 537.

action of concentrated sulphuric acid on some aromatic nitroamines, 1910,

A., i, 255.
action of concentrated sulphuric acid
no some aromatic nitroamines. II.
Derivatives of methylaniline,

methyl-p-anisidine, and methyl-toluidines, 1911, A., i, 123.
nitration of o-, m-, and p-nitrobenz-oyl-p-anisidines, 1911, A., i,

oyl-p-anisidines, 1911, A., 1, 776.
nitration of o-tolyl p-toluenesulph-

onate, 1912, A., i, 436.

the two isomeric trinitro-p-anisidines and a trinitro-p-phenetidine, 1912, A., i, 963. Reverdin, Frédéric, and Arthur Bucky, nitration of p-acetylaminophenoxy-acetic acid, of diacetyl-p-aminophenol, and of p-acetanisidine, 1906, A., i, 748.

Reverdin, Frédéric, and Pierre Crépieux, β-naphthol esters of p-acetylaminoand p-benzoylamino-benzoie acids.

1903, A., i, 29.

derivatives of diphenylamine and tolylphenylamine, 1903, A., i, 248. nitration of guaiacol acetate, 1903, A., i. 624.

chlorination of 4-amino- and 4-hydroxy-2':4'-dinitrodiphenylamines, 1903, A., i, 857.

5-nitroguaiacol, 1907, A., i, 42.

Reverdin, Frédéric, and L. Cuisinier, nitration of 4-benzoylaminophenyl acetate and of 4-acetylaminophenyl benzoate, 1907, A., i, 37.

Reverdin, Frédéric, and Ernst Delétra, chloronitro- and nitro-derivatives of 4-hydroxy-2':4'-dinitrodiphenylamine, 1904, A., i, 530.

nitration of benzoyl- and dibenzoyl-p-aminophenol, 1906, A., i, 165.

methyl amino-p-dimethylaminobenz-

oate, 1906, A., i, 273.

Reverdin, Frédéric, and Fritz Dinner, nitration of derivatives of p-aminophenol, 1907, A., i, 695.

Reverdin, Frédéric, and Auguste Dresel, dinitrophenyl ethers of 3-chloro-4-aminophenol and of p-aminophenol, 1904, A., i, 579.

mononitro-derivatives of p-amino-

phenol, 1905, A., i, 51.

dinitro-derivatives of p-aminophenol, 1905, A., i, 430.

Reverdin, Frédéric, Auguste Dresel, and Ernst Delétra, 3-chloro-4:6-dinitrotoluene and 3-chloro-2:4:6-trinitrotoluene, 1904, A., i, 580.

Reverdin, Frédéric, and Franz Liebl, action of concentrated sulphuric acid on some aromatic nitrosoamines. III.,

1912, A., i, 439.

Reverdin, Frédéric, and Armand de Luc, nitration of methyl 3-nitro-4-dimethylaminobenzoate, 1908, A., i, 167.

nitration of certain derivatives of p-aminophenol, 1909, A., i, 377, 913.

nitration of p-diethylaminobenzoic acid, 1909, A., i, 476.

trinitro-p-anisidine, 1910, A., i, 470. comparative nitration of mono- and diacylated aromatic amines, 1911, A., i, 37.

Reverdin, Frédéric, and Armand de Luc, constitution of Weselsky and Benedikt's dinitroquinol methyl ether; preparation of some methyl derivatives of the dinitro-p-anisidines, 1911, A., i, 965.

nitration of the acyl derivatives of p-anisidine, 1912, A., i, 182.

Reverdin, Frédéric, and Karl Philipp, nitro-halogen derivatives of anisole, 1906, A., i, 16.

Reverdin, Frédéric. See also Raphael

Meldola.

Révész, Géza. See Franz G. Alexander. Revington, Sidney Montagu, and Irvine Giles Rankin, a simple water-jet blower, 1908, A., ii, 30.

Revington, Sidney Montagv. See also Irvine Giles Rankin.

Treine Gues Rankin

 Revis, Cecil, detection of benzoic acid in milk, 1912, A., ii, 1007.
 Revis, Cecil, and George Arthur Payne,

acid coagulation of milk, 1907, A.,

ii, 492.
estimation of salicylic acid in milk and

cream, 1907, A., ii, 823.
Revis, Cecil. See also Ernest W.

Moore.
Revutzky, (Mlle.) E. D., crystallography of 2-methylcyclohexyl benzoate, 1909,

A., i, 229. Revutsky, (Mlle.) E. D. See also

Wladimir Iv. Vernadsky.

Rewald, Bruno, the resolution of dlcamphorsulphonic acid into its optically active components, 1909, A., i. 811.

the pentose from the pancreas, 1909, A., i, 858; 1911, A., i, 97.

Rewald, Bruno. See also Carl Neuberg.

Rewidzoff, O. See Hans von Wyss.

Rex, A., solubility in water of the halogen derivatives of hydrocarbons, 1906, A., ii, 342.

Reychler, Albert, stereochemistry of nitrogen, 1903, A., i, 23.

stereochemistry of nitrogen and the rotatory power of β -naphthylmethylethylamine d-camphorsulphonate, 1903, A., i, 23.

benzylquinoline chloride and d-camphorsulphonate, 1903, A., i, 366. the existence of mono-ammoniacal

the existence of mono-ammoniacal silver nitrate, 1904, A., ii, 403.

some considerations in support of the theory of "mobile ions," 1904, A., ii 534

trithioformaldehyde and a new method of preparing trimethylsulphonium iodide, 1906, A., i, 5. Reychler, Albert, preparation of triphenylmethane by the action of chloroform or benzylidene chloride on magnesium phenyl bromide, 1906, A., i, 821.

retarding or paralysing action exerted by chloroform, etc., on the reactions yielding organo-magnesium compounds, 1906, A., ii, 836.

reactions which generate organo-magnesium compounds, 1907, A., i, 23.

fixation of methyl alcohol on camphene and trimethylethylene, 1907, A., i, 275.

action of trimethylenetrisulphone on formaldehyde, 1907, A., i, 476. preparation of esters, 1908, A., i, 119.

formaldehyde, 1908, A., i, 130. action of chlorodimethyl ether on the

phenoxides of the alkali metals, 1908, A., i, 158.

action of chlorodimethyl ether on magnesium phenyl bromide, 1908,

A., i, 159.

[general method for the preparation of fatty or aromatic primary ethers], 1908, A., i, 383.

coumarin derivatives, 1908, A., i, 441. some reflections on radiology, 1908,

A., ii, 1003.

dissociation equilibrium of binary electrolytes, 1909, A., ii, 208. adsorption of certain bases by soluble

starch, 1909, A., ii, 977.

chemical dynamics and the colloidal state. I., II., and III., 1910, A., ii, 104.

adsorption of sulphur dioxide by caoutchoue and by wool, 1910, A., ii,

adsorption of arsenious acid by ferric

hydroxide, 1910, A., ii, 289. electrophoresis of lamp black, 1910, A., ii, 1030; 1911, A., ii, 250.

absorption of carbon dioxide and sulphur dioxide by caoutchouc and by blood charcoal, 1911, A., ii, 19.

crystallisation of sodium palmitate,

1912, A., i, 660.

osmotic properties of solutions, 1912,

A., ii, 1043.

Reynolds, (Miss) Grace Potter, reaction between organic magnesium compounds and unsaturated compounds containing alkyloxy-groups, 1910, A., i, 857.

reaction between organo-magnesium compounds and cinnamylidene esters. III. Reactions with the isomeric methyl esters of cinnamylideneacetic acid, 1911, A., i, 860.

Reynolds, (Miss) Grace Potter. See also (Miss) Marie Reimer.

Reynolds, Henry, manganese and the periodic law, 1908, A., ii, 41.

volumetric estimation of tin by means of potassium dichromate, 1908, A.,

Reynolds, James Emerson, researches on silicon compounds. Part VIII. Interactions of silicophenylamide and thiocarbimides, 1903, T., 252:

presidential address, 1903, T., 639:

P., 87.

silicon researches. Part IX. Bromination of silicophenyl-imide and -amide. and formation of a compound including the group SiN, 1905, T., 1870 ; P., 249.

silicon researches. Part X. Silicon thiocyanate, its properties and constitution, 1906, T., 397; P.,

17.

silicon researches. Part XI. Silicotetrapyrrole, 1908, P., 279; 1909,

T., 505.

Part XII. The silicon researches. action of silicochloroform on potassium pyrrole, 1908, P., 279; 1909, T., 508.

silicon researches. Part XIII. Silicon haloids and pyridine, acetonitrile, etc., 1908, P., 280; 1909, T.,

512.

results of cooling certain hydrated platinocyanides in liquid air, 1909,

A., i, 559.

Reynolds, James Emerson, and Emil Alphonse Werner, a study of the dynamic isomerism of thiourea and ammonium thiocyanate: the volumetric determination of thiourea by means of iodine, 1903, T., 1.

William Colebrook, Reynolds, Robert Sutcliffe, separation of strychnine and brucine; influence of nitrous acid in oxidation by nitric acid, 1906,

A., ii, 638.

Reynolds, William Colebrook, and Henry William Taylor, decomposition of nitric acid by light, 1911, P., 306; 1912, T.,

theory of sulphuric acid manufacture.

1912, A., ii, 550.

Reynolds, William Colebrook. See also Francis Howard Carr, and Frank Lee

Rey Pailhade, Joseph [Charles François] de, philothion, 1904, A., i, 837; 1908, A., i, 72.

Rev Pailhade, Joseph [Charles François] de, philothionic hydrogen, 1905, A., i, 728; 1906, A., i, 999.

distinction between serum-albumin and myo-albumin, 1906, A., i, 998.

oxidation of philothionic hydrogen by oxydases, 1907, A., i, 372.

the enzymic rôle of philothion towards oxygen, 1908, A., i, 238.

Rhead, Ezra Lobb, estimation of copper by titanium trichloride, 1906, T., 1491; P., 244.

gravimetric methods for the estimation of nickel in nickel steel, 1910,

A., ii, 352.

Rhead. Thomas Fred Eric, and Richard Vernon Wheeler, the effect of temperature and of pressure on the equilibrium $2CO \rightleftharpoons CO_2 + C$, 1910, T., 2178; P., 220; 1911, T., 1140;

the rate of reduction of carbon dioxide by carbon, 1912, T., 831; P.,

104.

the combustion of carbon, 1912, T., 846; P., 105.

Rheinberger, Eugen. See Alfred Heiduschka.

Rhodin, John Gustaf Adolf, mass analyses of Muntz metal by electrolysis; electrolytic properties of the alloy, 1905, A., ii, 483.

impedance of solutes in solvents as manifested by osmotic "pressure," 1907, A., ii, 744.

Rhodin, Sigurd, have manganese salts, employed as stimulants, a favourable influence on vegetation? 1908, A., ii, 980.

Rhodius, Richard. See Otto Diels. Rhoussopoulos, Petros. See Otto Wallach.

Riat, G. See Otto A. Oesterle. Ribadeau-Dumas, L. See E. Rist.

Riban, Joseph, ambrein, 1912, A., i,

Ribaud, G., the spectrum of magnetic rotation of bromine vapour, 1912, A., ii, 1114.

Ribaut, Henri, estimation of aconitine with silicotungstic acid, 1911, A., ii, 551.

Ribaut, Henri. See also Jacques Emile Abelous.

Rice, Edgar W. See Everhard Percy Harding.

Rice, Francis Owen. See Edward Charles Cyril Baly.

Ricevuto, Andrea, theory of tanning, 1909, A., ii, 222.

Rich, (Miss) Elizabeth Mary, isomeric chromous chlorides, 1908, P., 215.

Rich, (Miss) Elizabeth Mary, and Morris William Travers, the constitution of ammonium amalgam, 1906, T., 872; P., 136.

Rich, (Miss) Elizabeth Mary. See also William Arthur Knight.

Richard, A. H., action of halogen derivatives of acetone on some aromatic amines, 1907, A., i, 755.

pinacolin derivatives, 1911, A., i, 6. dimethyldipentene produced by the dry distillation of dimethylcaoutchouc, 1911, A., i, 733.

Richard, A. H., and Paul Langlais, modification of Couturier and Meunier's process for the preparation of pinacone, 1910, A., i, 455.

preparation of pivalic acid, 1910, A.,

i, 458.

preparation of pinacolin, 1910, A., i, 462.

Richard, J. See Andreas Lipp.

Richard. Ludwig. See Martin Freund. Richards, A. H., existence of bromous

acid, 1906, A., ii, 155.

Richards, Alfred Newton, and George
Barclay Wallace, the influence of potassium cyanide on protein metabolism, 1908, A., ii, 214.

Richards, Alfred Newton. See also Christian Archibald Herter, and

Charles H. Vosburgh.

Richards, Francis Edward. See Gilbert Thomas Morgan.

Richards, Joseph William, light aluminium alloys, 1904, A., ii, 735.

electrochemical calculations, 1906, A., ii, 417.

Richards, (Miss) Marion Brock, preparation of substituted indoles from benzoin and secondary arylamines, 1910, T., 977; P., 92.

condensations of phenanthraquinone with ethyl malonate and ethyl acetoacetate, 1910, T., 1456; P.,

195.

Richards, (Miss) Marion Brock. See also Herbert Freundlich.

Richards, Theodore William, significance of changing atomic volume. III., 1903, A., ii, 132.

application of the phase rule to the melting points of copper, silver, and gold, 1903, A., ii, 266.

calculation of thermochemical results, 1903, A., ii, 269.

freezing points of dilute solutions, 1903, A., ii, 354, 713.

inclusion and occlusion of solvent by crystals, 1904, A., ii, 242.

Richards, Theodore William, metric standard of volume, 1904, A., ii,

significance of changing atomic volume. IV. Effects of chemical and cohesive internal pressure, 1904, A., ii, 704,

efficiency of centrifugal purification,

1905, A., ii, 238.

revision of the atomic weight of strontium. II. Analysis of strontium chloride, 1906, A., ii, 26.

use of the nephelometer, 1906, A., ii,

493.

recent investigations on atomic weights, 1907, A., ii, 812.

modified form of Gooch crucible, 1909, A., ii, 877.

recent investigations in thermochemistry, 1910, A., ii, 19.

Faraday lecture: the fundamental properties of the elements, 1911, T., 1201; P., 178.

possible solid solution of water in

crystals, 1911, A., ii, 589.

atomic weights, 1912, A., ii, 928.

Richards, Theodore William, and

Ebenezer Henry Archibald, revision of
the atomic weight of cassium, 1903,
A., ii, 366.

Richards, Theodore William, and Gregory Paul Baxter, correction of the apparent weight of a salt to the vacuum standard, 1910, A., ii, 403.

Richards, Theodore William, and Gustav Edward Behr, electromotive force of iron under various conditions and the influence of occluded hydrogen, 1907, A., ii, 222.

Richards, Theodore William, and Harold Bisbee, quantitative electrolytic precipitation of copper, 1904,

A., ii, 597

Richards, Theodore William, and Frederic Bonnet, jun., variable hydrolytic equilibrium of dissolved chromium sulphate, 1904, A., ii, 343.

Richards, Theodore William, and Francis Newton Brink, densities of lithium, sodium, potassium, rubidium, and cæsium, 1907, A., ii, 258.

Richards, Theodore William, and Laurie Lorne Burgess, adiabatic determination of the heats of solution of metals in acids. I., 1910, A., ii, 391.

metals in acids. I., 1910, A., ii, 391. Richards, Theodore William, Laurie Lorne Burgess, and Allan Winter Rowe, adiabatic determination of heats of solution of metals in acids. II. Heat of dilution of the acid solutions, 1910, A., ii, 930.

Richards, Theodore William, and George Shannon Forbes, changes of energy accompanying the dilution of zinc and cadmium amalgams, 1907, A., ii, 424.

quantitative synthesis of silver nitrate and the atomic weights of nitrogen and silver, 1907, A., ii, 685.

Richards, Theodore William, and Richard Noel Garrod-Thomas, electrochemical investigation of fluid amalgams of zinc, cadmium, lead, copper, and lithium. II., 1910, A., ii, 384.

Richards, Theodore William, Lawrence Joseph Henderson, and George Shannon Forbes, elimination of thermometer lag and casual loss of heat in calori-

metry, 1905, A., ii, 677.

Richards, Theodore William, Lawrence Joseph Henderson, and Harry Louis Frevert, adiabatic determination of the heats of combustion of organic substances, especially of sucrose and benzene, 1907, A., ii, 604.

Richards, Theodore William, and Otto Hönigschmid, revision of the atomic weight of calcium. I. Analysis of calcium bromide, 1911, A., ii, 112.

revision of the atomic weight of calcium. II. Analysis of calcium chloride, 1911, A., ii, 204.

Richards, Theodore William, and Frederick Gray Jackson, new method for the standardisation of thermometers below 0°, 1906, A., ii, 726.

specific heat of the elements at low temperatures, 1910, A., ii, 264.

Richards, Theodore William, and Richard Henry Jesse, jun., heats of combustion of the octanes and xylenes, 1910, A., ii, 269.

Richards, Theodore William, and Grinnell Jones, the molecular weight of silver sulphate and the atomic weight of sulphur, 1907, A., ii, 685.

compressibilities of the chlorides, bromides, and iodides of sodium, potassium, silver, and thallium, 1909. A. ii. 214.

1909, A., ii, 214.

Richards, Theodore William, and George Leslie Kelley, transition temperatures of sodium chromate as convenient fixed points in thermometry, 1911, A., ii, 695.

Richards, Theodore William, Paul Köthner, and Erich Tiede, atomic weights of nitrogen and silver, 1909, A., ii, 231.

Richards, Theodore William, and Burritt Samuel Lacy, electrostenolysis and Faraday's law, 1905, A., ii, 299.

Theodore William, and Richards. Kenneth Lamartine Mark, apparatus for measuring the expansion of gases with temperature under constant pressure, 1903, A., ii, 409.

Theodore William, Richards. Joseph Howard Mathews, relationships between compressibility, surface tension, and other properties of substances, 1908, A., ii, 158.

use of electrical heating in fractional distillation, 1908, A., ii, 828.

efficiency of fractional distillation by heat generated electrically, 1909, A., ii, 969.

method for determining heat of evaporation as applied to water, 1911, A.,

ii, 697.

Richards. Theodore William, Edward Mueller, revision of the atomic weight of potassium. II. The analysis of potassium bromide, 1907, A., ii, 615.

Richards, Theodore William, and Allan Winter Rowe, new method for determining the specific heats of liquids,

1908, A., ii, 806.

Richards, Theodore William, and John W. Shipley, new method for the quantitative analysis of solutions by precise thermometry, 1912, A., ii, 599.

Richards, Theodore William, and Sidney Kent Singer, estimation of small quantities of mercury, 1904, A., ii, 448.

Richards, Theodore William, and Arthur Stähler, new determination of the atomic weight of potassium, 1906, A., ii. 848.

Richards, Theodore William, and Wilfred Newsome Stull, velocity and nature of the reaction between bromine and oxalic acid, 1903, A.,

range of validity and constancy of Faraday's law, 1903, A., ii, 259.

new method of determining compressibility with application to bromine, iodine, chloroform, bromoform, carbon tetrachloride, phosphorus, water, and glass, 1904, A., ii, 384.

Richards, Theodore William, Wilfred Newsome Stull, Francis Newton Brink, and Frederick Bonnet, compressibilities of the elements and their periodic

relations, 1907, A., ii, 858.
Richards, Theodore William, Wilfred Newsome Stull, Joseph Howard Mathews, and Clarence Livingston Speyers, compressibilities of certain hydrocarbons, alcohols, esters, amines, and organic haloids, 1912, A., ii, 896.

Richards, Theodore William, and Roger Clark Wells, redetermination of the transition temperature of sodium sulphate, referred to the international scale, 1903, A., ii, 411.

nephelometer, an instrument for detecting and estimating opalescent precipitates, 1904, A., ii, 287.

revision of the atomic weights of sodium and chlorine, 1905, A., ii, 450.

transition temperature of sodium bromide; a new fixed point in thermo-

metry, 1906, A., ii, 727.

Richards, Theodore William, and Hobart Hurd Willard, atomic weights of silver, lithium, and chlorine, 1910, A., ii, 292.

Richards, Theodore William, and John Hunt Wilson, electrochemical investigation of fluid amalgams of thallium, indium, and tin. I., 1910, A., ii, 384. Richards, Theodore William, and Franz

Wrede, transition temperature of manganous chloride, 1908, A., ii, 16.

Richardson, Arthur, distillation of chlorine water, 1903, T., 380; P., 39. the reaction between calcium carbonate and chlorine water, 1907, P., 118; 1908, T., 280.

Richardson, Clifford, grahamite, a solid native bitumen, 1910, A., ii, 964.

Richardson, Clifford, and Kenneth Gerard Mackenzie, a natural naphtha from the province of Santa Clara, Cuba, 1910, A., ii, 509.

Richardson, Clifford. See also William

Francis Hillebrand.

Richardson, Frederic William, estimation of formaldehyde, 1907, A., ii,

preparation of standard sulphuric acid, 1907, A., ii, 297.

Richardson, Frederic William, and Joshua C. Gregory, polarimetric estimation of tartaric acid and tartrates, 1903, A., ii, 457.

Richardson, Frederic William, and Adolf Jaffé, estimation of sucrose, lactose, etc., in milks, etc., 1904, A., ii, 373.

simplified form of endiometer for general gas analysis, 1910, A., ii, 341.

Richardson, Frederic William, and W. Walton, analysis of camphorated oil for camphor substitutes, 1909, A., ii, 102.

Richardson, Henry K., and Floyd D. Taylor, the conductivity of mixtures of copper sulphate and sulphuric acid, 1912, A., ii, 225.

Richardson, Owen Willans, solubility and diffusion in solution of dissociated gases, 1904, A., ii, 240.

diffusion of hydrogen through pal-

ladium, 1905, A., ii, 233. ionisation produced by hot platinum in different gases, 1907, A., ii, 6.

specific charge of the ions emitted by hot substances, 1908, A., ii, 1009. the positive thermions emitted by the

alkali sulphates, 1911, A., ii, 9. the positive thermions emitted by the salts of the alkali metals, 1911, A.,

ii. 10.

positive ionisation from hot salts,

1911, A., ii, 1051.

Richardson, Owen Willans, and Karl T. Compton, the photo-electric effect.

1912, A., ii, 1039.

Richardson, Owen Willans, and Hereward Lester Cooke, the heat liberated during the absorption of electrons by different metals, 1911, A., ii, 358.

Richardson, Owen Willans, and R. C. Ditto, diffusion of neon through hot

quartz, 1911, A., ii, 1087.

Richardson, Owen Willans, and E. R. Hulbirt, specific charge of the ions emitted by hot substances. II., 1910, A., ii, 923.

Richardson, William Dorrington, volumetric estimation of phosphoric

acid, 1907, A., ii, 907.

nitrates in vegetable foods, cured meats, and elsewhere, 1908, A., ii, 208. estimation of total nitrogen, includ-

ing nitrates, in presence of chlorides, 1908, A., ii, 426,

Richardson, William Dorrington, and E. F. Scherubel, a modified Wiley extraction apparatus, 1912, A., ii, 983.

Richardt, Franz, fractional combustion of gas mixtures, containing hydrogen, by heated palladium wire, 1904, A., ii,

Richardt, Franz. See also Fritz Haber. Richartz, Alfred. See Franz Kunckell. Richarz, Franz, electrolytic formation of

hydrogen peroxide, 1904, A., ii, 114. theory of Dulong and Petit's law. I. and II., 1908, A., ii, 562, 659.

anodic formation of hydrogen peroxide, 1910, A., ii, 27.

[hydrogen peroxide], 1912, A., ii, 1163. Richarz, Franz, and Rudolf Schenck, analogy between radioactivity and the behaviour of ozone, 1904, A., ii,

experiments on the light phenomena caused by ozone and by radium,

1904, A., ii, 399.

Richarz, Franz, See also Friedrich Heusler.

Richaud, A., and Bidot, reaction distinguishing between galenical preparations made from leaves and from other parts of plants, 1908, A., ii, 444.

new colour reaction of ferrous salts and some of its applications, 1909,

A., ii, 350.

Riché, J., butan-\(\beta\)-ol [methylethylcarbinol] and its tartrates, 1909, A., i,

Riche, J. A. See Francis Gano Benedict, L. E. Emmes, and Horatio B.

Williams.

Richens, Bernard E. See Herbert Hardy.

Richer, Karl, and E. H. Stein, the physiology and pathology of carbohydrate metabolism [colorimetric estimation of small amounts of sugar, 1912, A., ii, 99.

Richet, Charles, action of magnesium salts on the lactic acid fermentation. 1903, A., ii, 230.

poisons in the tentacles of actinians,

1903, A., ii, 317.

thalassin, the poison of sea anemones, 1905, A., ii, 746.

action of small quantities of metals on lactic acid fermentation, 1908, A., ii, 880.

Richet, Charles, jun. See Edmond Lesné.

Richmond, George Fletcher, Manila copal, 1910, A., i, 690.

Richmond, George Fletcher. Alphonso Morton Clover. See also

Richmond, Henry Droop, estimation of casein precipitated by rennet, 1903, A., ii, 584.

composition of milk, 1904, A., ii, 75,

522; 1906, A., ii, 588. composition and analysis of milk, 1905, A., ii, 869...

analysis of dried milk, 1906, A., ii,

studies in steam distillation and the recovery of amyl alcohol from the acid liquors obtained in the Gerber process, 1908, A., i, 495.

studies in steam distillation; formic and acetic acids, 1908, A., i, 754.

estimation of nitrogen, 1908, A., ii, 530. polarimetric estimation of lactose,

1911, A., ii, 73. the degree of accuracy with which proteins can be estimated in milk by formaldehyde titration, 1911, A. ii, 236.

Richmond, Henry Droop, and Horace C. Huish, souring of milk, 1912, A., ii,

Richmond, Henry Droop, and Edward Holl Miller, the "aldehyde figure" of milk, 1906, A., ii, 634.

the method of analysis of milk used in the Government laboratory for samples referred under the Sale of Food and Drugs Acts, 1906, A., ii, 813.

Richter, Andrei Alexandr, the death of plants at low temperatures, 1911, A., ii, 64.

Richter, E. See Wilhelm Lenz.

Richter, Eduard, quantitative formation of carbamide from uric acid, 1903, A., i. 468.

Richter, Erwin, [carrot oil, the ethereal oil from Daucus carota], 1909, A., i, 943; 1910, A., i, 329.

arsenic tri-iodide, 1912, A., ii, 43. Richter, G., preparation of bismuth

paranucleate, 1909, A., i, 275. Richter, L. See Friedrich Nobbe.

Richter, M. M., oxonium hydrosulphides of p-benzoquinone, 1911, A., i, 135. constitution of quinhydrone-like substances, 1911, A., i, 136. constitution of alloxantin, 1911, A., i,

fluorescence in the p-benzoquinone group, 1912, A., i, 34. N-quinhydrones, 1912, A., i, 55.

correction concerning the formation of cyananilic acid, 1912, A., i, 571. thiolcamphoric acid, 1912, A., i, 942.

Richter, Oscar, constitution of myristicin and its derivatives, 1907, A., i, 523.

Richter, Otto, rapid estimation of fat in cocoa by means of Zeiss' refractometer, 1912, A., ii, 1107.

Richter, O. K. See Hermann Pauly. Richter, Paul, guaiacum resin, 1906, A., i, 442.

influence of colloids on the transport numbers and conductivity of certain electrolytes, 1912, A., ii, 914.

Richter, Paul. See also Wilhelm Manchot.

Richter, Paul Friedrich. See Peter Bergell, and Carl Neuberg.

Richter, R., estimation of sulphur dioxide in white wines, 1911, A., ii, 330.

assay of paraldehyde, 1911, A., ii, 776. estimation of acetaldehyde in [officinal] paraldehyde, 1912, A., ii, 304.

See Paul Bohrisch, Richter, Rudolf. and Hermann Kunz-Krause. Richter, Woldemar. See Karl Auwers. Richter-Rjewskaja, N. P., tension of bromine vapour in solutions of hydrobromic acid, 1903, A., ii, 717.

Rickmann, Rud., the testing of enamels containing antimony, 1912, A., ii, 870.

Riddick, David Gibson. See John H. B. Jenkins.

Riddle, Oscar, the rate of digestion in cold-blooded vertebrates, 1909, A., ii,

Riddle, Oscar, and Samuel A. Matthews. modifications of blood-pressure in birds by drugs, 1907, A., ii, 562.

Rideal, Samuel, the Causse tests for water pollution, 1903, A., ii, 392. Ridsdale, Charles H., and N. D. Rids-

dale, mechanicalising analysis as an aid to accuracy and speed, 1911, A., ii, 1133.

Ridsdale, N. D. See Charles H. Rids-

Riebel, Paul. See Richard Stoermer. Rieche, Alfred. See Rudolph Fittig.

Riecke, [Carl Victor] Eduard, certain properties of the radium atom, 1908, A., ii, 6. lowering of the melting point by one-

sided pull or pressure, 1912, A., ii,

330.

Riecke, Eduard, Tscheslaw Retschinsky, and Otto Wigger, relative absorption of the rays of radium and polonium, 1906, A., ii, 63.

Riecke, Richard. See Theodor Pfeiffer. Riedel, Adolf, condensation of aldol and crotonaldehyde with malonic acid, 1908, A., i, 501.

action of ammonia and amines on cinnamenylacrylic [cinnamylideneacetic] acid and its methyl ester.

1908, A., i, 536.

Riedel, Adolf, and Ernst Schulz, additive capacity of unsaturated organic acids and their esters, 1909, A., i, 581.

Riedel, Adolf, and Erich Straube, condensation of butylchloral and butylchloral hydrate with malonic acid, 1909, A., i, 550.

Riedel, Adolf. See also Theodor Curtius.

Riedel, J. D., iodo-derivatives of lecithin, 1905, A., i, 164.

identification of lecithin, 1905, A., ii,

morphine alkyl bromides, 1906, A., i,

preparation of the alkyl bromides of the alkyl ethers of morphine, 1906, A., i, 530; 1907, A., i, 337.

preparation of amino-alcohols, 1906, A., i, 631.

Riedel, J. D., [apomorphine salts], 1906,

A., i, 692.

soluble double salts of 3:7-dimethyl-1-ethylxanthine, 1906, 716.

preparation of mercury cholates, 1906, A., i, 800.

preparation of aminoalkyl esters, 1906, A., i, 843.

preparation of quinazoline from o-nitrobenzaldehyde, 1907, A., i, 254.

preparation of acylated aminoalkyl esters, 1907, A., i, 897; 1908, A., i. 769.

preparation of substituted chlorohydrins, 1907, A., i, 920.

preparation of amino-alcohols, 1908,

A., i, 250, 956.

preparation of eugenyl o- and maminobenzoates, 1908, A., i, 338. preparation of alkyl camphorates, 1908, A., i, 352, 809.

preparation of choline from lecithin,

1908, A., i, 395.

preparation of morphine alkyl bromides, 1908, A., i, 452.

preparation of the alkyl haloids of dialkylaminodimethylethylcarbinol and their benzoyl derivatives, 1908, A., i, 607.

preparation of santalyl camphorate, 1908, A., i, 664.

action of ozone on thebaine, 1908, A., i, 1006.

[iodination of the higher fatty acids and esters], 1909, A., i, 204.

action of alkali dichromates on agaricic acid, 1909, A., i, 455.

preparation of mixed santalyl esters of dibasic acids, 1909, A., i, 497.

preparation of aqueous soluble compounds from 1-phenyl-2:3-dimethyl-5-pyrazolones and mono- or di-alkylglycollic acids of formulæ C₅H₁₀O₃ and upwards, 1910, A., i, 433.

preparation of morphine esters of acylaromatic hydroxycarboxylic acids,

1910, A., i, 765.

preparation of hexamethylenetetramine sulphosalicylates, 1912, A., i, 356.

the lecithin of egg-yolk, 1912, A., i, 744.

the acylation of amino-acids and some ketolactimones, 1912, A., i,

Riedel, Otto, chemico-mineralogical section of the older salt beds in the Berlepsch mine at Stassfurt, 1912, A., ii, 265.

Riedel, Robert, influence of one substance on the solubility of another, 1906, A., ii, 656.

Riedel. W. See Carl Tubandt.

Riedelbauch, Rudolf. See Wilhelm Muthmann.

Riedenstein, Erik Riedl von, See Carl Districk Harries.

Riederer, Herman S., volumetric estimation of bismuth as molybdate and its separation from copper, 1903, A., ii. 762.

Rieff, A. See Fritz Haber.

Riegel, Emile Raymond. See Latham Clarke, and Charles Robert Sanger.

Riegel, M., estimation of the lecithincontent of soja-oil, 1910, A., ii, 662. Rieger, J. B. See William Salant.

Riegger, Harold Eaton, oxidation of hydrazoic acid [azoimide], 1911, A., ii, 978

Riegler, Emanuel, a new reaction for the detection of acetoacetic acid in diabetic urine, 1903, A., ii, 112.

new method of estimating phosphoric acid and magnesia with molybdate, 1903, A., ii, 181.

general reaction of aldehydes, 1903, A., ii, 457.

gasometric and gravimetric estimation of ammonia, 1904, A., ii, 207.

gasometric estimation of calcium, barium, strontium, manganese, potassium, and copper, 1904, A., ii,

new reagent for the detection of the colouring matters of blood or their products of decomposition, 1905, A., ii, 128.

new reactions for acetoacetic acid, 1906, A., ii, 710.

use of ammonium tri-iodate in iodometry and alkalimetry, 1907, A., ii,

estimation of iodides in presence of bromides and chlorides, 1907, A., ii, 575.

colorimetric estimation of uric acid [in urine], 1912, A., ii, 700.

Righl, Max, does the lung tissue invert lactose ? 1906, A., ii, 782.

Riehl, Max. See also Ernst Weinland. Rieke, Reinhold, and Kurd Endell, lithium silicates, 1911, A., ii, 490,

See also Kurd Endell. Rieke. Reinhold. and Conrad Willgerodt.

Rieländer, August, chemistry of the brain, 1909, A., ii, 162.

Riemer, Johannes. See Felix Benjamin Ahrens.

Rieper, Peter. See Paul Rabe.

Riera v Punti, José. See Friedrich Kehrmann.

Ries. A., chemico-crystallographic examination of the platinichlorides, platinibromides, stannichlorides, and stannibromides of quaternary ammonium bases, 1911, A., i, 953.

behaviour of

Ries, Chr., anomalous behaviour of selenium, 1908, A., ii, 343.
Ries, Julius, loss of function and recovery of central nervous system in frogs, 1906, A., ii, 40.

Riesenfeld, Ernst Hermann, higher oxidation products of chromium. V. Perchromates, 1909, A., ii, 51.

decomposition of calcium carbonate,

1910, A., ii, 126.

the existence of real percarbonates and their differentiation from carbonates with hydrogen peroxide of crystallisation, 1910, A., ii, 290.

percarbonates, 1910, A., ii, 952.

catalysis of hydrogen peroxide, 1911, A., ii, 107.

the catalytic decomposition of hydrogen peroxide by dichromates, 1912, A., ii, 247.

silent electric discharges in gases at atmospheric pressure, 1912, A., ii, 1126.

Riesenfeld, Ernst Hermann, William Adelbert Kutsch, and Herman Ohl, decomposition of chromic acid by means of hydrogen peroxide, 1905, A., ii, 825.

triammine chromium tetroxide, 1906,

A., ii, 92.

Riesenfeld, Ernst Hermann, William Adelbert Kutsch, Herman Ohl, and Hans Emil Wohlers, perchromic acids, 1905, A., ii, 824.

Riesenfeld, Ernst Hermann, and W. Mau, the differentiation of true peroxy-salts from salts with hydrogen peroxide of crystallisation, 1912, A., ii, 156.

isomeric percarbonates, 1912, A., ii, 156. Riesenfeld, Ernst Hermann, and B. Reinhold, calculation of ionic hydration from transport numbers and ionic velocities, 1909, A., ii, 540.

anodic formation of hydrogen peroxide, 1909, A., ii, 879.

transport number of hydrochloric acid,

1910, A., ii, 14.

determination of transport numbers from E.M.F. measurements in solvents which are only partially miscible with water, 1910, A., ii, 14.

Riesenfeld, Ernst Hermann, and B. Reinhold, existence of real percarbonates and their differentiation from carbonates with hydrogen peroxide of crystallisation, 1910, A., ii, 33.

Riesenfeld, Ernst Hermann, and Fritz Seemann, chromi-aquo-triammines.

1910, A., ii, 39.

Riesenfeld, Ernst Hermann, and Alfred Wesch, higher oxidation products IV. Chromium of chromium. tetroxide compounds, 1908, A., i,

decomposition of chromic acid by hydrogen peroxide, 1908, A., ii, 951.

Riesenfeld, Ernst Hermann, and Hans Emil Wohlers, new burner for spectroscopic use, 1906, A., ii, 593.

detection of the metals of the alkaline earths by spectrum analysis in the course of qualitative analysis, 1906, A., ii, 804.

perchromic acid and its salts, 1907,

A., ii, 357.

Riesenfeld, Ernst Hermann, Hans Emil Wohlers, and William Adelbert Kutsch, higher oxidation products of chromium, 1905, A., ii, 461.

Riesenfeld, Ernst Hermann. See also

Walther Nernst.

Riesenfeld, Hans, solubility of ammonia in salt solutions, as measured by its partial pressure. II., 1904, A., ii, 15.

electrolytic-gas voltameters with nickel electrodes and the formation of nickel peroxide, 1906, A., ii, 723.

Riesenfeld, Hans, and Fritz Taurke, cellulose, 1905, A., i, 746.

See Carl Bülow. Riess, Gustav.

Riess, Leopold, poisoning with potassium chlorate, 1908, A., ii, 1062.

Riess, Michael, See Alexander Gutbier. Riesser, Otto, optical isomerides of arginine and ornithine, 1907, A., i,

Riesser, Otto, and Peter Rona, hippomelanin. II., 1909, A., i, 749.

Riesser, Otto, and Hans Thierfelder, cerebrone, V., 1912, A., i, 373. Riesser, Otto. See also Alexander

Ellinger, and Peter Rona.

Rietschel, Hans, and Leo Langstein, occurrence of amino-acids in the urine of children, 1906, A., ii, 785.

Rietschel, Hans. See also Ludwig F.

Meyer.

Riety, L., electromotive force produced by the flow of copper sulphate solution through a capillary tube, 1911, A., ii, 575.

Riety, L., difference of potential at the contact of glass with an electrolyte, 1912, A., ii, 622.

electromotive force produced by the flow of salt solutions through capillary tubes, 1912, A., ii, 622. Rietz, Erich. See Karl Auwers.

Rietz, Henry Lewis, and H. H. Mitchell, metabolism experiments as statistical problems, 1910, A., ii, 1082.

Riffart, Hans. See Alfred Heiduschka. Rigaut, Albert. See Henri Moissan.

Riggs, Louis Warner, determination of iodine in protein combinations, 1909. A., ii, 504, 699; 1910, A., ii, 650.

Riggs, Louis Warner, and Silas Palmer Beebe, iodine in human thyroids, 1909, A., ii, 504.

Riggs, Robert Baird. See Heyward

Scudder.

Righi, Augusto, phenomena observed in air ionised by radioactive substances, 1904, A., ii, 693.

radioactivity of the common metals,

1905, A., ii, 431.

electrification produced by radium rays, 1905, A., ii, 792.

diminution of resistance produced in bad conductors by radium rays, 1905, A., ii, 793.

atomic transformations of radioactive substances, 1907, A., ii, 324.

Riiber, Claus Nissen, addition of bromine to phenylbutadiene, 1903, A., i, 471.

bisdiphenylbutadiene, 1904, A., i,

the two isomeric hydrocinnamylidenemalonic acids, 1904, A., i, 894.

formation of isomeric hydrocinnamylideneacetic acids, 1905, A., i, 777.

oxidation of allocinnamic acid, 1908,

A., i, 639.

Ay-butenylbenzene, 1911, A., i, 848. oxidation of allocinnamylideneacetic

acid, 1911, A., i, 860.

addition of hydrogen bromide to cinnamylidenemalonic acid, cinnamylideneacetic acid, and phenylbutadiene, 1911, A., i, 979.

Riiber, Claus Nissen, and Victor Moritz differences Goldschmidt, between acid from storax and cinnamic synthetical cinnamic acid, 1910, A., i, 174.

Riiber, Claus Nissen, and J. Schetelig, heat of combustion of some polymeric and isomeric compounds produced by the action of light, 1904, A., ii, 539.

Rijn. See Ryn.

Rill, Jean, See Alexander Naumann. Rilliet, Auguste. See Emil Abderhalden. and Amé Pictet.

Rimatori, Carlo, analysis of chrysocolla,

1903, A., ii, 735.

gravimetric and spectroscopic analysis of zinc blendes from Sardinia, 1905. A., ii. 598.

mineralogy of Sardinia. II., 1908, A., ii. 863.

Rimbach, [Friedrich] Eberhard, Hermann Bürger, and Adolf Grewe, solubility and decomposition of double salts in water. III., 1904, A., ii, 264.

Rimbach, Eberhard, and Adolf Grewe, solubility and dissociation of double salts in water. IV. and V., 1905,

A., ii, 375.

Rimbach, Eberhard, and Edmund Heiten, saccharin and alkali saccharinates, 1908, A., i, 394.

Rimbach, Eberhard, and Herman F. C. Kilian, double fluorides of quadrivalent cerium, 1909, A., ii, 810,

cerous salts of organic acids, 1909,

A., ii, 810.

Rimbach, Eberhard, and Friedrich Korten, iridium compounds, 1907, A., ii. 276.

Rimbach, Eberhard, and Carl Neizert. complex formation in molybdic acid solutions, 1907, A., ii, 269.

Eberhard, Rimbach, and Philipp Schneider, action of inorganic compounds on the rotation of quinic acid, 1903, A., ii, 624.

Rimbach, Eberhard, and Alwin Schubert. solubility of some comparatively insoluble salts of the rare earths, 1909,

A., i, 631.

Rimbach, Eberhard, and Hans Volk, polarimetric determination of avidity of weak bases in non-aqueous solutions, 1911, A., ii, 869.

Rimbach, Eberhard, and Otto Weber, action of inorganic substances on the rotation of lævulose and dextrose,

1905, A., i, 416.

Rimbach, Eberhard, and K. Weitzel, temperature-coefficients of conductivity of certain electrolytes in nonaqueous solvents, 1912, A., ii, 422.

Eberhard, Rimbach, and Wintgen, influence of complex formation on the volume and refractivity of dissolved substances, 1910, A., ii, 810.

Rimele, Eugen. See Theodor Curtius. Rimini, Enrico, estimation of hydrazine free and combined, 1904, A., ii, 207.

Rimini, Enrico, myristicin, 1905, A., i, 198, 656,

iodometric estimation of hydrazine salts and their use in volumetric analysis, 1906, A., ii, 897.

estimation of mercuric chloride in pastilles, 1908, A., ii, 433.

oxidation products of artemisin, 1909. A., i, 115.

new researches in the camphor group. III., 1909, A., i, 725.

biological oxidation of carone and 1909, fenchone. II., 728.

Rimini, Enrico, and Temistocle Jona. estimation of formaldehyde, 1912, A., ii. 698.

Rimini, Enrico, and Giovanni Malagnini, selenates, 1907, A., ii, 81.

Rimini, Enrico, and Francesco Olivari, B-nitroisoapioles, 1906, A., 759.

myristicin, 1907, A., i, 522.

fenchone as an ebullioscopic solvent,

1907, A., ii, 436. Rimmer, Travis. See Heinrich Mache. Rimpel, Chaim. See Heinrich Biltz, and Friedrich Wilhelm Semmler.

Rinaldi, U., purine metabolism. The contents in purine bases of the muscles of different animals, 1912, A., ii, 663.

Rinati, Guido Verona, application of the Benedikt-Zigmondy process for the estimation of glycerol in wine, 1911, A., ii, 545.

Rinck, Arthur. See Max Busch, and

Bernhard Wagner.

Rinckleben, P., extraction of zymase from fresh brewers' yeast by plasmolysis, 1911, A., i, 1054.

Rindell, Arthur, solubility of slightly soluble calcium salts in aqueous solutions of ammonium salts, especially of triammonium citrate, 1910, A., ii, 294.

estimation of solubility in agricultural chemistry, 1912, A., ii, 86.

Rindl, M., and Hugo Simonis, the estimation of lead, copper, and silver in complicated organic salts, 1908, A., ii, 432.

Ringe, Oskar. See Franz Fischer.

Ringer, A. I., the maximum production of hippuric acid in animals, with consideration of the origin of glycine in the animal body, 1911, A., ii, 1116.

the influence of glutaric acid on phloridzin glycosuria, 1912, A., ii, 856.

Ringer, A. I., protein metabolism in experimental diabetes, 1912, A., ii, 1195.

gluco-neogenesis. I. The quantitative conversion of propionic acid into dextrose, 1912, A., ii, 1196.

Ringer, A. I., and Graham Lusk, the production of sugar from amino-acids,

1910, A., ii, 227.

Ringer, Wilhelm Eduard, the nature of the inactive dimethylene derivative of racemic acid, 1903, A., i, 149.

changes in the composition of seawater on freezing, 1906, A., ii, 556. nitrogenous compounds and silica in

sea-water, 1907, A., ii, 55. concentration of hydrogen ions in sea-

water, 1909, A., ii, 309.

concentration of hydrogen ions in dilute solutions of phosphoric acid, monosodium phosphate, disodium phosphate, 1909, A., ii,

the acidity of urine, 1909, A., ii,

687.

concentration of the hydrogen ions in solutions of phosphoric acid and sodium hydroxide, 1910, A., ii, 396. conditions for the precipitation of uric

acid and its salts from solutions, 1910, A., ii, 838.

the fixing of acids by egg-albumin and viscosity, 1911, A., i, 406.

quadriurates, 1911, A., i, 1044. rapid measurement of the concentration of the hydrogen ions in liquids,

1911, A., ii, 363.

Ringer, Wilhelm Eduard, and (Mlle.) Ida Maria Petronella Klingen, nitrates, nitrites, and ammonia in sea-water, 1908, A., ii, 320.

Ringer, Wilhelm Eduard. See also Ernst Cohen, (Fräulein) H. A. van Herwerden, Willem Paulinus Jorissen, and Cornelis Adrianus Pekelharing.

Ringleben, O. See Wilhelm Schneidewind, and Gustav Wimmer.

Rinkes, Inne Jan, fluoroanilines and fluorophenols. I., 1912, A., i, 844.

Rinkes, Inne Jan. See also Arnold Frederik Holleman, and Bouwe Siollema.

Rinman, Erich Ludwig, bistriazole compounds, 1905, A., i, 387.

Rinne, Fritz, crystalline form of radium bromide, 1903, A., ii, 369.

metallic iron found at Magdeburg in 1831, 1906, A., ii, 867.

crystallisation in fused masses, owing to the liberation of gas, 1910, A., ii, 193.

Rinne, Fritz, and Hendrik Enno Boeke, transitions of ferrous sulphide, 1907, A., ii, 471.

El Inca meteoric iron, 1908, A., ii, 303. Rinne, Fritz, and Rudolf Kolb, optical characters of the a- and B-modifications of quartz and leucite, 1911,

A., ii, 209. composition and occurrence of rinneite,

1911, A., ii, 613.
Rinne, R., behaviour of magnesium hydrogen carbonate when its solution is boiled, 1907, A., ii, 169.

easily constructed arrangement for filtering alkaline solutions, 1907, A., ii, 447.

Rintelen, P. See Josef König.

Ripke, Otto, synthesis of pentamethylenediguanidine, 1911, A., i, 620.

Ripke, Otto. See also Reginald Oliver Herzog. Ripley, Phil. F. See Georg Bredig.

Rippetoe, J. R., and Louis Elsberg Wise, estimation of citral in lemon oil, 1912, A., ii, 210.

Riquier, Ch. See Émile Louïse.

Rischbieth, P., [lecture experiments], quantitative volumetric gas analysis and synthesis, 1909, A., ii, 564.

Rising, Adolf, methyl and ethyl ethers p-hydroxyphenylhydroxylamine and the derived azoxy-compounds, 1904, A., i, 237.

sulphonation of guaiacol, 1907, A., i,

42.

Rispal, Augustin. See Jules Aloy. Risse, Felix. See August Michaelis, and Friedrich Wilhelm Semmler.

Rissom, Johannes. See Theodor Curtius. Rist, E., and L. Ribadeau-Dumas, immunisation of rabbits against the hæmolytic action of sodium taurocholate, 1904, A., ii, 196.

Ritchie, William Thomas, the wax of tubercle bacilli in relation to their acid resistance, 1906, A., ii, 190.

Ritsema, Ipo Christiaan. See Albert

Edinger.

Ritsert, Eduard, compounds of aromatic aminocarboxylic esters with phenolsulphonic acids, 1904, A., i, 413.

compounds of aminocarboxylic esters with aromatic sulphonic acids, 1904, A., i. 498.

Ritsert, Eduard, and Wilhelm Epstein, alkyl esters of 3: 4-diaminobenzoic acid, 1904, A., i, 805.

Ritson, Stanley, estimation of total sulphur in urine, 1909, A., ii, 827.

Rittener, August. See Ernst Berl, and Georg Lunge.

Ritter, Adolf. See Otto Frank.

Ritter, Ernst. See Paul Liechti. Ritter, Franz, spark potential in chlorine, bromine, and helium, 1904, A., ii,

463.

Ritter, Friedrich. See Otto Wallach. Ritter, G. See Leopold Rügheimer.

Ritter, Georg E., ammonia and nitrates as sources of nitrogen for mould fungi, 1910, A., ii, 230.

nitrogen nutrition of Leguminosa, 1911, A., ii, 428.

the behaviour of moulds to sucrose, 1912, A., ii, 795.

Ritter, H. See Aladar Skita. Ritter, Karl. See Paul Rabe.

Ritz, Walter, spectrum of potassium, 1903, A., ii, 621.

spectra of the alkali [metals], 1908, A., ii, 445.

new law of series spectra, 1908, A., ii,

Ritzel, Albert, gas solubility, compressibility, and surface tension, 1907, A., ii, 740.

absorption of uranium-X by charcoal, 1909, A., ii, 851.

crystal-habit of sodium chloride in relation to the solvent, 1911, A., ii,

Rivals, Paul. See Henri Baubigny.

Rivas, D., detection of indole in cultures of Bacterium coli, 1912, A., ii,

Rivat, Georges, detection of dextrin by means of its coloration by iodine, 1910, A., ii, 1117.

Rivera-Maltes. See Emile Kohn-Abrest. Rivers, William Halse Rivers, and H. N. Webber, the action of caffeine on the capacity for muscular work, 1907. A., ii, 800.

Rivett, Albert Cherbury David, neutral salt action as exhibited in the freezing points of mixtures in aqueous solution,

1912, A., ii, 130.

Rivett, Albert Cherbury David, and Nevil Vincent Sidgwick, the rate of hydration of acetic anhydride, 1910, T., 732; P., 66. the rate of hydration of acid an-

hydrides; succinic, methylsuccinic, itaconic, maleic, citraconic, and phthalic, 1910, T., 1677; P., 200.

Rivett, Albert Cherbury David. also (Miss) Stella Deakin, and Nevil Vincent Sidgwick.

Rivier, Henri, phenyl chlorothiocarbonates, 1906, A., i, 947; 1907, A., i,

Rivier, Henri. See also Otto C. Billeter.

Rivière, G., and G. Bailhache, presence of quinol in the pear tree, 1904, A., ii, 583.

Rivkind, (Mlle.) L. See Gabriel Bertrand.

Riwkind, E. See Efim Semen London. Riwosch-Sandberg, F. J. See Efim Semen London.

Rix. C. See Alfred Werner.

Rix, Marcellus, action of water on trimethylene dibromide and of sulphuric acid on trimethylene glycol, 1904, A., i, 465.

Rixon, Frederic William. See Karl

Elbs.

Riza, Ali, reaction of cystine, 1903, A., ii, 460.
 Roaf, Herbert Eldon, action of acids and alkalis and of acid, neutral, and

alkaline salts on tadpoles, 1906, A., ii, 243.

the digestive gland in mollusca and decapod crustacea, 1906, A., ii, 779.

osmotic effect on various salt solutions on cell volume, 1906, A., ii, 784.

application of Barfoed's reagent to show the hydrolysis of disaccharides by enzymes, 1908, A., i, 503.

separation of hippuric acid from urine,

1908, A., i, 534.

colorimetric method applicable to both peptic and tryptic enzymes, 1908, A., ii, 743.

combining power of egg-white for hydrochloric and sulphuric acids,

1909, A., i, 195.

osmotic pressure of hæmoglobin, 1909, A., i, 195.

hydrolytic enzymes of invertebrates, 1909, A., ii, 71.

a method to show the presence of pentoses in the presence of ketoses,

1909, A., ii, 272.
the relation of proteins to crystalloids.
I. The osmotic pressure of hæmoglobin and the laking of red blood-

corpuscles, 1910, A., i, 209. the relations of proteins to crystalloids. II. The osmotic pressure of ionising salts of serum proteins, 1910, A., i, 344.

earbon dioxide output during decerebrate rigidity, 1911, A., ii, 503.

physiology of marine organisms. II. Influence of the carbon dioxide and oxygen tensions on rhythmical movements, 1912, A., ii, 369.

the influence of muscular rigidity on the carbon dioxide output of decerebrate cats, 1912, A., ii, 579. Roaf, Herbert Eldon, the relation of proteins to crystalloids. III. Hæmolysis by alkali. IV. Hæmolysis by hypotonic sodium chloride solutions. V. Hæmolysis by rise of temperature, 1912, A., ii, 655.

Roaf, Herbert Eldon, and Edmund Alderson, effect of narcotics on the detachment of electrolytes from cell

proteins, 1907, A., ii, 896.

Roaf, Herbert Eldon, and Edward S. Edie, preparation and estimation of lecithin, 1905, A., ii, 364.

Roaf, Herbert Eldon, and Maximilian Nierenstein, action of extract of the hypo-bronchial gland of Purpura lapillus, 1907, A., ii, 801.

Roaf, Herbert Eldon. See also L.
Adamson, Edward S. Edie,
C. H. H. Harold, and Benjamin

Moore

Robel, Jan. See Lad. Hildt, and Léon

Marchlewski.

Robert, (Mlle.) C., influence of calcium on the development and mineral composition of Aspergillus niger, 1912, A., ii, 192.

nature of the fixation of calcium by Aspergillus niger, 1912, A., ii,

671.

Roberto, U., and F. Roncali, application of hydrazine sulphate in the determination of oxidising substances, 1904, A., ii, 773.

Roberts, (Miss) Charlotte Fitch, and Louise Brown, action of metallic magnesium on aqueous solutions, 1903, A., ii, 726.

Roberts, David James. See John Joseph

Sudborough.

Roberts, Edwin Jay, separation of cerium by potassium permanganate, 1911, A., ii, 541.

Roberts, Edwin Jay. See also Philip Embury Browning.

Roberts, F. See Joseph Barcroft.

Roberts, Joseph H. T., a method of investigating the transpiration of gases through tubes, 1912, A., ii, 237.

Roberts, Norman, extraction apparatus, 1910, A., ii, 494.

jointless stock-bottle-support burette, 1912, A., ii, 295.

Roberts, Norman, and F. Alex. McDermott, crucible furnace, 1911, A., ii, 385.

a handy burette holder, 1911, A., ii, 875.

Roberts, Norman. See also Joseph Hoeing Kastle. Roberts, Percival Rudolph, and Gellert Alleman, action of ethyl alcohol on hydrochloride toluene-p-diazonium and of sulphuric acid on p-tolyl ethyl ether, 1911, A., i, 369.

Roberts, Robert Tuckerman. See Horace

Lemuel Wells.

Roberts, William. See John Joseph Sudborough.

Roberts, Walter Morrell. See William

Henry Perkin, jun.

Roberts-Austen, (Sir) William Chandler, obituary notice of, 1903, T., 654.

Robertson, A., and A. J. Wynne, poisoning as the result of eating the seeds of Phascolus lunatus, 1906, A., ii,

Robertson, Andrew John. See James Walker.

Robertson, Charles A. See William Jay Hale.

Joseph G. See Thomas Robertson, Gray.

Robertson, Philip Wilfred, studies on comparative cryoscopy. Part I. The fatty acids and their derivatives in phenol solution, 1903, T., 1425;

studies on comparative cryoscopy. Part II. The aromatic acids in phenol solution, 1904, T., 1617; P.,

studies on comparative cryoscopy. Part III. The esters in phenol solution, 1905, T., 1574; P., 231.

a volumetric method of estimating the cinchona alkaloids by means of their double thiocyanates, 1905, P., 242.

studies on comparative cryoscopy. Part IV. The hydrocarbons and their halogen derivatives in phenol solution, 1906, T., 567; P., 82.

volumetric estimation of mercury,

1907, A., ii, 580.

ortho-bromophenols and some bromonitrophenols, 1908, T., 788; P., 73.

the melting points of the anilides, ptoluidides, and a-naphthalides of the normal fatty acids, 1908, T., 1033; P., 120.

the non-existence of perbromic acid,

1912, A., ii, 934.

Robertson, Philip Wilfred, and Henry Vincent Aird Briscoe, the migration of the para-halogen atom in phenols, 1912, T., 1964; P., 219.

Robertson, Philip Wilfred. See also

Arthur Hantzsch.

Robertson, Robert, the velocity of decomposition of nitroglycerin by heat. Part I., 1909, T., 1241; P., 179.

Robertson, Robert, and Sidney Scrivener Napper, the estimation of small quantities of nitrogen peroxide, 1907, T., 761; P., 91.

the evolution of nitrogen peroxide in the decomposition of guncotton,

1907, T., 764; P., 91.

Robertson, Robert Alexander, James Colguhoun Irvine, and Mildred Eaton Dobson, chemistry and physiological action of the humic acids, 1907. A., i, 894.

sucroclastic enzymes in Beta vulgaris,

1909, A., ii, 695.

Robertson, Thorburn Brailsford, reactions of infusoria to chemical and osmotic stimuli, 1906, A., ii, 105.

ion-protein compounds. I. Influence of electrolytes on the heart's fre-

quency, 1906, A., ii, 179.

ion-protein compounds. II. Influence of electrolytes on staining of tissues by erythrosine [tetraiodofluorescein] and methyl-green, 1906, A., ii, 376.

influence of temperature on heart beat,

1906, A., ii, 465.

ion-protein compounds. III. Influence of electrolytes on the toxicity of alkaloids, 1906, A., ii, 567.

conditions of equilibrium of an associating amphoteric electrolyte in the presence of any number of nonamphoteric electrolytes, 1906, A., ii, 828.

extension of the theoretical applicability of Guldberg and Waage's mass

law, 1906, A., ii, 833.

ion-protein compounds. IV. Properties of caseinogen, 1907, A., i,

synthesis of protein by pepsin, 1907,

A., i, 666.

dissociation of serum-globulin varying hydrogen ion concentra-

tions, 1907, A., i, 990.

dissociation of solutions of the neutral caseinates [caseinogenates] of sodium and ammonium, 1907, A., i, 1096.

applicability of the laws of amphoteric electrolytes to serum globulin, 1908,

A., i, 929.

influence of temperature on the solubility of casein in alkaline solutions, 1908, A., i, 930.

dissociation of solutions of the basic caseinates [caseinogenates] of sodium and ammonium, 1908, A., i, 1027.

adsorption and the behaviour of casein in acid solutions, 1908, A., ii, 89.

Robertson, Thorburn Brailsford, the superficial layer of cells and its relation to their permeability and to the staining of tissues by dyes, 1908, A., ii, 120.

theory of adsorption, 1908, A., ii,

818.

synthesis of paranuclein through the agency of pepsin and the chemical mechanics of the hydrolysis and synthesis of proteins through the agency of enzymes, 1909, A., i, 342.

refractive indices of solutions of the caseinates and the acid and alkali equivalents of casein, 1909, A., i,

neutrality of the tissues and tissuefluids, 1909, A., ii, 748.

the refractive indices of solutions of certain proteins, 1910, A., i, 526.

rate of solution of casein in solutions of the hydroxides of the alkalis and of the alkaline earths, 1910, A., i, 528.

the refractive indices of solutions of certain proteins. II. The paranu-

cleins, 1910, A., i, 793.

the relative magnitude of the parts played by the proteins and hydrogen carbonates in the maintenance of the neutrality of blood, 1910, A., ii,

electrochemistry of proteins; dissociation of potassium caseinogenate in solutions of varying alkalinity, 1910, A., ii, 679.

certain factors which determine the constituents of emulsions of oil and

water, 1910, A., ii, 697.

electrochemistry of proteins. II. Dissociation of basic caseinogenates of the alkaline earths, 1910, A., ii, 939.

electrochemistry of proteins. III.

Dissociation of salts of ovimucoid in
solutions of varying alkalinity and

acidity, 1911, A., i, 91.

the refractive indices of certain proteins. III. Serum globulin. IV. Casein in alcohol-water mixtures, 1911, A., i, 341.

electrochemistry of proteins. IV.
Dissociation in solutions of the
globulinates of the alkaline earths,

1911, A., i, 406.

electrochemistry of proteins. V. The electrochemical equivalent of caseinogen and its relation to the combining and molecular weights of caseinogen, 1911, A., i, 407.

Robertson, Thorburn Brailsford, theory of the action of inorganic salts on proteins in solution, 1911, A., i, 695.

electrochemistry of proteins. VII.

The mode of formation and ionisation of the compounds of proteins with inorganic acids and bases, 1911, A., i, 933.

electrochemistry of proteins. VI.

The conductivities of solutions of
the caseinogenates of potassium and
of the alkaline earths in mixtures of
water and alcohol, 1911, A., ii, 460.

the refractive indices of solutions of certain proteins. VII. Salmine,

1912, A., i, 519.

electrochemistry of proteins. VIII.

The dissociation of solutions of the sulphate and chloride of protamine (salmine), 1912, A., i, 738.

the action of acids on the respiratory

centre, 1912, A., ii, 571.

the isolation of occytase, the fertilising and cytolysing substance in mammalian blood sera, 1912, A., ii, 573.

refractive indices of solutions of certain proteins. VI. The proteins of oxserum; a new optical method of determining the concentrations of the various proteins contained in blood-sera, 1912, A., ii, 611.

extraction of a substance from the sperm of a sea-urchin (Strongylocentrotus purpuratus) which will fertilise the eggs of that species,

1912, A., ii, 782.

refractivity of the products of the hydrolysis of caseinogen and a rapid method of determining the relative activity of trypsin solutions, 1912, A., ii, 819.

the non-enzymatic character of occytin (occytase), 1912, A., ii, 855.

Robertson, Thorburn Brailsford, and Henry Chalmers Biddle, the composition of certain substances produced by the action of pepsin on the products of the complete peptic hydrolysis of casein, 1911, A., i, 589.

Robertson, Thorburn Brailsford, and Theodore Charles Burnett, depression of freezing point due to caseinates in

solution, 1909, A., i, 447.

Robertson, Thorburn Brailsford, and Joseph E. Greaves, the refractive indices of solutions of certain proteins. V. Gliadin, 1911, A., i, 589.

Robertson, Thorburn Brailsford, and Carl L. A. Schmidt, part played by alkali in the hydrolysis of proteins by trypsin, 1908, A., i, 843. Robertson, Thorburn Brailsford.

also Frederick Parker Gay.

Robertson, William, solubility as a measure of the change undergone by isodynamic hydrazones, (1) camphorquinonephenylhydrazone, (2) acetaldehydephenylhydrazone, 1905, T.,

1298; P., 181.

Robertson, William. See also Henry
Edward Armstrong, and Thomas

Martin Lowry.

Robin, Albert, and G. Bardet, action of artificial oxydases on infectious dis-

eases, 1904, A., ii, 429.

Robin, Félix, crystallisation by annealing of hammer-hardened metals, 1912, A., ii, 1054.

Robin, Félix, and P. Gartner, the etchof steels; austenite and martensite,

1911, A., ii, 495.

Robin, Lucien, simultaneous separation and estimation of barium, strontium, and calcium, 1903, A., ii,

separation of barium, strontium, and calcium, 1904, A., ii, 149.

estimation of nitrites in waters, 1904, A., ii, 367.

new indicator in alkalimetry, 1904, A., ii, 440.

a new indicator for detecting boric acid, particularly in food-stuffs, 1904, A., ii, 445.

estimation of volatile acidity in wines,

1904, A., ii, 521.

detection and estimation of citric acid in wines, 1905, A., ii, 124.

estimation of sucrose, reducing sugars, and [added] starch in chocolates, 1966, A., ii, 499.

detection of cocoanut oil and margarine in butter, 1907, A., ii,

139.

estimation of formaldehyde and its polymerides, 1907, A., ii, 993.

detection of benzoic acid in butter,

1908, A., ii, 1078.

detection of benzoic and salicylic acids in fermented beverages and in milks, 1909, A., ii, 273.

detection of adulteration of butter,

1912, A., ii, 872.

proposed modifications of Robin's method for the analysis of butter, 1912, A., ii, 1107.

Robinoff, Michael. See Carl Gustav

Schwalbe.

Robinson, Clifford Hanks, oxidation of B-naphthaquinone, 1910, A., i, 270.

Robinson, Clifford Hanks. See also Charles James.

Robinson, Charles J., combustion of halogen compounds in presence of copper oxide, 1906, A., ii, 496.

Robinson, Charles J. See also John

Bishon Tingle.

Robinson, Charles S., two compounds isolated from peat soils, 1911, A., ii, 431.

Robinson, Charles S. See also Lee Holt Cone, and Andrew J. Patten.

Robinson, Charles Stanley, and Humphrey Owen Jones, complex thio-oxalates, 1911, P., 279; 1912, T., 62.

Robinson, Charles Stanley. See also Humphrey Owen Jones.

Robinson, Fred., the adsorption of acids by carbohydrates, 1910, A., i, 817.

Robinson, Fred. See also Henry John Horstman Fenton.

Robinson, Frederic William, double and triple ferrocvanides of magnesium, aluminium, and cerium, with potassium and ammonium, 1909, T., 1353; P., 195.

Robinson, Gilbert Wooding. See Leslie

Frank Newman,

Robinson, Henry Haliburton, the gum of Cochlospermum gossypium, 1906, T., 1496; P., 242.

the constituents of the oil of Pinus longifolia, 1911, P., 247.

Robinson, Henry Haliburton. See also Wyndham Rowland Dunstan.

Robinson, James, the absorption of cathode rays of different velocity in helium, 1910, A., ii, 93.

distribution of photo-electric cathode rays in a vacuum and in different

gases, 1910, A., ii, 377.

Robinson, J. E. See Charles James.

Robinson, Robert, a new synthesis of oxazole derivatives, 1909, T., 2167; P., 295.

Robinson, Robert, and John Lionel Simonsen, experiments on the constitution of the aloins, 1909, T., 1085; P., 76, 153.

Robinson, Robert. See also Norman Bland, Paul Engels, Edward Hope, Ernest Griffiths Jones, Joseph Lister, Bernard Dunstan Wilkinson Luff, James Wallace McDavid, and William Henry Perkin, jun.

Robinson, (Miss) Rona, 3-hydroxyphthalic and 3-methoxyphthalic acids and their derivatives, 1906, P., 323.

Robinson, (Miss) Rona. See also William Henry Bentley.

Robinson, William O., and W. H. Waggaman, basic magnesium chlorides, 1910, A., ii, 37.

Robinson, William O. See also Frank Kenneth Cameron, and Charles Lathrop Parsons.

Robison, Robert, and Frederic Stanley Kipping, organic derivatives of silicon. Part V. Benzylethylsilicone, dibenzylsilicone, and other benzyl and benzylethyl derivatives of silicane, 1908, T., 439; P., 25.

organic derivatives of silicon. Part XVIII. Dibenzylsilicanediol and its anhydro-derivative, 1912, T., 2142;

P., 245.

organic derivatives of silicon. Part XIX. The preparation and properties of some silicanediols of the type SiR₂(OH)₂, 1912, T., 2156; P., 245.

Robert. also Arthur Robison, See Hantzsch.

Robitsek, Alfred, See Richard Anschütz.

Robitzsch, Max, experimental determination of the ratio of the specific heats Cp/Cv for potassium and sodium vapours, and the conclusions to be drawn therefrom, 1912, A., ii, 898.

Robyn, A., dinaphthapyranic (dinaphthaxanthyl) derivatives containing

nitrogen, 1905, A., i, 608.

Robyn, A. See also Robert Fosse. Roccati, Alessandro, rhodonite from Chiaves and from other localities of the Valli di Lanzo, 1906, A., ii,

Rocchi, Giuseppe, action of iron on the mobile oxygen of blood, 1912, A., ii,

Rochaix, A. See Jules Courmont. Roche. See Bouchetal de la Roche.

Roché. See Albert Charrin.

Roche, D. A., a method of qualitative analysis, 1911, A., ii, 1031.

Roche, Raoul, nitrification in Egyptian soil, 1907, A., ii, 643.

Roche, Raoul. See also L. Freyssinge. and Henri Pellet.

Rochereau, E., a new universal gasometer, 1912, A., ii, 680.

Rocherolles, Jacques. See Eugène Charabot.

Rockwood, Elbert William, utilisation of vegetable protein by the animal organism, 1904, A., ii, 575.

elimination of endogenous uric acid,

1904, A., ii, 673.

influence of salicylic acid and its isomerides on metabolism, 1909, A., ii, 497.

digestibility of bleached flour, 1910, A., ii, 975.

Rockwood, Elbert William, and Clarence van Epps, influence of certain drugs on the excretion of uric acid and creatinine, 1907, A., ii, 568. Rockwood, Elbert William. See also

Lafayette Benedict Mendel.

Ferdinand. Rocques. See Antoine Villiers.

Rocques, Xavier, composition of wine brandies, 1905, A., ii, 275,

colorimetric estimation of higher alcohols in brandies, 1905, A., ii, 359. estimation of glycerol in liqueur wines,

1905, A., ii, 769.

variation of some diastases during the metamorphosis of a caddis-fly, Limnophilus flavicornis, 1909, A., ii,

analysis of small samples of spirits,

1912, A., ii, 392.

preservation of milk samples, 1912, A., ii, 1218.

Rocques, Xavier, and L. Lévy, the nature of cyanogen compounds in kirschwasser, 1909, A., ii, 337.

Rocques, Xavier, and G. Sellier, estimation of gum in syrups, 1911, A., ii,

Rodano, Giuseppe A. See Celso Ulpiani. Rodd, Ernest Harry. See Henry Edward Armstrong, and Reginald Thomas Colgate.

Rodella, Antonio, importance of strictly anaerobic putrefactive bacilli for the ripening of cheese, 1906, A., ii, 297.

Rodenberg, G. See Heinrich Frerichs. Rodenburg, Jan, estimation of manganese in potable water, 1910, A., ii, 1000. Rodenburg, Jan. See also Gerard Carel

Adriaan van Dorp.

Rodewald, Gustav. See Lothar Wöhler. Rodié, Joseph, volatile oil of Juniperus phoenicea, 1906, A., i, 971; 1907, A., i, 544.

Spanish oil of thyme, 1907, A., ii, 306. Rodillon, G., identification of pyrami-

done, 1906, A., ii, 343.

Rodin, Nils J., proteolysis in the thymus of the calf, 1911, A., ii, 1112.

Rodinis, Oreste. See Robert Kremann. Rodolico, Leonardo, comparative action of strophantin and digitoxin on the toad's heart, 1911, A., ii, 515.

Rodolico, Leonardo. See also Eduardo

Filippi.

Rodriguez Carracido, José, rapid estimation of mercuric chloride in very dilute solutions, 1907, A., ii, 131. explanation of the viscosity curve for mixtures of glycerol and water, 1908, A., ii, 758.

Rodriguez Carracido, José, separation of argon from nitrogen, 1909, A., ii, 728.

theory of the formation of fusel oil; [production of glycerol during alcoholic fermentation], 1910, A., i, 350. biochemical classification of the pro-

teins, 1911, A., i, 90.

partition-coefficients, 1912, A., ii, 750. Rodriguez Mourelo, José, changes in the colour of calcium sulphide under the influence of light, 1908, A., ii, 140.

preparation of anhydrous chromic chloride by Bourion's method, 1910, A., ii, 1072.

phototropy of certain phosphorescent metallic sulphides, 1912, A., ii, 1117.

Rodriguez Mourelo, José, and Antonio Banús, chloroacetylene, Garcia 1911, A., i, 414.

action of carbon on chromyl chloride,

1911, A., ii, 731.

See Friedrich Willy Rodt. Victor.

Hinrichsen.

Roebuck, J. R., rate of the reaction between arsenious acid and iodine in acid solution; rate of the reverse reaction and the equilibrium between them, 1903, A., ii, 14; 1906, A., ii, 76.

Röder, Ferdinand, the alteration of the chemical equilibrium point by the energy of motion, 1912, A., ii, 543.

Roeder, Hans, the action of thermal influences on the digestive power of gastric and pancreatic juices, 1910, A., ii, 423.

Roeder, Hans. See also Julius Wohl-

gemuth.

Roederer, derer, G., strontium-ammonium, 1905, A., ii, 455.

action of ammonia on strontium; strontium-ammonium, 1906, A., ii,

Roederer, G. See also Antoine Guntz. Rödiger, Martin. See Edgar Wedekind. Röer, Elise, estimation of titanic acid in ilmenite, 1910, A., ii, 78.

Röhl, G., the constitution of the sulphide enclosures in iron and steel, 1912,

A., ii, 1059. Roehl, Wilhelm, protein katabolism during digestive activity, 1907, A., ii, 707.

mechanism of the action of atoxyl,

1909, A., ii, 599.

Röhler, Hermann, formamide as a solvent for inorganic salts and the electrolysis of such solutions, 1910, A., ii, 684.

Röhmann, Franz, secretion of feather glands, 1904, A., ii, 355. lanocerin, 1905, A., ii, 842. artificial nutrition, 1912, A., ii, 462.

Röhmann, Franz, and Junzo Nagano, absorption and fermentative splitting of disaccharides in the small intestine of dogs, 1903, A., ii, 494.

Röhmann, Franz, and T. Shmamine, complex compounds of ferrous salts, hydrogen peroxide, and proteins; on the part played by iron in biological oxidation processes, 1912, A., i, 735.

compounds of ferric salts with albumoses, 1912, A., i, 735.

Roehrich, V. H. See George Bell Frankforter.

Röhrig, Armin, improved apparatus for use in the Gottlieb-Röse method of estimating fat in milk, 1905, A., ii,

occurrence of formic acid in raspberries, 1910, A., ii, 235.

Röhrs, Fritz, molecular refraction, molecular volume, and dissociation in nonaqueous solvents, 1912, A., ii, 309.

Roelen, (Mlle.) B. van. See Georges Chavanne.

Rölle, Heinrich. See Erich Beschke. Roemer, Carl, pharmacology of veronal. I. Symptoms and doses, 1911, A., ii,

1120. Roemer, Carl. See also Carl Jacobi. Römer, Fritz. See Otto Fischer.

Roemer, Heinrich, methods of analysis of the [native] potassium salts, 1910, A., ii, 347.

volumetric estimation of combined sulphuric acid by the barium chromate method, 1910, A., ii, 750.

Roemer, Heinrich. See also Alfred Thiel.

Römer, Hermann, results of experiments on the action of phosphoric acid on sugar beet, 1905, A., ii, 757.

Roemer, Hermann. See also Friedrich Kretschmer, Hermann Wilfarth, and Gustav Wimmer.

Römer, Paul H., the Schardinger reaction of cow's milk, 1912, A., ii,

Rönneburg, Albert. See August Klages. Röntgen, Paul, the nature of copper matte, 1906, A., ii, 672.

Roerdanz, Walter. See

Klinger.

Rösch, Joseph, structure of the bands in the spectrum of effect carbons (effektkohlen) and of barium fluoride, 1907, A., ii, 211.

Röse, Carl. See Ragnar Berg. Röse, Heinrich. See Hans Fischer. Roesicke, Adolf. See Emil Fromm. Rösing, Georg, new apparatus for showing the ammonia-condensation power of soils, 1908, A., ii, 620.

accumulation of nitrogen by Azotobacter chrococccum, 1912, A., ii, 473. Rösing, Georg. See also Theodor Remy,

and Georg Schroeter.

Roesler, A., [preparation of vanillin from guaiacol], 1908, A., i, 348.

Roesler, Armand, and Boris Glasmann, iodometric estimation of benzidine and tolidine, 1904, A., ii, 99.

Roesler, H. A., friction in the bomb calorimeter, 1910, A., ii, 690.

Roesler, H. A. See also Victor Hugo Gottschalk.

Roesner, Hans. See Emil Fischer.

Rossing, Adelbert, estimation of calcium sulphide in bone charcoal, 1903, A., ii, 105.

estimation of starch by hydrolysis with hydrochloric acid, 1904, A., ii, 298.

decomposition products formed from starch by hydrolysis with hydrochloric acid; their estimation in starch-dextrose and syrups, and their influence on the technical value of syrups, 1905, A., i, 684.

Roessler. See Deutsche Gold- & Silber-Scheide-Anstalt vorm. Roessler. Rössler, Emil. See Erwin Rupp.

Rössler, Hubert. See Georg Schroeter. Rössler, L., estimation of gold by means of hydrogen peroxide, 1910, A., ii, 1115.

Rössler, L. See also Ludwig Vanino.
Rössler, Paul. See Ludwig Knorr.
Pitters Kunt. See Pickand Josef Manner.

Rötgers, Kurt. See Richard Josef Meyer. Roethlisberger, Paul, clinical process for the estimation of uric acid in blood serum, 1911, A., ii, 548.

Roettgen, Theodor, estimation of volatile acids in wines by means of Bötticher's apparatus, 1910, A., ii, 661.

estimation of lactic acid in wine by the methods of Möslinger and Kunz, 1912, A., ii, 1005.

Roettgen, Theodor. See also Karl Windisch.

Roever, Carl. See Karl Auwers.

Röver, Eugen. See Julius von Braun. Roger, H., adulteration of linseed cakes,

Roger, H., adulteration of linseed cake 1906, A., ii, 404.

Roger, L., and E. Vulquin, humin substances in peat wool ("Ouate de Tourbe"), 1909, A., i, 86.

Rogers, Allen, derivatives of new complex inorganic acids, 1903, A., ii, 375.

extraction apparatus, 1906, A., ii, 277.

Rogers, Allen, and Edgar Fahs Smith, derivatives of complex inorganic acids, 1904, A., ii, 178; 1905, A., ii, 38.

Rogers, Austin Flint, eglestonite from San Mateo Co., California, 1911, A., ii, 807.

new synthesis and new occurrences of

covellite, 1911, A., ii, 900. minerals from the lead and zine district of Galena-Joplin (Kansas-Missouri) 1911, A., ji, 900.

baddeleyite [native zirconia] from Montana, 1912, A., ii, 172.

lorandite from Wyoming, 1912, A., ii, 265.

Rogers, Austin Flint, and G. E. Postma, composition of minerals of the apatite group, 1912, A., ii, 565.

Rogers, Charles G., temperature-coefficient of the rate of the heart-beat, 1911, A., ii, 503.

Rogers, Francis M. See Harmon Northrop Morse.

Rogers, Leonard, pigmented atrophy of the mucous membrane of the small intestine of malarial origin, 1903, A., ii, 675.

enhydrina poisoning, 1903, A., ii, 676. blood changes in plague, 1905, A., ii,

338.

Rogerson, Harold, the constituents of the flowers of Trifolium incarnatum, 1910, T., 1004; P., 112.

chemical examination of the root of Lasiosiphon meissnerianus, 1911, A.,

ii, 325.

chemical examination of the bark of Euonymus atropurpureus, 1912, T., 1040; P., 138; discussion, P., 138.

Rogerson, Harold, and Jocelyn Field Thorpe, some alkyl derivatives of glutaconic acid and of 2:6-dihydroxypyridine, 1905, T., 1685; P., 239.

a mode of formation of aconitic acid and citrazinic acid, and of their alkyl derivatives, with remarks on the constitution of aconitic acid, 1906, T. 631; P., 87.

glutaconic and aconitic acids, 1906,

P., 146.

Rogerson, Harold. See also Frederick

Belding Power.

Rogoff, Moissei J., dialdehydes prepared by the action of aldehydes on aromatic hydroxyaldehydes. III. p- and m-Nitrobenzylidenedivanillin dimethyl ethers, 1904, A., i, 173.

phenols insoluble in aqueous alkali hydroxides, 1905, A., i, 883. Rogovsky, E., change in the hydrogen spectrum under the prolonged action of strong electric discharges, 1908, A., ii, 335.

Rogowicz, Johann, solubility of barium sulphite in water and in [sucrose] solutions, 1905, A., ii, 821.

Rogowina, Eugenie. Alfred

Werner.

Rogowski, W. de. See Charles Dhéré. Rogoziński, Felix, the influence of muscular work on the weight and composition of the organs, 1907, A., ii,

40. the protein peptones. III. and IV.,

1908, A., i, 487.

phosphorus metabolism in the animal organism, 1910, A., ii, 972.

glycogenic property of glucosamine,

1911, A., ii, 814.

the action of proteolytic enzymes on clupein, 1912, A., i, 672.

methylation of clupein, 1912, A., i, 898.

Rogoziński, Felix. See also Gabriel

Bertrand. Rohdé, Alice, and Walter Jones, the

purine enzymes in the rat, 1910, A.,

Rohde, Erwin, colour reactions of proteins with p-dimethylaminobenzaldehyde and other aromatic aldehydes, 1905, A., i, 618.

action of chloral hydrate on the heart,

1906, A., ii, 110.

metabolism. I. Metabolic investigations of the surviving warm-blooded

heart, 1910, A., ii, 976.

Rohde, Erwin, and Sagoro Ogawa, gaseous exchange and activity of the heart under the influence of poisons and nerve stimulation, 1912, A., ii,

Rohde, Georg, cinchona alkaloids, 1909,

A., i, 505. Rohde, Georg, and Aldo Antonaz, quinine

alkaloids, 1907, A., i, 634. Rohde, Georg, and Gustav Dorfmüller, constitution of \$\beta\$-bromocarmin, 1910,

A., i, 492.

Rohde, Georg, and Georg Schärtel, condensation products from salicylidenehydrocyanosalicylidene-aniline (anilino-o-hydroxyphenylacetonitrile), 1910, A., i, 775.

Rohde, Georg, and Georg Schwab, action of methyl iodide on the isonitrosocompounds of cinchotoxine and quino-

toxine, 1905, A., i, 228.

Rohde, Georg. See also Gustav Schultz. Rohde, Karl. See Theodor Posner.

Rohde, Otto, formation of solid surfaces in solutions of dyes: photo-electric effects in the case of these and of metallic sulphides, 1906, A., ii, 342.

Rohdich, Otto. See Hermann Matthes. Rohland, Paul [Waldemar], cause of the catalytic action of the hydrogen ions of acids on hydrolytic reactions, 1903, A., ii, 16.

hydration and hardening of some

sulphates, 1903, A., ii, 539.

the second anhydrous modification of calcium sulphate, 1903, A., ii, 545. the first anhydrous modification of

calcium sulphate, 1904, A., ii, 33. hardening of barium sulphate, 1904,

A., ii, 257.

constitution of ultramarine, 1904, A., ii, 487.

reactivity of calcium sulphate in colloidal media, 1904, A., ii, 560. "ageing" of clays, 1904, A., ii, 736.

hydration and hardening, 1905, A.,

ii, 19, 389, 511.

relationships between the solubility of calcium sulphate and the hydration of gypsum and of Portland cement, 1905, A., ii, 319.

the clays as semipermeable walls,

1905, A., ii, 683.

hydration of Portland cement, 1906, A., ii, 285.

relation between temperature and depth of colour of certain inorganic substances, 1906, A., ii, 409.

abnormal changes of melting point. 1906, A., ii, 422.

cause of the catalytic effect of hydrogen and hydroxyl ions on hydrolytic reactions, 1906, A., ii, 733.

catalytic action of aluminium chloride,

1907, A., ii, 27.

ionic and chromophore theory of indi-

cators, 1907, A., ii, 519.

the adsorptive power of the hydroxides of silicon, aluminium, and iron, 1907, A., ii, 957; 1909, A., ii, 27; 1910, A., ii, 615; 1912, A., ii, 1145.

physico-chemical processes in the production of soil, 1908, A., ii, 59, 620. Dulong and Petit's law, 1908, A., ii,

relation of changes of solubility of calcium sulphate and its rate of hydration, 1908, A., ii, 842.

the odour of clay, 1909, A., ii, 404;

1912, A., ii, 1175.

the behaviour of suspended matter in crystalloidal and colloidal conditions, 1909, A., ii, 473.

Rohland, Paul [Waldemar], decomposition of substances allied to colloids, 1909, A., ii, 474.

adsorption by clays, 1909, A., ii, 551. inertness of adsorbed CO₃"-ions, 1909, A., ii, 662.

solubility of iron oxide, 1909, A., ii, 811.

adsorptive power of hydroxides of silicon, aluminium, and iron. III. Adsorption by clay. II., 1910, A., ii. 104.

new preparation of the second anhydrous modification of calcium sul-

phate, 1910, A., ii, 125.

refardation of the oxidation of iron by chromic chloride, 1910, A., ii, 129. sulphates and hydrogen sulphates of barium and calcium, 1910, A., ii,411. estimation of potassium as potassium

platinichloride, 1910, A., ii, 548. molecular refraction of the isomeric hydrocarbons, C₁₀H₂₂, 1910, A., ii,

809.

phenomena of the colloidal state,

1910, A., ii, 941.

the causes of the variation in the velocity of hydration of cement, 1911, A., ii, 605.

the hydration and hardening o

cement, 1911, A., ii, 881.

 Cause of the de-rusting of iron in ferroconcrete. II. Two chemical processes occurring in a railway tunnel, 1911, A., ii, 1093.

the removal of rust from iron in reinforced concrete, 1912, A., ii, 53.

the co-operation of organisms in clayformation, 1912, A., ii, 484.

action of hydroxyl ions on suspensions of kaolin, 1912, A., ii, 1150.

the estimation of colloid materials in soils, 1912, A., ii, 1220.

Rohloff, C., and Shinjo, boundary between the solid and liquid conditions in gelatin solutions, 1907, A., ii, 611.

Rohm, J. See Bronislaw Radziszewski. Rohm, Karl, estimation of water-soluble phosphoric acid and total phosphoric acid in superphosphates, 1906, A., ii, 490.

Rohmer, Martin, acceleration of the reduction of quinquevalent arsenic by hydrogen bromide; a correction, 1910, A., ii, 774.

Rohn, Eugen. See Alexander Gutbier. Rohn, W., anomalous dispersion of certain organic colouring matters, 1912, A., ii, 878.

fluorescent properties of sodium fluorescein in solution, 1912, A., ii, 878.

Rohner, Franz. See Fritz Fichter. Rohner, Josef, [reactivity of diazo-salts of 2:5-dichloroaniline], 1908, A., i, 482.

Rohonyi, Hugo, enzyme action and electrolytic dissociation, 1911, A., i,

the changes of hydrogen ion concentration produced by the action of pepsin, and the acid-combining capacity of some hydrolysis products of egg-albumin, 1912, A., ii, 1066.

Rohrer, Ladislaus von, electrometric determination of the acidity of urine,

1905, A., ii, 772.

Rojahn, Wilhelm. See Hugo von Soden. Roka, Kalman. See Carl Liebermann. Rolfe, George William, and H. W. Geromanos, hydrolysis of starch by acids, 1904, A., i, 17.

Rolfe, George William, and Isaac T.

Haddock, presence of maltose in acidhydrolysed starch products, 1904, A,

i, 17.

Rolker, H. F. See John Bishop Tingle. Roll, C. See Georgi Vasiljevitsch Kor-

schun.

Rolla, Luigi, condensation products of aminophenylcyanamide with aldehydes and ketones, 1907, A., i, 875. aminophenylcarbamide and amino-

phenylthiocarbamide, 1908, A., i,

theory of colloidal solutions, 1909, A., ii, 131.

vapour pressures at low temperatures, 1910, A., ii, 19.

optics of colloidal gold, 1910, A., ii, 304.

dissociation of hydrated salts, 1911, A., ii, 375.

diffusion of electrolytes in colloids, 1911, A., ii, 969.

heat of formation of hydrogen selenide, 1912, A., ii, 1040.

Rolla, *Luigi*, and *Giovanni* Ansaldo, dissociation of mixed hydrated salts, 1912, A., ii, 335.

Rolla, Luigi, and Angelo Repetto, action of iodine on hydrogen selenide, 1912, A., ii, 1154.

Rolland, C. See A. Daniel-Brunet. Rolle, Johannes. See Richard Wolffen-

stein.
Rolle, Otto. See Daniel Vorländer.

Rollett, Adolf, alcoholysis of lecithin, 1909, A., i, 692. linoleic acid, 1909, A., i, 759.

linolenic acid and linseed oil, 1909, A., i, 760; 1911, A., i, 175. Rollett, Adolf, syntheses of hydroxy-I. Synthesis of \$-tribetaines. methyl-α-lactobetaine, 1910, A., i, 658.

syntheses of hydroxybetaines. Synthesis of y-trimethyl-B-hydroxybutvrobetaine (dl-isocarnitine), 1910, A., i, 824.
Rollett, Adolf. See also Johann Feigl,

and Robert Pschorr.

Rollhäusser. Heinrich. See Theodor

Roloff, Max, analysis of natural mineral waters, 1908, A., ii, 231.

Roman, Thomas, and G. Delluc, presence of traces of zinc in alcohol and its detection, 1907, A., ii, 397.

Romanoff, E., action of potassium hydroxide on a mixture of phenylacetylene and menthone, 1905, A., i,

Románski, Zygmunt, estimation of phosphoric acid in basic slags by weighing the "yellow precipitate," 1909, A., ii, 182.

estimation of phosphoric acid in superphosphates and bone-meals, 1911,

A., ii, 227.

Romburgh, Pieter van, additive compounds of s-trinitrobenzene, 1904, A., i, 487.

presence of esters of cinnamic acid in specimens of gutta-percha, 1904, A., i, 905.

action of ammonia and amines on allyl formate, 1906, A., i, 2.

presence of lupeol in some kinds of gutta-percha, 1906, A., i, 20.

triformin (glyceryl triformate), 1906, A., i, 725.

decomposition of pentaerythritol tetraformate on heating, 1907, A., i, 1011.

lupeol, 1908, A., i, 39.

Javanese basilicum oil and methylchavicol, 1909, A., i, 597.

essential oil from the fruit of Morinda

citrifolia, 1909, A., i, 597. nitration of diethylaniline, 1910, A., i, 19.

the simplest fat, glyceryl triformate, 1910, A., i, 215.

action of nitrous acid on dinitrodialkylanilines, 1911, A., i, 281.

additive compounds of m-dinitrobenzene, 1911, A., i, 622.

hypaphorine and the relation of this substance to tryptophan, 1911, A.,

i, 668. essential oil of Litsea odorifera leaves, 1912, A., i, 38.

Romburgh, Pieter van, and George Barger, preparation of the betaine of tryptophan and its identity with the alkaloid hypaphorine, 1911, T., 2068; P., 258.

Romburgh, Pieter van, and Nardus Henri Cohen, occurrence of B-amyrin acetate in some varieties of gutta-percha, 1906,

A., i, 197.

Romburgh, Picter van, and Willem van Dorssen, action of ammonia and amines on formic esters of glycols and glycerol. II., 1906, A., i, 3.

the simplest hydrocarbon with two conjugated systems of double bonds: aye-hexatriene, 1906, A., i, 130.

the reduction of acraldehyde and some derivatives of s-divinyl glycol (78dihydroxy-ac-hexadiene), 1906, A., i, 141.

derivatives of aye-hexatriene, 1906.

A., i, 722.

Romburgh, Pieter van, and August Daniel Maurenbrecher, action of bases, ammonia, and amines on s-trinitrophenylmethylnitroamine, 1907, A., i, 512.

Romeo, Giovanni, action of p-nitrobenzyl chloride on acetoacetic and cyanoacetic esters and their derivatives. 1903, A., i, 260.

nitrobenzyl ethers, 1905, A., i, 435. empirical formula and properties of solanin, 1906, A., i, 300.

Romeo, Giovanni, and Carmelo Marchese, reduction products of di-pnitrobenzylmalononitrile, 1905, A., i,

Romeo, Giovanni. See also Enrico Berté.

Romkes, P. C., liver cells and their permeability to sugar, 1909, A., ii, 73.

Romyn, Gysbert, use of alkaline mercuric iodide solution as an oxidising agent in volumetric analysis, 1907. A., ii, 49.

estimation of nitric acid, 1911, A., ii. 767.

estimation of ferrous ions with standard iodine, 1912, A., ii, 94.

Romyn, Gysbert, and J. A. Voorthuis, estimation of formaldehyde in air, 1903, A., ii, 580.

Rona, Peter, estimation of creatinine, 1910, A., ii, 909.

the behaviour of chlorine in serum, 1911, A., ii, 50, 126.

hydrolysis of esters in the tissues, 1911, A., ii, 627.

the seission of esters in the blood, 1911, A., ii, 740.

Rona, Peter, and A. Döblin, blood-sugar. IX. The permeability of bloodcorpuscles to dextrose, 1911, A., ii,

glycolysis. II., 1911, A., ii, 619.

Rona, Peter, and Josine Ebsen, ester hydrolysis by the blood, 1912, A., ii,

Rona, Peter, and Leonor Michaelis, colloidal nature of albumose solutions, 1907, A., i, 370.

methods for the removal of proteins from solution, 1907, A., i, 1094. sugar in blood, 1908, A., ii, 117;

1909, A., ii, 249.

adsorption of sugar, 1909, A., ii, 384. the sugar of the blood. VII. Permeability of blood corpuscles for dextrose, 1909, A., ii, 680.

the condition of the calcium in milk.

I., 1909, A., ii, 913.

general chemistry of the proteins. II. Precipitation of globulins at the isoelectric point, 1910, A., i, 905.

ester and fat hydrolysis in blood and serum, 1911, A., ii, 302.

general chemistry of the proteins. IV. Protein scission and soap-protein compounds, 1912, A., i, 590.

Rona, Peter, and Wilhelm Müller, the replacement of protein by gelatin,

1907, A., ii, 186.

Rona, Peter, and Router Ottenberg, the method of nitrogen estimation in the urine, 1910, A., ii, 449.

Rona, Peter, and Otto Riesser, hippomelanin. I., 1908, A., i, 1028.

Rona, Peter, and Dengo Takahashi, blood sugar. VIII. The sugar content of the corpuscles, 1911, A., ii, 125.

the behaviour of calcium in the serum, and the calcium content of the blood-corpuscles, 1911, A., ii, 302.

Rona, Peter. See also Emil Abderhalden, Josef Herzig, Leonor Michaelis, and Otto Riesser.

Roncagliolo, Cesare, hydrazine derivatives of o-aminobenzaldehyde, 1905, A., i, 652.

selenium-iron alums, 1906, A., ii, 232. Roncagliolo, F. See Guido Pellizzari.

Roncali, F. See U. Roberto.

Ronceray, substances contained "orchil" lichens, 1904, A., i, 897.

Ronchèse, A., volumetric estimation of uric acid by means of iodine solution, 1906, A., ii, 401.

new method for the estimation of ammonia, 1907, A., ii, 651.

estimation of ammonia in water, 1908, A., fi, 320.

Ronchèse, A., estimation of ammonia in urine, 1908, A., ii, 983. gasometric estimation of urea, 1909,

A., ii, 103.

Ronnet, Léon, estimation of potassium in soils, 1908, A., ii, 534.

Halphen's reaction, 1909, A.,

estimation of aldehydes in alcohol; preparation of standard aldehyde solution, 1910, A., ii, 663.

estimation of ferrocyanides and thio-

cyanates, 1911, A., ii, 938. Ronus, Max. See Hans Rupe.

Rooks, J. R. See Anton Julius Carlson.

Roop, W. P., new method for investigation of the magnetic permeability of gases, 1911, A., ii, 183.

Roos, Ernst. See Oscar Hinsberg, and

W. A. Nagel.
Roos, L., and W. Mestrezat, estimation of the volatile acidity of wine, 1906, A., ii, 256.

Roose, Georg, comparative investigation on the composition and cleavage products of different silks. X. Monoamino-acids of the cocoon of the Italian silk-worm, 1910, A., i, 794.

electrochemical Root, Jay Emery, analysis and the voltaic series, 1903,

A., ii, 683.

electrolysis of cobalt and nickel tartrates, 1905, A., ii, 208.

Roozeboom, Hendrik Willem Bakhuis, a representation in space of the regions in which solid phases occur, 1903, A., ii, 135.

equilibria of phases in the system: acetaldehyde-paracetaldehyde, with and without molecular transforma-

tion, 1903, A., ii, 135.

the boiling-point curves of the system: sulphur-chlorine, 1903, 634.

the phenomena of solidification and transformation in the systems NH4 NO₃, AgNO₃, and KNO₃, AgNO₃, 1904, A., ii, 112.

the system bromine + iodine, 1904, A., ii, 165.

sublimation lines of binary mixtures, 1904, A., ii, 233.

application of the phase rule to mixtures of iron and carbon, 1904, A., ii, 717.

boiling points of saturated solutions in binary systems in which a compound occurs, 1906, A., ii, 217.

behaviour of the halogens towards each other, 1907, A., ii, 80.

Roozeboom, Hendrik Willem Bakhuis. and Adriaan Hendrik Willem Aten. melting point lines of the system: sulphur + chlorine, 1904, A., ii, 394.

equilibria between solid and liquid phases in ternary systems which are pseudobinary; explanation of anomalous fusion and solution phenomena, 1905, A., ii, 803.

Roozeboom, Hendrik Willem Bakhuis. and Willem Jacob van Heteren, tin

amalgams, 1903, A., ii, 216.
Roozeboom, Hendrik Willem Bakhuis, and Gerard Hildebrand Leopold, threephase lines in chloral alcoholate and aniline hydrochloride, 1906, A., ii, 654.

Roozeboom, Hendrik Willem Bakhuis, and Jacob Olie, jun., solubilities of the isomeric chromic chlorides, 1905, A., ii. 716.

Rorive, F., and Bernhard Tollens, diphenylhydrazones of the tolualdehydes, 1907, A., i, 709. Rorive, F. See also Bernhard Tollens.

Rosam, W., molasses food from seed-beet

straw, 1904, A., ii, 838.

Rosanoff, Martin Andre, principle of optical superposition, 1906, A., ii, 320;

1907, A., ii, 207.

Rosanoff, Martin Andre, Robert H. Clark, and R. L. Sibley, reinvestigation of the velocity of sugar hydrolysis. I., 1912, A., ii, 34.

Rosanoff, Martin Andre, and Charles W. Easley, partial vapour pressures of binary mixtures, 1909, A., ii, 861.

Rosanoff, Martin Andre, Louise Gulick, and Herbert K. Larkin, preparation of acetamide, 1911, A., i, 529.

Rosanoff, Martin Andre, and Arthur E. Hill, modification of Volhard's method for the estimation chlorides, 1907, A., ii, 503.

estimation of chlorides or bromides in the presence of thiocyanates, 1907,

A., ii, 984.

Rosanoff, Martin Andre, Arthur Becket Lamb, and F. E. Breithut, new method of measuring the partial vapour pressures of binary mixtures, 1909, A., ii, 379.

Rosanoff, Martin Andre, and W. L. Prager, esterification. I. Victor Meyer's esterification law, 1909, A., ii.

Rosanoff, Nicolai. See Arthur Hantzsch. Rosanoff, Nicolai Andréevitsch, absorption spectra of hydrogen peroxide, 1912, A., ii, 875.

Rosanoff, Nicolai Andréevitsch. See also

Nicolai D. Zelinsky.

Rosario, José I. del, oxidation of hexoses by air in presence of alkali hydroxides. 1911, A., i, 605.

Aristide, crystallography of octahydrated thorium selenate, 1907.

A., ii, 359.

crystallography of nitrodesmotroposantonin and B-naphthyl propyl ketone, 1909, A., i, 241.

crystallographic study of o-thymotic acid and of two isomeric thymotides,

1909, A., i, 648.

crystallographic study of ethyl isosuccino-p-toluidate, 1911, A., i, 776. crystallographic study of potassium

p-hydroxybenzoate, 1911, A., i, 864. crystallographic observations on cerium sulphate tetrahydrate, 1911, A., ii, 984.

crystallographic study of 3:4:5-trimethoxyphthalic acid, 1912, A., i,

Roschansky, D., influence of the spark on the frequency of electrical vibrations, 1911, A., ii, 15.

Roschdestvensky, D., anomalous dispersion in sodium vapour, 1912, A., ii,

1016.

Roschdestvensky, Michael Sergeivitsch, new method for obtaining substituted thiocarbamates of monohydric alcohols, 1909, A., i, 300.

action of thiocarbimides on alcohols and mercaptans. I. New method for obtaining mono-substituted thioand dithio-carbamates of monoatomic alcohols and mercaptans, 1910, A., i. 107.

Roschdestvensky, Michael Sergeivitsch. See also Antony G. Doroschewsky.

Roscoe, (Sir) Henry Enfield, congratulatory address to, on the occasion of the Jubilee of his Doctorate, and his reply, 1904, P., 84, 106.

Rose, A. R., influence of phytin on the growth of lupine seedlings, 1912, A.,

ii, 862.

Rose, Friedrich, See Friedrich Kohlrausch.

Rose, Hermann, dispersion and rotationdispersion, of certain naturally active crystals, 1910, A., ii, 246. dispersion of cinnabar, 1912, A., ii, 873,

Rose, J. A. See Alfred Partheil.

Rose, J. D., an adjustable automatic

burette, 1910, A., ii, 648. Rose, Robert. See Hans Stobbe. Rose, Rudolf. See H. Gödecker.

Rose, Robert Evstafieff, reduction of the anhydroxime of o-benzoylbenzoic acid, 1911, A., i, 372.

Robert Evstafieff, and Carl Livingston, leaf-oil of the Washington cedar (Thuja plicata), 1912, A., i,

Rose. Robert Evstafieff. See also James Colquhoun Irvine, and Thomas Purdie.

Rose, Thomas Kirke, certain properties of the alloys of silver and cadmium, 1905, A., ii, 86.

Rose, William Cumming, mucic acid and intermediary carbohydrate metabolism, 1911, A., ii, 904.

creatine and creatinine. III. tion of creatine in infancy and childhood, 1911, A., ii, 1012.

creatine and creatinine. IV. Estimation of creatine in the presence of

sugar, 1912, A., ii, 818.

Rose, William Cumming. See also Lafayette Benedict Mendel.

Rosebrugh, T. R., and William Lash Miller, mathematical theory of the changes of concentration at the electrode brought about by diffusion and by chemical reaction, 1911, A., ii,

181. Alexander. See Heinrich Roseeu,

Wieland. Rosemann, Rudolf, influence of alcohol on protein metabolism, 1903, A., ii,

nutritive value of alcohol, 1904, A., ii, 58, 187.

physiology of digestion. I. Gastric juice obtained from a dog by shamfeeding, 1907, A., ii, 706.

physiology of digestion. II. Total chlorine of the animal body, 1910,

A., ii, 1082.

physiology of digestion. III. The secretion of gastric juice when the chlorine supply of the body is lessened, 1911, A., ii, 998.

physiology of digestion. IV. The total chlorine of the animal body on a diet rich in chlorine, 1911, A., ii,

1110.

physiology of digestion. V. The total chlorine of the human fœtus,

1911, A., ii, 1110.

Rosenbach, Adolf. See Otto Wallach. Rosenbach, Otto. See Leopold Lichtwitz. Rosenbaum, Adolf. See Julius Arnheim. Rosenberg, Anna, rôle of catalase in plants, 1910, A., ii, 992.

Rosenberg, Anna. See also

Zaleski.

Rosenberg, Egon. See Carl Neuberg. Rosenberg, Georg. See Reginald Oliver

Rosenberg, H. See Wolfgang Heubner.

Rosenberg, J. O., the ferronitrosulphides and their relation to the nitroprussides. III., 1911, A., ii, 290.

Rosenberg, Paul, condensation of formaldehyde and lactose, 1908, A., i,

Rosenberg, Siegfried, and Oppenheimer, resistance of protein to tryptic digestion in the animal organism, 1904, A., ii, 573.

Rosenberg, T. See Alfred Gigon.

Rosenberger, Franz, a heptose in human urine, 1907, A., ii, 41. inosite in animal tissues and fluids.

1908, A., ii, 873.

inosite [in flesh], 1908, A., ii, 1055. cycloses, 1909, A., ii, 252. inosite. IV., 1910, A., ii, 325.

Rosenberger, George. See Fritz Fichter. Rosenblatt, M., estimation of dextrose in the presence of other substances by Bertrand's method, 1912, A., ii, 1003.

Rosenblatt, M., and (Mme.) Rosenblatt, influence of concentration of sucrose on the paralysing action of certain acids on alcoholic fermentation, 1910, A., ii, 643.

Rosenblatt, M., and (Mlle.) M. Rozenband, paralysing action of acids on alcoholic fermentation, 1909, A., ii, 752.

also Rosenblatt. M. See Bertrand.

Rosenblatt, (Mme.) M. (née Rozenband). See Gabriel Bertrand, and M. Rosenblatt.

Rosenbloom, Jacob, is Bence-Jones' protein produced from osseoalbumoid, 1910, A., ii, 731.

distribution of chlorate in a woman poisoned by potassium fatally chlorate, 1912, A., ii, 859.

Rosenbloom, Jacob, and William John Gies, azolitmin compounds of proteins, 1907, A., i, 806.

Rosenburg, Arthur, stereoisomeric semicyclic 1:5-diketones from 3-methylcyclohexanone and phenyl styryl ketone, 1912, A., i, 782.

Rosenburg, Arthur. See also Hans

Stobbe.

Rosenbusch, Richard. See Arthur Kötz. Rosenfeld, E. N. See Philip Adolph Kober.

Rosenfeld, Franz, behaviour of phenylglycine in the animal organism, 1903, A., ii, 743.

indoxyluria, 1904, A., ii, 193.

Rosenfeld, Franz. See also Curt Lehmann.

Rosenfeld, Georg, glycogen formation, 1912, A., ii, 854.

Rosenfeld, Georg. See also Arthur

Liebrecht.

Rosenfeld, L., hydrolytic decomposition products of caseoplastein, 1907, A., i,

Rosenfeld, R. See Leon Asher.

Rosenhain, Walter, calorimetry of volatile liquids, 1906, A., ii, 269.

Rosenhain, Walter, and Sydney Leonard Archbutt, constitution of the alloys of aluminium and zinc, 1911, A., ii, 895.

Rosenhain, Walter, and John Charles Willis Humfrey, crystalline structure of iron at high temperatures, 1910, A., ii, 128.

Rosenhain, Walter, and Percy Alexander Tucker, eutectics. alloys of lead and tin, 1908, A., ii, 1038.

Wilhelm. See Eduard Rosenhaupt, Jordis.

Rosenheim, Arthur, molybdic acid, 1903, A., ii, 299. [formula for aldehyde hydrogen sul-

phites], 1905, A., i, 508. dihydrate of molybdic acid, 1906, A.,

ii, 762. halogen compounds of molybdenum

and tungsten, 1907, A., i, 688. antimony thioglycollate; correction,

1908, A., i, 246. molybdenum hexathiocyanate salts,

1909, A., i, 141, 558.

reaction between hydrogen sulphide cyanaminodithiocarbonates, 1910, A., i, 13.

molybdenum cyanides, 1910, A., i,

232.

iso- and hetero-poly-acids. IV. The constitution of metatungstates and borotungstates, 1911, 612.

the constitution of the metatungstates,

1912, A., ii, 649.

the estimation of thorium, especially in monazite sand, by means of sodium hypophosphate, 1912, A., ii, 869.

Rosenheim, Arthur, and Hans Aron, complex salts of quadrivalent tin,

1904, A., ii, 411.

Rosenheim, Arthur, and R. Bernhardi-Grisson, the electrolytic reduction of tungstic acid, 1911, A., ii, 402.

Rosenheim, Arthur, and Alfred Bertheim, hydrates of molybdic acid and some of their compounds, 1903, A., ii, 374.

Rosenheim. Arthur, and Hans Julius Braun, halogen compounds of molybdenum and tungsten, 1905, A., ii, 717.

Rosenheim, Arthur, and Isser Davidsohn, formation of complex salts with thio-acids; thioglycollates, 1904, A., i, 843.

hydrates of molybdic acid. II., 1904,

A., ii, 128.

Rosenheim, Arthur, and Paul Frank. [zirconichlorides of organic bases], 1905, A., i. 297.

zirconium salts, 1905, A., ii, 256;

1907, A., ii, 271.

Rosenheim, Arthur, and Abraham Garfunkel, halogen compounds molybdenum and tungsten. IV. Thiocyanates of tervalent molybdenum, 1908, A., i, 614.

cobaltinitrites, 1911, A., i, 619.

Rosenheim, Arthur, Abraham funkel, and Franz Kohn, molybdenum cyanides, 1910, A., i, 101.

Rosenheim, Arthur, and Herbert Grünbaum, tetragenic double salts of antimony fluoride and their applicability as mordants, 1909, A., ii, 243.

Rosenheim, Arthur, and Julian Hertzmann, zirconium tetrachloride and colloidal zirconium hydroxide. III., 1907, A., ii, 271.

Rosenheim, Arthur, Julian Hertzmann, and Max Pritze, complex gold sul-

phites, 1908, A., ii, 860.

Rosenheim, Arthur, and Felix Jacobsohn, action of liquid ammonia on certain metallic anhydrides [acidic oxides], 1906, A., ii, 760.

Rosenheim, Arthur, and Franz Kohn, molybdenum dichloride, 1910, A.,

iso- and hetero-poly-acids. I. Metatungstic acid, 1911, A., ii, 116.

Rosenheim, Arthur, and Morduch Koss, halogen compounds of molybdenum and tungsten. II., 1906, A., i, 603.

Rosenheim, Arthur, and Richard Levy, anhydrous thiocyanic acid, 1907, A., i, 489.

Rosenheim, Arthur, Richard Levy, and Herbert Grünbaum, perthiocyanic acid and trithioallophanic acid, 1909, A.,

i, 776. Rosenheim, Arthur, and Walter Levy, compounds of unsaturated ketones with metallic chlorides, 1904, A., i, 1024.

platinum phosphorus halogen compounds and their derivatives. II., 1905, A., i, 183.

Rosenheim, Arthur, and Heinrich Loebell. sulphate of tervalent uranium,

1908, A., ii, 294.

Rosenheim, Arthur, and Willy Loewenstamm, thiocarbamide derivatives of univalent metallic salts, 1903, A., i,

platinum phosphorus halogen compounds and their derivatives. I.,

1904, A., ii, 131.

Rosenheim, Arthur, Willy Loewenstamm, and Ludwig Singer, compounds of ethyl acetoacetate and acetylacetone with metallic chlorides, 1903, A., i, 603.

Rosenheim, Arthur, and Victor J. Meyer, absorption spectra of solutions of isomeric complex cobalt salts, 1906,

A., i, 406.

compounds of thiocarbamide with salts of bivalent metals, 1906, A., i,

Rosenheim, Arthur, and Paul Müller. ferric aceto-compounds, 1904, A., i,

Rosenheim, Arthur, and Jacob Pinsker, estimation of hypophosphoric, phosphorous, and hypophosphorous acids in presence of one another, and of phosphoric acid, 1910, A., ii,

preparation and molecular weight of hypophosphoric acid, 1910, A., ii,

iso- and hetero-poly-acids. III. The basicity of some hetero-poly-acids, 1911, A., i, 265.

Rosenheim, Arthur, and Max Pritze, molecular weight and hydrates of hypophosphoric acid, 1908, A., ii, 942.

some complex selenium anions, 1909, A., ii, 882.

Rosenheim, Arthur, Victor Samter, and Isser Davidsohn, thorium compounds, 1903, A., ii, 601.

Rosenheim, Arthur, and Willfried Sarow, salts of alkylsulphurous and alkylsulphonic acids, 1905, A., i, 404.

Arthur, and Richard Rosenheim, action of stannic and Schnabel, titanic chlorides on organic hydroxyl compounds, 1905, A., i, 731.

Rosenheim, Arthur, and Ludwig Singer, preparation of alkylsulphinic acids,

1904, A., i, 567.

and Rosenheim, Arthur, Wilhelm Stadler, formation of complex salts with thio-acids. II. Thiolmalic acids and their salts, 1905, A., i, 740.

Rosenheim, Arthur, and Wilhelm Stadler, compounds of thiocarbamide and of xanthamide with salts of univalent copper, 1906, A., i, 407.

Rosenheim, Arthur, Wilhelm Stadler, and Felix Jacobsohn, the molecular weight of hypophosphoric acid, 1906,

A., ii, 744.

Rosenheim, Arthur, Walter Vogelsang, and Morduch Koss, simple and complex salts of bismuth, 1906, A., i, 231.

Rosenheim, Arthur, and M. Weinheber, iso- and hetero-poly-acids. II. oxalato-tellurates, 1911, A., i, 109. gravimetric estimation of tellurium alkalimetric estimation of

telluric acid, 1911, A., ii, 151. Rosenheim, Otto, fluorescence and phosphorescence of diamonds and their influence on the photographic plate, 1903, A., ii, 123.

the methylation of gallotannic acid,

1905, P., 157.

detection of choline in physiological fluids, 1906, A., ii, 133.

preparation of cholesterol from brain, 1906, A., ii, 240.

colour reaction of formaldehyde with proteins and its relation to the Adamkiewicz reaction, 1906, A., ii,

the chemistry of Hehner's test for formaldehyde in milk, 1907, A., ii,

choline in cerebro-spinal fluid, 1907, A., ii, 637.

history of the optical activity of tannin, 1909, A., i, 599.

nomenclature of lipoids, 1909, A., i, 748. substances in placental pressor extracts, 1909, A., ii, 416.

pancreatic lipase. III. The separation of the lipase from its co-enzyme, 1910, A., ii, 517.

quadriurates, 1911, A., i, 403. Rosenheim, Otto, and S. Kajiura,

proteins of rice, 1908, A., ii, 317. Rosenheim, Otto, and John Alexander Shaw-Mackenzie, pancreatic lipase. I. The accelerating action of hæmolytic substances and their inhibition by cholesterol, 1910, A., ii, 517.

pancreatic lipase. II. The action of serum on pancreatic lipase, 1910,

A., ii, 517.

Rosenheim, Otto, and (Miss) M. Christine Tebb, the non-existence of protagon as a definite chemical compound, 1907, A., i, 995; 1909, A., i, 860. protagon, 1908, A., i, 488; 1909, A., i, 73.

Rosenheim, Otto, and (Miss) M. Christine Tebb, optical activity of "protagon"; a new physical phenomenon observed in connexion with the optical activity of so-called "protagon," 1908, A., ii, 879.

lipoids of the brain. I. Sphingo-

myelin, 1909, A., i, 282.

lipoids of the adrenal, 1909, A., ii, 416. the non-existence of "protagon" in the brain, 1910, A., i, 529.

lipoids of the brain. II. A new method for the preparation of the galactosides and of sphingomyelin, 1910, A., ii, 1085.

Rosenheim, Otto. See also S. Kajiura, Frank Spiller Locke, and Francis

Whittaker Tunnicliffe.

Rosenknopf, B. See Josef Tambor. Rosenkrantz, R. W., ash-free egg

albumin, 1906, A., i, 998.

Rosenkranz, W., Fehling's solution,
1911, A., ii, 663.

Rosenlew, Erik, preparation of the externally- and internally-compensated inactive forms of 2:5-dihydroxyadipie acid, 1904, A., i, 553.

preparation of adipic acid, 1906, A., i, 558.

Rosenmund, Karl W., diketodialkylpiperazines, 1910, A., i, 67. p-hydroxyphenylethylamine, 1910, A.,

i. 106.

a.p.hydroxyphenylethylamine and the synthesis of hordenine, an alkaloid in malt germs, 1910, A., i, 241.

hydroxy- and dihydroxy-phenylalkylammonium compounds and B-

nitrostyrenes, 1911, A., i, 34. preparation of phenyl-, alkyloxy-phenyl-, and dialkyloxyphenylethanolamines and their alkyl ethers, 1912, A., i, 448.

preparation of nitrostyrene and of arylnitroethanol derivatives, 1912,

A., i, 842.

Rosenmund, Karl W., and Franz Herrmann, adaline, 1912, A., i, 244.

Rosenmund, Karl W., Carl Mannich, and Willy Jacobsohn, preparation of p-hydroxyphenylisopropylamine, 1912, A., i, 443.

preparation of 3:4-dihydroxyphenylalkylamines, 1912, A., i, 967.

Rosenmund, Karl W. See also Otto Diels.

Rosenow, E. See Hermann Fühner. Rosenstein, Ludwig, the ionisation constant of phenolphthalein and the effect on it of neutral salts, 1912, A., ii, 893. Rosenstein, M. See H. Cantoni.

Rosenstiehl, [Daniel] Auguste, presence of lecithin in wine, 1904, A., ii.

hydrolysis of salts, 1907, A., ii, 610;

1908, A., ii, 164.

fermentation of malic acid in the production of wine, 1908, A., ii,

influence of the sterilisation temperature of grape juice and of the fermentation temperature on the "bouquet" of wine, 1908, A., ii,

intervention of osmotic pressure in

dyeing, 1909, A., ii, 796.

parallelism between the occurrence of cohesion and the conditions necessary for dyeing, 1911, A., ii, 99.

polymerised water and water of erystallisation, 1911, A., ii, 270.

rôle of affinity in dyeing, 1911, A., ii,

polymerised water and water of crystallisation; temperature and conditions of dehydration; water of crystallisation, 1911, A., ii, 386.

historical data relating to osmotic force; rectification of author's names,

1911, A., ii, 588.

Rosenthal, Felix, and Joseph Severin, the therapy of antimony poisoning by potassium hexatantalate, 1912, A., ii, 668.

Rosenthal, Felix. See also Julius Morgenroth.

Rosenthal, Isidor, decomposition of complex chemical compounds in a variable magnetic field, 1908, A., ii,

Rosenthal, Leo. See Daniel Vorländer. Rosenthal, Oskar. See Julius Morgenroth, and Wilhelm Prandtl.

Rosenthal, Theodor, chemistry of browncoal-tar, 1903, A., i, 396.

Rosenthaler, Leopold, ferric chloride as a reagent for tartaric, oxalic, and

citric acids, 1903, A., ii, 765. saponins of the seeds of Entada scan-

dens, 1904, A., ii, 72. spontaneous alteration of Fehling's

solution, 1904, A., ii, 95. volumetric estimation of sugar, 1904, A., ii, 520.

iron compounds of salicylic acid, 1905.

A., i, 47. pentose reactions of saponins, 1905, A., i, 539.

the vanillin-hydrochloric acid reaction, 1905, A., ii, 489.

the saponin of the white soapwort, 1906, A., i, 32.

Rosenthaler, Leopold, rise of temperature when chloroform and ethyl ether are mixed, 1906, A., i, 330.

alkaline aqueous mercuri-iodide as a reagent for hydroxyl groups, 1906, A., i, 921.

estimation of arsenic acid, 1906, A., ii, 801.

behaviour of Nessler's reagent towards some glucosides [saponin] and carbohydrates, 1906, A., ii, 911.

adsorbent action of lead sulphide, 1907, A., ii, 605.

amygdalin, 1908, A., i, 197.

hydrolysis of amygdalin by emulsin, 1908, A., i, 817; 1909, A., i, 74; 1910, A., i, 403; 1911, A., i, 99.

volumetric estimation of magnesium,

1908, A., ii, 67.

vanillin-hydrochloric acid as a test for albumin and tryptophan, 1908, A., ii, 76.

decolorising action of charcoal, 1908,

A., ii, 158.

barium arsenite and arsenate, 1908, A., ii, 322.

asymmetric syntheses by means of enzyme action, 1909, A., i, 74, 622; 1910, A., i, 603.

catalysing constituents of emulsin,

1909, A., i, 623.

detection of methylpentoses in presence of pentoses, 1909, A., ii, 353.

the protective action of proteins on enzymes, 1910, A., i, 600.

the separation of the racemic cyanohydrins by emulsin, 1910, A., i,

603.

δ-emulsin, 1910, A., i, 800.

detection of acetone, 1910, A., ii, 465.

specific stereochemical behaviour of catalysts, 1910, A., ii, 840; 1911, A., ii, 384.

the reducing properties of milk, liver, and yeast, 1910, A., ii, 1089.

volumetric estimation of hydrogen cyanide, especially in and with benzaldehydecyanohydrin, 1910, A., ii, 1119.

Halphen's reaction [for cottonseed oil], 1910, A., ii, 1123.

[solutions of benzaldehyde and hydrogen cyanide in water], 1911, A., i, 987.

estimations with mercuric nitrate, 1911, A., ii, 668.

pyro-analyses of drugs, 1911, A., ii, 948.

Rosenthaler, Leopold, distribution of amygdalin, 1912, A., i, 640. a colour reaction of alcohols and alco-

a colour reaction of alcohols and alcoholic hydroxyl groups, 1912, A., ii, 871.

Rosenthaler, Leopold, and P. Görner, aromatic nitro-derivatives, particularly nitrophenols, as precipitants for alkaloids, 1910, A., ii, 557.

Rosenthaler, Leopold, and Renatus Meyer, extracts containing glucosides,

1909, A., i, 172.

Rosenthaler, Leopold, and R. Reis, action of magnesium hydroxide on chloral hydrate, 1907, A., i, 1009.

Rosenthaler, Leopold, and Adolf Siebeck, organic iron salts, 1908, A., i,

246.

Rosenthaler, Leopold, and Knut T. Ström, saponin of the white soapwort.

II., 1912, A., i, 640.

Rosenthaler, Leopold, and Friedrich Türk, arsenical sulphuric acid as an alkaloidal reagent, 1904, A., ii, 457. absorbent properties of different

species of charcoal, 1907, A., fi, 12.
Roshdestwensky, Alexander, and
William Cudmore McCullagh Lewis,
the electrochemistry of solutions in
acetone. Part I., 1911, T., 2138;

P., 266.

the electrochemistry of solutions in acetone. Part II. The silver nitrate concentration cell, 1912, T., 2094; P., 239.

Rosický, Vojtěch, anthophyllite from Bohemia, 1904, A., ii, 419.

morphotropy of some synthetic compounds, 1909, A., i, 458.

[adamite from Thasos, Turkey; "barytocelestine," from Binnenthal, Switzerland], 1910, A., ii, 309.

Rosický, Vojtěch. See also Franz Plzák.

Rosin, Heinrich, improved Seliwanoff test, 1903, A., ii, 616.

reactions with resorcinol in urine, 1904, A., ii, 595.

Rosin, J., volumetric estimation of phosphoric acid, 1911, A., ii, 768.

Rosinger, Hugo, condensation products of glyoxal and isobutaldehyde, 1907, A., i, 824.

Roska, Johann. See Ernst Tezner.

Ross, Alexander David, and Robert Cochran Gray, magnetic properties of alloys of manganese, aluminium, and copper, 1909, A., ii, 359.

the magnetism of the copper-manganese-tin alloys under varying thermal

treatment, 1911, A., ii, 183.

Ross. Alexander David. See also James Gordon Gray.

Ross, E. L., and Philip Bouvier Hawk. the metabolic influence of ether anæsthesia, 1912, A., ii, 280.

Ross, E. L. See also Harry Sands

Grindley.

Ross, Hugh Campbell, the death of leucocytes; the vacuolation of leucocytes, 1908, A., ii, 868.

Ross, Kenneth, and Samuel Smiles, the dehydration of iso-\beta-naphthol sulphide,

1912, P., 275.

Ross, Kenneth. See also Cevil Reginald

Crymble.

Ross, Raymond, and John Petty Leather, composition and valuation of oils used for gas-making purposes, 1906, A., ii, 815.

new gas analysis apparatus, 1908, A.,

ii, 626.

Ross, William H., hydroxylamine and its salts, 1906, A., ii, 19.

chemical action of ultra-violet light,

1906, A., ii, 512.

Ross, William H. See also Raymond Calvier Benner, and Herbert Newby

Ross, W. J. Clunies, experiments with

sodium silicate, 1912, A., ii, 49.
Rossel, Arnold, biology of the metal thorium, 1911, A., ii, 1117.

Rossem, A. van. See Jacob Böeseken. Rossem, Cornelis van, the system: chloral-

water, 1908, A., i, 501.

influence of slow dissociation on the equilibrium between phases, 1908, A., ii, 361.

solubility in water of nearly insoluble salts, especially silver chloride,

1912, A., ii, 348.

solubility of silver chloride in water, 1912, A., ii, 643, 940.

weak and strong binary electrolytes,

1912, A., ii, 893.

deduction of the law of dilution, 1912,

A., ii, 1147.

Rossen Hoogendyk van Bleiswyk, G. L. C. M. van, the equilibrium diagram of alloys of potassium and sodium, 1912, A., ii, 348.

Rosset, Georges. See Adolphe Besson. Rosset, H., apparatus for the estimation

of fluorides in foods, 1909, A., ii, 933. Rossi, Carlo, electrolysis with alternating

current, 1905, A., ii, 137.

Rossi, Dominik. See Carl Adam Bischoff. Rossi, Emilio, new method for preparing oxides of nitrogen, and hence nitric acid, from compressed air by electric means, 1905, A., ii, 386.

Rossi, Ernst, the relationship between muscular rigor and protein coagulation; chemical stimulation of muscle. I., 1910, A., ii, 730.

the relationship between muscular rigor and protein coagulation; chemical stimulation of muscle. II. Rigor produced by salts, 1911, A., ii, 812.

Rossi, Felice. See Pietro Albertoni.

Rossi, Ferdinando, and Francesco Scurti, reduction of nitrates in musts and wines, 1907, A., ii, 125.

Rossi, Giacomo, Hartleb's method for the estimation of sulphates in drinking

water, 1903, A., ii, 178.

Rossi, Giuseppe (Bologna), compounds of cupric thiosulphate with various amines, 1912, A., i, 799.

Rossi, Giuseppe (Bologna). See also

Mario Raffo.

Rossi, Giuseppe (Imola), new compound of hexamethylenetetramine with orthoarsenic acid, 1912, A., i, 242.

catalytic action of light in the oxidation of phenolphthalin to phenolphthalein, 1912, A., ii, 107.

Rossi, Luciano, action of pyrocinehonic on the phenylenedianhydride amines, 1904, A., i, 1046.

action of ammonia on itaconic and pyrocinchonic anhydrides, 1906, A., i, 138.

action of ethyl acetylsuccinate and diacetylsuccinate on phenetidine, 1906, A., i, 982.

detection of indican in urine by means of alkali persulphates, 1906, A., ii, 910.

Rossi, Luciano. See also Arnaldo Piutti. Rossi, Ottorino, the reducing substance in cerebro-spinal fluid, 1903, A., ii, 673. Rossi, Paolo, radioactivity of Vesuvian

cotunnite, 1908, A., ii, 9. secondary radiation of X-rays, 1909,

A., ii, 850.

radioactive equilibrium in Vesuvian cotunnite, 1911, A., ii, 174.

transformation constant of radium-D, 1912, A., ii, 723.

Rossi, R., effect of pressure on the band spectra of the fluorides of the metals of the alkaline earths, 1909, A., ii, 775. effect of pressure on arc spectra: ti-

tanium, 1910, A., ii, 368.

relation between the atomic volumes and the spectra of elements, 1912, A., ii, 22.

Rossiter, Edmund Charles, the estimation of sulphides in alkali cyanide, 1911, A., ii, 654.

ii. 632.

Rosso, G. del. See Bernardo Oddo.

Rosso, V. See Filippo Perciabosco.

Rossolimo, A. I., the oxidising action of impure ether, 1905, A., i, 295.

Rost, Arnold. See Stanislaus von Kostanecki.

Rost, Eugen, and Friedrich Franz, comparative tests of the pharmacological action of sulphurous acid contained in organic compounds and that contained in normal sodium sulphite, 1904, A.,

Rost, Franz. See Kurt Moeckel. Rost, H. See Georges Darzens.

Rostoski, Otto, albumoses and peptone precipitins, 1903, A., ii, 315.

Rostoski, Otto. See also Emil Abderhalden.

Rostosky, Leopold. See Paul Jannasch. Rostworowski, S. Graf, and George Wiegner, absorption of phosphoric acid by zeolites (permutite), 1912, A., ii, 937.

Rotarski, Th., anti-albumid and the anti-group in the protein molecule, 1903, A., i, 667.

liquid crystals, 1903, A., i, 869; 1908,

A., i, 640; ii, 675.

reduction of nitro-compounds by alcohols in presence of alkali, 1905, A., i, 765.

azoxy-compounds, 1908, A., i, 374.
molecular mechanical theory of anisotropic liquids or so-called liquid
crystals, 1910, A., ii, 695.

Rotarski, Th. See also Friedrich Dreyer, and Léon Rotinjanz.

Roters, Paul. See Ferdinand Henrich.

Roth, A. W. See Hugo Henkel.
Roth, Emil, action of trimethylxanthine on Bacterium typhi and B. coli, 1904, A., ii, 432.

Roth, Ernst. See Karl Fries.

Roth, George B. See Charles Wallis Edmunds.

Roth, Heinrich. See Robert Pschorr, and Alfred Wohl.

Roth, Karl. See Carl Paal.

Roth, Max, the influence of nutrition, body-weight, and water diuresis on phloridzin diabetes, 1912, A., ii, 963.

R6th, Nikolaus. See Dionys Fuchs.
Roth, Paul. See Robert Behrend, and
Ludwig Knorr.

Roth, Rudolf. See Karl Andreas Hof-

Roth, Walter Adolf, electrical conductivity of potassium chloride in mixtures of water and ethyl alcohol, 1903, A., ii, 126.

Roth, Walter Adolf, depression of the freezing point by non-electrolytes in concentrated aqueous solutions, 1903, A., ii, 467.

hydrochloric acid as a standard titration liquid, 1904, A., ii, 513.

density and latent heat of fusion of ice, and the molecular depression of the freezing point in aqueous solutions, 1908, A., ii, 757.

rate of solution of gases in water, 1909, A., ii, 646.

calibration and manipulation of the calorimetric bomb, 1910, A., ii, 584. heat of combustion and heat of transformation of the cinnamic acids.

1912, A., ii, 235.
accurate cryoscopic determinations. I.
Nitrates of univalent metals, 1912,

A., ii, 532.

Roth, Walter Adolf. See also Kar Auwers.

Rothacker, Oscar. See Alfred Heid-uschka.

Rothacker, P. See Reinhold von Walther.

Rothberg, P. See Louis J. Curtman.
Rothberger, C. Julius, and Heinrich
Winterberg, poisonous symptoms
in dogs with Eck's fistula, 1905, A.,
ii, 408.

action of barium and calcium on the heart; extra systolic ventricular tachycardia experimentally produced by stimulation of the accelerator nerves, 1911, A., ii, 1117.

the increase of cardiac activity produced by calcium, 1911, A., ii, 1117. Rothe, Alfred. See Alfred Lottermoser.

Rothé, Edmond, polarisation of platinum, gold, and palladium electrodes, 1904, A., ii, 308.

a photographic method of studying the action of n-rays on phosphorescence, 1904, A., ii, 603.

influence of pressure on ionisation produced in gases by the X-rays; the saturation current, 1908, A., ii, 1007.

Rothe, J., quantitative estimation of metals in organic substances, 1908, A., ii, 132.

Rothe, Rudolf [Ernst]. See Friedrich Hoffmann.

Rothe, O. See Ludwig Knorr.

Rothe, Wilhelm, artificial digestion experiments with vegetable foods, 1907, A., ii, 368.

Rothe, Wilhelm, Hans Wangnick, and Albert Stutzer, comparative experiments on the natural and artificial digestion of proteins, 1906, A., ii, 691. Rothe, Wilhelm. See also Albert Stutzer. Rothenbach, Fritz, and Wilhelm Hoffmann, attempts to increase the oxidising action of vinegar bacteria by the addition of iron and manganese salts, 1907, A., ii, 805.

Rothenfusser, S., condensation of p-8-naphthylphenylenediamine, amine, and B-naphthylhydrazine with aldehydes and ketones, 1908,

A., i, 52.

detection of hydrogen peroxide, formaldehyde, and persulphates, 1909, A., ii, 91.

detection of sucrose in wine, pale ale,

etc., 1910, A., ii, 463.

detection of sucrose in wine, white beer, etc., 1911, A., ii, 665. new method for the estimation of

glycerol in wine, 1912, A., ii, 607. detection of sucrose in the presence of other sugars, especially its detection

in musts and wines, 1912, A., ii, 1003.

detection of sucrose, 1912, A., ii,

1216. Rothenfusser, S. See also Albert Hilger. Rother, Franz, cathodic pulverisation and absorption of hydrogen by iridium,

1912, A., ii, 1179. Rother, Julius. See Walter Schrauth. Rothera, Arthur Cecil H., the combination of nitrogen in proteins, 1904,

A., i, 1065.

relation of cystine to sulphur metabolism, 1905, A., ii, 267.

the sodium nitroprusside reaction for

acetone, 1909, A., ii, 99.

the alkaloid of pituri obtained from Duboisia hopwoodii, 1910, A., ii, 993.

Rothermundt, M., and J. Dale, the action of atoxyl in vitro on the animal body, 1912, A., ii, 668.

Rothgiesser, Franz. See Hermann Grossmann.

Rothlauf, Leo. See Alfred Einhorn.

Rothmann, A., the behaviour of creatine in autolysis, 1908, A., ii, 967.

Rothmann, A. See also Josef Igersheimer.

Rothmund, [Ludwig] Victor, action of acetone on alkali sulphites, 1906, A., i, 233.

critical opalescence, 1908, A., ii, 669. the reduction and estimation of perchlorates, 1909, A., ii, 434.

solubility influences. III., 1909, A., ii, 980.

solubility of ozone in dilute sulphuric acid, 1912, A., ii, 1164.

Rothmund, Victor, and A. Burgstaller, the accuracy of Volhard's method for the estimation of chlorine, 1909, A., ii, 932.

estimation of perchlorates by means of titanous salts, 1910, A., ii, 68.

Rothmund, Victor, and Karl Drucker, electrolytic dissociation of pieric acid, 1904, A., ii, 231.

Rothmund, Victor, and Otto Flaschner electrolytic reduction of hydroxylamine, 1908, A., ii, 583.

Rothschild, Julius. See Fritz Reizen-

Rothschild, Max. See Martin Freund. Rothstein, J. M., boiler deposits, 1905. A., ii, 389.

Rotinjanz, Léon, changes in the viscosity of liquid sulphur, 1908, A., ii, 463. Rotinjanz, Léon, and Th. Rotarski,

thermal investigation of an anisotropic liquid, 1907, A., ii, 226.

Rotinjanz, Léon. See also Nicolai N.

Nagornoff.

Rotschy, Arnold. See Amé Pictet. Rotta, W. See Edouard Vongerichten

Rotter, Godfrey. See Oswald Silberrad.

Rottgardt, Karl, the cathode fall in argon (air, nitrogen, hydrogen), and the periodic system of the elements, 1911, A., ii, 178.

Rottgardt, Karl. See also Georg Gehlhoff.

Rottsieper, Werner. See Walther Borsche.

Roubier. See F. Sarvonat.
Rouchy, Charles, influence of microbes on the composition of waters, 1908, A., ii, 541.

bacterial formation of sulphates in sewage purification, 1908, A., ii, 1063.

Roudsky, D. See Charles Louis Alphonse Laveran.

Roudstein, Salomon. See Amé Pictet. Rouillard and Goujon, desulphitation of wine by means of hexamethylenetetramine, 1910, A., ii, 239.

Rouiller, Charles August, reaction between carboxylic acids and benzenesulphonamide at high temperatures, 1912, A., i, 584.

Rouiller, Charles August. See also Harry Clary Jones, and Phoebus A. See also

Levene.

Rouquette, E., sterilisation of drinking waters by the action of ozonised oxygen and of chlorine compounds in the nascent state, 1912, A., ii, 374.

Roure-Bertrand Fils, linalool is a tertiary alcohol, 1907, A., i, 943.

Roure-Bertrand Fils, vegetation of odoriferous plants: successive conditions of vegetable substances, 1907, A., ii, 905.

ethereal oils, material for the investigation of, 1908, A., i, 558.

ethereal oil from Salvia sclarea, 1908, A., i, 903.

vegetation of odoriferous plants; successive conditions of plant constituents during the normal development of a perennial plant, 1908, A., ii, 417.

volatile oils, 1909, A., i, 944.

Roure-Bertrand Fils, Justin Dupont, and Louis Labaune, essential oils, 1910, A., i, 755; 1911, A., i, 895; 1912, A., i, 880.

Roure-Bertrand Fils, Justin Dupont, Louis Labaune, and J. Leroide, [essential oils], 1910, A., i, 184.

Rousseaux, E. See Charles Girard. Roussel, J. See Eugène Varenne.

Rousset, Henri, normal tubes for the polarimetric estimation of sucrose, 1908, A., ii, 73.

Routala, Oskar. See Carl Engler, Paul Jannasch, and Gustav Komppa.

Roux, Eugène, new base derived from galactose, 1903, A., i, 73.

new bases derived from pentoses, 1903, A., i, 463.

the mutarotation of sugars, 1904, A., i. 224.

new bases derived from sugars, 1904, A., i, 230, 291.

mannamine, a new base derived from mannose, 1904, A., i, 291.

condition of starch in stale bread, 1904, A., ii, 625.

reversion of amylocellulose into starch,

1905, A., i, 262. reversion of artificial starches, 1905, A., i, 328.

saccharification of artificial starches by malt, 1905, A., i, 624.

retrogradation and composition of natural starches other than potato starch, 1906, A., i, 235.

Roux, Eugène. See also Léon Maquenne. Roux, Jules, abnormal mobility of the ions of some rare earths, 1908, A., ii, 149.

Row, Raghavendra, effects of constituents of Ringer's fluid on skeletal muscles, 1903, A., ii, 498.

effect of Ringer's fluid on plain muscle, 1904, A., ii, 190.

Rowe, Allan Winter, velocity of reaction in electrolytic gas, 1907, A., ii, Rowe, Allan Winter. See also Theodore William Richards.

Rowe, Frederick Maurice. See Arthur George Green.

Rowell, Herbert W., direct estimation of antimony, 1907, A., ii, 133,

estimation of small quantities of bismuth, 1908, A., ii, 325.

Rowland, James Scott, and Llewellyn John Davies, estimation of phosphorus in iron ores, 1905, A., ii, 116.

Rowland, Sydney, See Allan Macfadven.

Rowland, William Samuel, electrolytic corrosion of copper-aluminium alloys, 1908, A., ii, 381.

Rowlands, John Sydney, renal calculi. 1908, A., ii, 770.

See Leonard Erskine Rowlands, R. A.

Rowntree, Leonard George. See Walter Jones.

Roy, Charles Smart. See Paul Rabe. and Oswald Silberrad.

See Carl Dietrich Harries. Roy, Louis. Roy, Paul. See André Kling.

Royds, Thomas, grating spectrum of radium emanation, 1909, A., ii, 206. comparison of the radium emanation spectra obtained by different ob-

servers, 1909, A., ii, 287. series systems in the spectra of zinc, cadmium and mercury, 1910, A., ii, 87.

Royds. Thomas. See also Ernest Rutherford.

Rozen, Z., the ancient lavas in the neighbourhood of Cracow, 1910, A., ii, 315.

Rozenband, (Mlle.) M. (now Mme. M. Rosenblatt). See Gabriel Bertrand. and M. Rosenblatt.

Rozenblat, Henryka, the action of sodium chloride and sodium hydrogen carbonate on the secretion of gastric juice, 1907, A., ii, 633.

Rozsa, Michael, the influence of affinity in solutions, 1911, A., ii, 1073.

Rozzi, A. See Alberto Chilesotti.

Rubegni, Stefano. See Italo Bellucci. Rubens, Heinrich, emissive power and temperature of Auer mantles containing different quantities of cerium, 1906, A., ii, 509.

Rubens, Heinrich, and Otto von Baeyer, an extremely long-waved radiation of mercury vapour, 1911, A., ii, 350.

Rubens, Heinrich, and Ernst Hagen, change of the emissive power of metals with the temperature in the shortwaved portion of the ultra-red, 1910, A., ii, 262.

Rubens, Heinrich, and Herbert Hollnagel, measurements in the longwaved spectrum, 1910, A., ii, 172.

Rubens, Heinrich, and Erich Ladenburg, reflective power of ethyl alcohol,

1909, A., ii, 105.

Rubens, Heinrich, and Robert Williams Wood, the isolation of long-waved heat rays by quartz lenses, 1911, A., ii, 92. Rubens, Heinrich. See also Ernst

Hagen.

Rubner, Max, heat of decomposition in alcoholic fermentation, 1904, A., ii,

energy-metabolism in certain bacteria; spontaneous heat-formation in cow's milk and the lactic acid fermentation, 1906, A., ii, 568.

bacterial growth and concentration of nutrition (nitrogen and sulphur metabolism), 1906, A., ii, 568.

estimation of [organic] nitrogen in water, 1907, A., ii, 820.

Rubner, Max, and Otto Heubner, natural nourishment of infants, 1905, A.,

ii, 403.

Rubow, V., lecithin in heart and kidneys in the normal condition, during starvation, and in fatty degeneration, 1905, A., ii, 336.

Rubricius, Hans, estimation of manganese in irons and steels by the persulphate method, 1905, A., ii, 766.

Ruckert, A., action of Oidium lactis and Vibrio choleræ on choline hydrochloride, 1909, A., ii, 82.

Ruckstuhl, Werner. See Richard Lorenz. Paul.

See

Walther

Rucktäschel.

Hempel. Rudakoff, Th., and A. Alexandroff, composition of the fusel oil obtained in the distillation of acorns, 1904, A.,

Rudenko, Y. P., combination of salts with hydrogen peroxide, 1912, A., ii,

Ruder, W. E., solubility of wrought tungsten and molybdenum, 1912, A., ii, 454.

Rudert, Gerhardt, change of the conductivity of solid cuprous iodide in the light, 1910, A., ii, 253.

Rudge, William Arthur Douglas, properties of radium in minute quantities, 1905, A., ii, 496.

action of radium and other salts on gelatin, 1906, A., ii, 412.

specific heat of gases at constant volume and high pressure, 1907, A., ii, 225.

Rudge, William Arthur Douglas, observations on the surface-tension of liquid sulphur, 1911, A., ii, 258. radioactivity and molecular structures,

1912, A., ii, 519.

action of sunlight and of radium compounds on glass, 1912, A., ii, 881.

Rudin, Ernst. See Fritz Fichter.

Rudnick, Paul, modified burette for standard alkali solutions, 1910, A., ii,

Rudno Rudzinski, Albin von, pentosans as constituents of foods, especially rye straw, 1904, A., ii, 284.

Rudó, Camilla, and Stephan Cserna, the influence of intraperitoneal infusion of blood on the gaseous metabolism, 1912, A., ii, 952.

Rudolf, Leo. See Eugen Bamberger.

Rudolfi, Ernst, formation of cafeium evanamide and of calcium carbide, 1907, A., i, 688.

silicides of copper, 1907, A., ii, 352. electrical conductivity of alloys and their temperature-coefficients, 1908, A., ii, 923.

dielectric constants of mixtures of solids, 1909, A., ii, 536.

the thermoelectricity of alloys. I., 1910, A., ii, 575.

Rudolfi, Ernst. See also Leopold Rügheimer.

Rudolph, Christian, preparation of salicylic acid from o-cresol, and a new method of preparing aurin, 1906, A., i, 361.

Rudolph, Max. See Alfred Stock.

Rudorf, [Carl Casimir] George, conductivity and internal friction of solutions, 1903, A., ii, 403.

comparative studies in the periodic system; the various gradation stages between elements, 1904, A., ii,

internal friction of solutions, 1904, A., ii, 607.

spectrum regularities and the atomic weight of radium, 1905, A., ii, 69.

the periodic system and the methodical classification of the elements, 1906, A., ii, 530.

the dissociation theory in its application to light absorption, 1907, A., ii, 937.

molecular and some other constants of the inactive gases, 1909, A., ii, 571.

some numerical constants of radium emanation and their relation to those of the inactive gases, 1909, A., ii, 954.

Rudorf, [Carl Casimir] George, the linear expansion of solid elements as a function of their absolute melting point, 1912, A., ii, 624.

Rudse, Friedrich. See Stanislaus von

Kostanecki.

Rudzik, K. See Willy Marckwald. Rück, Ulrich, and Hermann Steinmetz, preparation and properties of pure

thiceyanic acid, 1912, A., i, 954. Rücker, Adolf. See Alexander Naumann. Rücker, Conrad. See Hans Stobbe.

Rüdiger, Max. See Julius Wilhelm Brühl, and Johannes Thiele.

Ruediger, William Carl. See Shepherd Ivory Franz.

Rueger, Charles E., changes of colour caused by the action of certain rays on glass, 1905, A., ii, 709.

Rügfeimer, Leopold, 3-benzylisoquinoline, 1903, A., i, 775.

determination of the molecular weight of metallic chlorides, 1903, A., ii, 725.

molecular weight of bismuth phosphate, 1905, A., ii, 576.

action of primary amines on aldehydes, 1906, A., i, 418.

combining power of metallic atoms with atoms of the same kind, 1909, A., ii, 134.

Rügheimer, Leopold, and Ernst Albrecht. derivatives of 4-benzylisoquinoline, 1903, A., i, 439.

homologues of 4-benzyliso-

quinoline, 1903, A., i, 439. Rügheimer, Leopold, and Bruno Friling, 4-benzylisoquinoline, 1903, A., i, 438.

Rügheimer, Leopold, and Karl Ludwig Gonder, molecular weight of uranium tetrachloride in boiling bismuth chloride solution, 1909, A., ii, 148.

Rügheimer, Leopold, Siegfried Toeche Mittler, and Ernst Rudolfi, determination of molecular weight by use of solvents with high boiling points, 1905, A., ii, 571.

Rügheimer, Leopold, and G. Ritter, 3methoxy-4:5-methylenedioxybenzylamine, 1912, A., i, 447.

B. benzyliminopropyl methyl ketone; keto-enol isomerism, 1912, A., i, 474.

Rügheimer, Leopold, and Ernst Rudolfi, molecular weights of metallic chlorides, 1905, A., ii, 576.

Rügheimer, Leopold, and Ludwig Schaumann, derivatives of 4-benzylisoquinoline, 1903, A., i, 439.

Rügheimer, Leopold, and Paul Schön, benzylaminoacetal and analogues, 1908, A., i, 153.

Rügheimer, Leopold, and Paul Schön, synthesis of 6:7-dimethoxyisoquinoline, 1909, A., i, 605.

Ruehl, Ernst. See Emil Abderhalden. Rühl, Friedrich. See Paul Jannasch.

Rühle, J., detection of saponin, 1912, A., ii, 819.

Rümelin, Gustav, heat of dilution of concentrated solutions, 1907, A., ii,

rate of transformation of the radium emanation, 1907, A., ii, 836,

Rümpler, A., preparation of colourless albumins from dark coloured plant juices, 1903, A., i, 214. betasterol, 1903, A., i, 418.

Ruer, Rudolf, electrolytic solution of platinum by alternating currents, 1903, A., ii, 407, 528.

zirconium salts; constitution of normal zirconium sulphate, 1905, A., ii.

electrolytic solution of platinum, 1905, A., ii, 137, 795.

condition in which chlorine exists in colloidal solutions of metallic hydroxides, 1905, A., ii, 169.

metazirconic acid, 1905, A., ii, 256. zirconium oxychloride as a means of testing for zirconium, 1905, A., ii,

lead oxychlorides, 1906, 542.

modifications of lead oxide, 1906, A., ii, 755.

alloys of palladium and copper, 1907, A., ii, 32.

alloys of palladium and silver, 1907, A., ii, 99.

alloys of palladium and gold, 1907, A., ii, 100.

alloys of palladium and lead, 1907, A., ii, 275.

form of the freezing point curves in binary systems, 1907, A., ii, 433. passivity of platinum, 1908, A., ii, 601,

dissociation of a compound in a state of equilibrium and a thermodynamic relation necessary to the validity of the law of constant proportions,

1908, A., ii, 819. dissociation of a compound in a state of equilibrium, 1909, A., ii,

543.

the impassable line in systems of three components and its relation to the law of combining weights, 1909, A., ii, 985.

independent components and compounds, 1910, A., ii, 194.

Ruer, Rudolf, changes of volume and heat development occurring when the components of a compound which vaporises unchanged are transferred separately into the gas space, 1910, A., ii, 266.

Ruer, Rudolf, and Nikolaus Iljin, the stable system: iron-carbon, 1911, A.,

ii, 494.

Ruer, Rudolf, and Kiosuke Kaneko, the system: nickel-cobalt, 1912, A., ii, 1059.

Ruer, Rudolf, and Max Levin, zirconium.

sulphuric acids, 1905, A., ii, 827. Ruer, Rudolf, and Emil Schütz, the system: iron-nickel, 1910, A., ii, 959.

Ruer, Rudolf. See also Max Levin.

Rüst, Carl, standardisation of permanganate with an oxalate, 1903, A., ii, 107.

Rüst, Ernst, testing formaldehyde pas-

tilles, 1906, A., ii, 312.

Rütgers. See Firma Rud. Rütgers. Rütgerswerke-Aktiengesellschaft. Curt Geutsch, preparation of m-tolyl ortho-oxalate, 1911, A., i, 438.

Ruff, Otto, catalytic action of aluminium chloride in the reactions of sulphuryl chloride (dissociation catalysis), 1903, A., ii, 149.

preparation of sulphamide, 1903, A.,

ii, 723.

titanium nitride, 1909, A., ii, 406. electric vacuum furnace, 1910, A., ii,

permeability to light of mixtures of several light-absorbing substances [spectroscopic evidence for the formation of new compounds], 1911, A., ii, 237.

a new method for the analysis of some binary compounds, based on the law of mass action, 1911, A., ii, 264.

the so-called sulphammonium and the spectroscopic test for new compounds, 1911, A., ii, 484.

the equilibrium diagram of the ironcarbon alloys, 1911, A., ii, 897.

the system: iron-carbon, 1912, A., ii, 353, 917.

the preparation of ductile tungsten; melting point and other properties of pure tungsten, 1912, A., ii, 946.

the equilibrium diagrams of carbon with iron, nickel, cobalt, and manganese, 1912, A., ii, 1176.

Ruff, Otto, and Kurt Albert, the action of silicochloroform on some fluorides and the preparation and properties of silicofluoroform, 1905, A., ii, 161,

Ruff, Otto, Kurt Albert, and Emil Geisel. silicochloroform, 1905, A., ii, 518.

Ruff, Oto, and Ferd, Bornemann, the estimation of osmium: osmium oxides and chlorides, 1910, A., ii, 305.

Ruff, Otto, Hans Einbeck, Georg Fischer, and Kurt Thiel, the chlorides of sulphur; su!phur tetrachloride and its compounds, 1905, A., ii, 22.

Ruff, Otto, and Fritz Eisner, tungsten hexafluoride, 1905, A., ii. 255.

preparation and properties of the fluorides of sexavalent molybdenum, 1907, A., ii, 624.

titanium nitride and a new class of titanium compounds; the titaniumnitrogen haloids, 1908, A., ii, 700.

Ruff, Otto, Fritz Eisner, and Wilhelm Heller, fluorides of sexavalent tungsten, 1907, A., ii, 268.

Ruff, Otto, and Georg Fischer, chlorides of sulphur, especially the so-called sulphur dichloride, 1903, 204.

Ruff, Otto, and Emil Geisel, attempts to prepare nitrogen fluoride, 1903, A., ii, 724.

constitution of nitrogen sulphide, 1904,

A., ii, 396. so-called magnesium peroxide, 1904, A., ii, 817.

sulphammonium and its relation to nitrogen sulphide, 1905, A., 699.

the so-called metalammonium compounds, 1906, A, ii, 228.

silicoiodoform, 1908, A., i, 966. Ruff, Otto, and Hans Georges, lithium

imide, 1911, A., ii, 280.

Ruff, Otto, and Ewald Gersten, some sources of error in the gasometric estimation of nitrates and nitrites by Schloesing's or Piccini's methods, 1911, A., ii, 930.

triferro-carbide (cementite), Fe₃C, 1912,

A., ii, 260.

Ruff, Otto, and Otto Goecke, the solubility of carbon in iron, 1911, A., ii, 897.

Ruff, Otto, and Hugo Graf, the behaviour of sulphur towards water and the vapour pressure of sulphur from 78-210°, 1907, A., ii, 947.

vapour pressure of sulphur at low temperatures, 1908, A., ii, 578.

Ruff, Otto, Hugo Graf, and Wilhelm Heller, arsenic pentafluoride, 1906, A., ii, 160.

Ruff, Otto, Hugo Graf, Wilhelm Heller, and Max Knoch, preparation and chemical properties of antimony pentafluoride, 1907, A., ii, 98.

Ruff. Otto, and Leopold Hecht, sulphammonium and its relation to nitrogen sulphide, 1911, A., ii, 277.

Ruff, Otto, and Alfred Heinzelmann, uranium hexafluoride, 1911, A., ii,

Ruff, Otto, and Richard Ipsen, titanium

tetrafluoride, 1903, A., ii, 550. Ruff, Otto, and Willi Jeroch, iodometric estimation of sulphurous acid in alkaline solution, 1905, A., ii, 200.

Ruff. Otto, and Otto Johannsen, boiling points of the alkali metals, 1905, A., ii, 818.

preparation of metallic lithium, 1906,

A., ii, 282.

Ruff, Otto, Max Knoch, and Julian Zedner, fluorides and oxides of quinquevalent bismuth, 1908, A., ii, 298.

Ruff, Otto, and Herbert Lickfett, vanadium chlorides, 1911, A., ii, 291. vanadium bromides, 1911, A., ii, 988.

vanadium fluorides, 1911, A., ii, 989. Ruff, Otto, and Walter Martin, pure vanadium, 1912, A., ii, 166.

the solubility of carbon in nickel,

1912, A., ii, 354.

Ruff, Otto, and Wilhelm Plato, preparation of calcium, 1903, A., ii, 19, 211. regularities in the composition of the most fusible mixtures of pairs of inorganic salts, 1903, A., ii, 588.

electrolytic preparation of calcium, 1904, A., ii, 731.

Ruff, Otto, Wilhelm Plato, and Hugo Graf, preparation and properties of some new fluorine compounds, 1904, A., ii, 265.

Ruff, Otto, and Emil Schiller, tantalum and columbium pentafluorides, and the preparation of pure tantalic and columbic acids, 1912, A., ii, 168.

[separation of columbium and tantalum], 1912, A., ii, 208.

Ruff, Otto, and Kurt Stäuber, nitrosyl fluoride, 1906, A., ii, 20.

Ruff, Otto, Kurt Stäuber, and Hugo Graf, compounds of arsenic and antimony pentafluoride with nitrosyl fluoride, 1908, A., ii, 584.

Ruff, Otto, and Kurt Thiel, action of hydrogen fluoride on nitrogen sulphide, and a new method of formation of thionyl fluoride, 1905, A., ii, 160.

Ruff, Otto, and Oskar Treidel, new titanium compounds; titanium nitrides, 1912, A., ii, 561.

Ruff, Otto, and Georg Winterfeld, the bromides of sulphur, 1903, A., ii, 590.

Ruff, Otto, and Julian Zedner, solutions of the alkali metals in liquid ammonia, 1908, A., ii, 585.

behaviour of fluorine towards nitrogen, oxygen, and chlorine at the temperature of the electric arc and the induction discharge, 1909, A., ii,

Ruff, Otto, Julian Zedner, Max Knoch, and Hugo Graf, compounds of antimony pentachloride with antimony pentafluoride; a contribution to the theory of valency, 1909, A., ii, 1023.

Ruff, Otto, Julian Zedner, Emil Schiller, and Alfred Heinzelmann, some new

fluorides, 1909, A., ii, 244.

Ruffer, Marc Armand, and Milton Crendiropoulos, new method of producing hæmolysins, 1903, A., ii,

toxic properties of bile, 1904, A., ii.

357

Rufz, J. de. See H. Colin.

Ruggli, Paul, ring containing a triple linking, 1912, A., i, 914.

Ruggli, Paul. See also Johannes Thiele. Ruh, H. O. See John James Rickard Macleod.

Ruhemann, Siegfried, action of ammonia and organic bases on ethyl esters of olefinedicarboxylic and olefine- 8. ketocarboxylic acids, 1903, T., 374, 717; P., 50, 128.

condensation of phenols with esters of unsaturated acids. Part VIII ..

1903, T., 1130; P., 201.

the action of benzamidine on olefinic β-diketones, 1903, T., 1371; P.,

olefinic ketonic compounds, 1904, T., 1451; P., 206.

the combination of mercaptans with olefinic ketonic compounds, 1904, P., 251; 1905, T., 17, 461; P., 123.

the action of phenylpropiolyl chloride on ketonic compounds. Part II.,

1906, T., 682; P., 89.

the ethyl esters of acetonyloxalic and acetophenyloxalic acids and the action of ethyl oxalate on acetanilide and its homologues, 1906, T., 1236; P., 197.

tetrazoline. Part IV., 1906, T., 1268; P., 238.

xanthoxalanil and its analogues, 1906,

T., 1847; P., 284. glutaconic and aconitic acids, 1906,

P., 137. dithioxanthoxalanil; preliminary note, 1906, P., 324.

Ruhemann, Siegfried, tetrazoline; reply to R. Stollé, 1906, A., i, 465.

the action of ethyl oxalate on thioacetanilide and its homologues, 1907, T., 797; P., 115.

methyl dicarboxyaconitate, 1907, T., 1359; P., 195.

constitution of xanthoxalanil, 1907, A., i, 691.

the formation of 4-pyrone compounds from acetylenic acids. Parts I. and II., 1908, T., 431, 1281; P., 52, 177.

the action of mustard oils on the ethyl esters of malonic and cyanoacetic acids, 1908, T., 621; P., 53; 1909, T., 117; P., 14.

formation of cyclohexanone derivatives from olefinic compounds, 1909, T.,

109; P., 10.

the condensation of amides with esters of acetylenic acids, 1909, T., 984; P., 87; discussion, P., 87.

diketodiphenylpyrroline and its analogues, 1909, T., 1603; P., 220; 1910, T., 462; P., 59.

triphenyl-2-pyrone, 1910, T., 457;

P., 59. cyclic di- and tri-ketones, 1910, T.,

1438; P., 196.

triketohydrindene hydrate, 1910, T., 2025; P., 235.

triketohydrindene hydrate. Part III. Its relation to alloxan, 1911, T., 792; P., 97.

triketohydrindene hydrate. Part IV. Hydrindantin and its analogues,

1911, T., 1306; P., 163. triketohydrindene hydrate. Part V. The analogues of uramil and purpuric acid, 1911; T., 1486; P., 210.

triketomethylenedioxyhydrindene, 1912, T., 780; P., 95.

studies on cyclic ketones. Part I., 1912, T., 1729; P., 224.

Ruhemann, Siegfried, and Stanley Isaac Levy, studies on cyclic ketones. Part II., 1912, T., 2542; P., 316.

Ruhemann, Siegfried, and Richard William Merriman, the action of phenylpropiolyl chloride on ketonic compounds, 1905, T., 1383; P., 224.

Part III., 1905, T., tetrazoline. 1768; P., 258.

Ruhemann, Siegfried, and William Johnson Smith Naunton, diphenylcyclopentenone, 1911, P., 309; 1912, T., 42.

Ruhemann, Siegfried, and John Gillies Priestley, the action of ethyl carbamate on esters of organic acids and mustard oils, 1909, T., 449; P., 62.

Ruhemann, Siegfried, and Edwin Roy Watson, contributions to the knowledge of the \$\beta\$-diketones, 1904, T., 456; P., 48.

the action of organic bases on olefinic ketonic compounds, 1904, T., 1170;

P., 175.

Ruhland, Willy, formation of arabin by bacteria and their relation to the gum of the Amygdaleæ, 1907, A., ii, 43.

significance of the colloidal nature of aqueous dye-solutions for their penetration into living cells, 1909, A., ii. 257.

[the permeability of cells for dyes],

1910, A., ii, 53. Ruhoff, Otto E. See Louis Kahlenberg. Ruhstrat, Gebr., apparatus for the electrolytic production of oxygen and hydrogen, 1912, A., ii, 751.

Ruhtenberg, Hans. See Gustav Heller. Rule, Alexander, some new derivatives of dicyclopentadiene, 1906, T., 1339 ; P., 235.

the action of nitrous gases on dicyclo-

pentadiene, 1908, T., 1560; P., 175. the action of hydrogen sulphide on the alkyloxides of the metals. Part I. Sodium and potassium ethoxides, 1911, T., 558; P., 60.

Rule, Alexander. See also Alfred Theophilus de Mouilpied.

Rullmann, W., the reactions for the oxidising enzymes of cow's and human milk, 1904, A., ii, 304.

Schardinger's milk reaction, 1911, A., ii. 667.

Rulon, S. A., and Philip Bouvier Hawk, studies on water drinking. III. Uric acid elimination following copious water drinking between meals, 1911, A., ii, 135.

studies on water drinking. IV. The excretion of chlorides when large amounts of water are taken between meals, 1911, A., ii, 1012.

Wladimir. Rumine. Herman Decker.

Rumpf, Karl. See Julius von Braun.

Rumpf, Theodor, Max Dennstedt, and A. Gronover, quantity of fat contained in human blood and some organs, 1904, A., ii, 136.

Rumpf, Theodor. See also Max Dennstedt.

Runge, Carl [David Tolmé], relationship between spectra and atomic weights, 1904, A., ii, 2.

spectra of the alkali [metals], 1908,

A., ii, 78.

Runge, Carl [David Tolmé], radioactivity of air over the open sea, 1908, A., ii, 80; 1911, A., ii, 1050.

Runge, Carl, and Julius Precht, bunsen flame spectrum of radium, 1903,

A., ii, 346.

position of radium in the periodic system according to its spectrum, 1903, A., ii, 346.

spark spectrum of radium, 1903, A., ii, 621; 1904, A., ii, 461.

heat given out by radium, 1904, A., ii, 7. Runge, Otto. See Fritz Reitzenstein.

Runkel, Karl. See Richard Anschütz. Runne, Ernst, titration of alkaloidal salts, 1910, A., ii, 362.

Runne, Ernst. See also Hermann Emde. Runne, H. See Julius Tröger.

Ruoss, Hermann, estimation of tannic acid by ferric salts, 1903, A., ii, 189.

Ruot. See Pierre Mazé.

Rupe, Hans, carvone, 1906, A., i, 681. turmeric oil, 1908, A., i, 95.

influence of constitution on the rotatory power of optically active substances, 1909, A., ii, 950; 1910, A., ii, 470.

Rupe, Hans, and Hans Altenburg, B. cinenic acid, 1909, A., i, 7.

semicarbazide and cyclic nitrosochlorides, 1911, A., i, 72.

Rupe, Hans, and James Bürgin, hydrocarbons from cinnamyl chloride. CHPh:CH·CHoCl, 1910, A., i, 161. reduction of methyl pulegenate, 1910, A., i, 378.

turmeric oil. IV. Synthesis of a-ptolyl-a-methylbutyric acid, 1911,

A., i, 446.

Rupe, Hans, and Ernst Busolt, B-phenylcinnamic acid (BB-diphenylacrylic

acid), 1908, A., i, 23.

Rupe, Hans, Ernst Busolt, Karl Dorschky, Paul Häussler, Carl Liechten-han, Walther Lotz, and Friedrich Münter, influence of constitution on the rotatory power of optically active substances, 1909, A., i, 927.

Rupe, Hans, Karl Dorschky, and Wal-ther Lotz, carvone. III. The semicarbazones of carvone, 1906, A., i, 595.

Rupe, Hans, and Alfred Ebert, a hydrocarbon from isopulegone, 1908, A., i,

Rupe, Hans, and Fritz Emmerich, action of magnesium methyl haloids on carvone and dihydrocarvone, 1908, A., i, 433.

action of magnesium methyl iodide on carvenone and pulegone, 1908, A., i,

556.

Rupe, Hans, and F. Fiedler, action of semicarbazide on hydroxamic acids, 1912, A., i, 142.

Rupe, Hans, and Gunnar Frisell, cinnamylidenecamphor and its reduction

products, 1905, A., i, 220, 362. Rupe, Hans, and Ernst Hinterlach, action of semicarbazide on unsaturated compounds. II., 1908, A., i, 12.

Rupe, Hans, and W. Kerkovius, tetramethylcycloheptatriene, 1911, A., i, 847.

menthyl esters of a-phenyldihydrocinnamic [aB-diphenylpropionic]

acids, 1912, A., i, 458.

Rupe, Hans, and Sidonius Kessler, constitution and behaviour of semicarbazidesemicarbazones, 1910, A., i, 15.

effect of negative substituents on the formation of semicarbazones, 1910,

A., i, 93.

Rupe, Hans, and Hans P. Labhardt, hydroxyphenyltriazoles, 1903, A., i, 537.

Rupe, Hans, and Carl Liechtenhan, carvone. II. Action of magnesium methyl iodide on carvone, 1906, A., i, 374.

condensations with cinenic acid, 1908, A., i, 390.

Rupe, Hans, and Walther Lotz, Bodimethylsorbic acid. I., 1903, A., i, 229.

condensations with citronellal, 1903, A., i, 841.

cineolic acid. V. Cineolic anhydride

and bromine, 1907, A., i, 12. neolic acid. VI. Action of sulphurie cineolic acid. acid on cineolic acid, 1907, A., i, 13.

Walther Lotz, Mux Hans, Rupe. Silberberg, and Albert Zeltner. influence of the double linking between carbon atoms on the rotatory power of optically active substances, 1903, A., i, 565.

Rupe, Hans, Ernst Luksch, and Alfred Steinbach, turmeric oil, 1909, A., i,

Rupe, Hans, and Gustav Metz, synthesis of hydroxyphenyltriazoles and [its bearing on] spatial hindrance, 1903, A., i, 535.

Rupe, Hans, and Friedrich Münter, influence of constitution on the rotatory power of optically active substances. III. Menthyl esters of terephthalic acid, & naphthoic acid, and certain of their reduction products, 1910, A., i, 398.

Rupe, Hans, and E. Oestreicher, reduction of semicarbazones and the preparation of some hydroxytriazoles, 1912, A., i, 220.

Hans, Samuel Pfeiffer, and Immanuel Splittgerber, condensations with citronellal. II., 1907, A., i, 711.

Rupe, Hans, and Alexander E. Porai-Koschitz, chromophore groupings. I. Methineammonium dyes, 1904, A., i, 107.

methineammonium compounds, 1906,

A., i, 754.

Rupe, Hans, and Heinrich Proske. hydrocarbons from ω -bromostyrene and preparation of \gamma-phenylbutyric acid, 1910, A., i, 367.

Rupe, Hans, Max Ronus, and Walther Lotz. preparation of unsaturated aliphatic acids with a double linking in the $\alpha\beta$ -position, 1903, A., i, 139.

Rupe, Hans, and Paul Schlochoff, action of semicarbazide on unsaturated

ketones, 1904, A., i, 144.

cineolic acid. IV. Synthesis and constitution of cinenic acid, 1905, A., i. 409.

methylheptenone oxides, 1905, A., i,

carvone, 1905, A., i, 449.

Rupe, Hans, Heinz Schobel, and Erwin Abegg, constitution of 3-methylpulegene (3-methylmenthadiene), A., i, 573.

Rupe, Hans, and Georg L. M. Schwarz, chromopherous groups. II. Methineammonium dyes, 1905, A., i, 83.

Rupe, Hans, and Oskar Siebel, methineammonium dyes, III., 1906, A., i, 858.

Rupe, Hans, and Felix Speiser, cinnamylidenelævulic acid and reduction products, 1905, A., i, 351.

Rupe, Hans, and Immanuel Splittgerber, aminocampholic acids, 1907, A., i, 1016.

Rupe, Hans, and Alfred Steinbach, turmeric oil. II. Oxidation products of curcumone, 1911, A., i, 69. turmeric oil. III. Synthesis of \gamma-ptolylvaleric acid, 1911, A., i, 293.

Rupe, Hans, Karl Georg Thiess, and Alexander Wetter, benzoylenebenz-

iminazole, 1910, A., i, 71.
Rupe, Hans, and Ludwig Veit, condensation products of gallacetophenone.

1906, A., i, 435.

Rupe, Hans. See also Sidonius Kessler. Rupert, Frank F., system: hydrogen chloride and water, 1909, A., ii, 725.

Rupert, Frank F., solid hydrates of ammonia, 1909, A., ii, 726; 1910, A., ii, 605.

Rupert, Frank F. See also Gilbert Newton Lewis.

Rupp, Erwin, iodometry of sulphurous acid, 1903. A., ii, 40.

iodometry of the peroxides of calcium, strontium, barium, magnesium, and

sodium, 1903, A., ii, 42.

chlorine evolution apparatus and an apparatus for the electrolysis of hydrochloric acid for lecture purposes, 1903, A., ii, 69.

iodometry of ferrous salts, 1903, A.,

ii, 244.

iodometry of hydrazine, 1903, A., ii, 329.

iodometry of phosphorus, 1903, A., ii, 692.

iodometric estimation of zinc with potassium ferrocyanide, 1903, A., ii. 695.

iodometric estimation of mercuric eyanide, 1903, A., ii, 696.

iodometric estimation of chloral hydrate, 1903, A., ii, 699.

titration of metals with iodic acid. 1903, A., ii, 755.

volumetric estimation of mercurous salts and of mercurous and mercuric salts together, 1903, A., ii, 759.

titration of hydrargyrum praecipitatum

alb, 1903, A., ii, 759.

volumetric estimation of magnesium. 1904, A., ii, 88. titration of minute quantities [especi-

ally of gold], 1904, A., ii, 150. a new burner for spectra; apparatus for collecting gases for lecture ex-

periment purposes, 1904, A., ii, 153. iodometry of the precipitated per-oxides of lead, bismuth, and manganese, 1904, A., ii, 211.

volumetric and gravimetric estimation of platinum, 1904, A., ii, 296.

formic acid and its volumetric estimation, 1905, A., ii, 291.

iodic acid as an oxidising reagent, 1905, A., ii, 417.

iodometric estimation of sulphurous acid, 1905, A., ii, 479.

titrimetric method of estimating mercury, 1905, A., ii, 484.

estimation of phosphorns in phosphorised oil, 1905, A., ii, 763.

evaluation of officinal mercuric cyanide, 1905, A., ii, 867.

titrimetric estimation and separation of cyanides, thiocyanates, and chlorides, 1905, A., ii, 867.

Rupp, Erwin, mercuric oxycyanide, 1906, A., i, 340.

modification of Beckmann's boilingpoint apparatus, 1906, A., ii, 147. volumetric estimation of lead as iodate.

1906, A., ii, 198.

two new forms of apparatus in organic analysis, 1906, A., ii, 802.

volumetric estimation of mercury, 1906, A., ii, 902; 1907, A., ii, 720.

titration with permanganate in alkaline solution; [estimation of formic and nitrous acids], 1906, A., ii, 907. standardisation of acids and alkalis,

1907, A., ii, 194.

acidimetric estimation of both mercury components in mercury oxycvanide, 1908, A., ii, 634.

preparation of carbon monoxide, 1908.

A., ii, 943.

estimation of [organic] sulphur by Carius' method, 1908, A., ii, 982.

volumetric estimation of mercury by means of the thiocyanate, iodometric, and acidimetric processes, 1908, A., ii, 1073.

a simple apparatus for the cryoscopy of urine, 1909, A., ii, 167.

estimation of zinc with ferrocyanide,

1909, A., ii, 184.

new volumetric methods for titrating zinc or lead, 1910, A., ii, 243.

a practical gas generating arrangement in connexion with the nitrometer, 1910, A., ii, 344.

titration of mercuric chloride and "sublimate pastilles," 1910, A., ii,

phenolphthalein derivatives and their behaviour as indicators, 1911, A., i, 301.

detection of fluorine, 1912, A., ii, 88. simple apparatus for estimating carbon dioxide, 1912, A., ii, 297.

Rupp, Erwin, and Albert Finck, iodometry of phosphorous acid and phosphorus trihaloids, 1903, A., ii,

iodometry of hypophosphites and hypophosphates, 1903, A., ii, 330.

Rupp, Erwin, and Samuel Goy, mercuric oxycyanide, 1908, A., i, 770; 1909, A., i, 295; 1912, A., i, 613.

preparation of mercuric cyanide, 1908,

A., i, 863.

Rupp, Erwin, and Max Horn, volumetric estimation of iodides in the presence of chlorine and bromine ions, 1906, A., ii, 895.

titration of ferrous salts with alkali hypoiodite, 1907, A., ii, 132.

Rupp, Erwin, and Walter Klee, preparation of mercuric chloride from mercuric sulphate and sodium chloride by the wet process, 1910, A., ii, 615.

Rupp, Erwin, and Julius Kost, estimation of iodine in pharmaceutical preparations such as ointments, etc.,

1907, A., ii, 298.

Rupp, Erwin, and Ludwig Krauss, iodometric estimation of copper as cuprous xanthate, 1903, A., ii, 106.

Rupp, Erwin, and Kroll, estimation of hypophosphites, 1911, A., ii, 1133.

Rupp, Erwin, and K. Kropat, estimation of total mercury in officinal mercury salicylate, 1912, A., ii, 998.

Rupp, Erwin, and Franz Lehmann, acidimetric assay of white precipitate, 1908, A., ii, 70.

complete analysis of mercury cyanides, 1908, A., ii, 70.

simple preparation of mercuric oxycyanide solution from its components, 1909, A., i, 92.

titration of diabetic sugar, 1909, A., ii. 442.

volumetric estimation of sugars by K. Lehmann's process, 1910, A., ii,

volumetric separation of mercury and silver, 1910, A., ii, 350.

estimation of nitrites, 1911, A., ii,

qualitative analytical treatment of with boric acid, 1911, silicates A., ii, 658.

estimation of arsenic, 1912, A., ii, 866.

Rupp, Erwin, and Richard Loose, an indicator highly sensitive towards alkali and suitable for titrations with centinormal solutions, 1909, A., ii, 90.

Rupp, Erwin, and Johannes Mielck, estimation of peroxidised compounds by means of alkali hypoiodite, 1907, A.,

ii, 391.

Rupp, Erwin, and Philipp Nöll, estimation of mercury in organic mercury compounds, 1905, A., ii, 285.

Rupp, Erwin, and Fritz Pfenning, acidimetric estimation of alkali iodides, 1909, A., ii, 434.

direct titrations of cobalt and nickel, 1910, A., ii, 458.

Rupp, Erwin, and Emil Rössler, volumetric estimation of ammonium salts with sodium hypobromite, 1905, A., ii, 418.

Rupp, Erwin, and Georg Schaumann, iodometric estimation of bismuth as chromate, 1903, A., ii, 110.

Rupp, Erwin, and Wilhelm Friederich Schirmer, volumetric estimation of mercuric oxide, 1908, A., ii, 1073.

Rupp, Erwin, and Karl Seegers, indicators in the titration of cinchona bases,

1908, A., ii, 239.

Rupp, Erwin, and Max Zimmer, iodometry of thallium as chromate, 1903, A., ii. 183.

Rupp, G., composition of the mineral water of Bad Dürkheim, 1912, A., ii, 268.

Ruppenthal, Karl. See Ferdinand Henrich.

Ruppenthal, Richard. See Max Busch. Ruppert, Eduard. See Alfred Einhorn.

Ruppin, Ernst, estimation of dissolved gases in sea-water, 1904, A., ii, 214. electrical conductivity of sea-water.

1906. A., ii, 492.

estimation of sulphuric acid as barium sulphate, 1909, A., ii, 180, 435.

the alkalinity of sea-water, 1910, A., ii. 405, 452.

precipitation of sulphate ions as barium sulphate, 1910, A., ii, 1108.

ratio of the Cl-, SO3-, and o0-values of a series of sea-water samples examined in the hydrographical laboratories of Helsingfors, Kiel, Christiania, Monaco, and Nancy, 1911, A., ii, 123.

hydrographical-chemical methods.

1912, A., ii, 599.

Rusche, Franz. See Robert Behrend. Rusche, Wilhelm, can horseflesh be detected by glycogen estimation? 1907, A., ii, 320.

Ruschhaupt, Walter, diuresis; opposite influence of two salts, 1903,

A., ii, 33.

diuresis; the influence of diuretics on the excretion of sodium chloride, 1903, A., ii, 33.

diuresis; the effect of certain operative procedures on sodium chloride diuresis, 1903, A., ii, 33.

Ruschhaupt, Walter. See also Wilhelm Filehne, and Emil Knoevenagel.

Rusconi, Arnaldo, detection of ethyl alcohol in ohloroform, 1909, A., ii,

hemolysis as a means of detecting saponin in beer, aerated waters, and wine, 1910, A., ii, 559.

Rusnov, Peter voil. See Rudolf Wegscheider.

Russ, Donald E. See Miles Standish

Russ, Franz, aluminium hydroxide. I., 1904, A., ii, 736.

Russ, Franz, action of the silent electric discharge on chlorine, 1905, A., ii,

decomposition of formaldehyde by the silent discharge, 1906, A., i, 627.

influence of the material of the vessel and of light on the formation of ozone by the silent discharge, 1906. A., ii, 606.

Russ, Franz, and B. Larsen, estimation of formaldehyde, 1906, A., ii, 816.

Russ, Franz. See also Viktor Ehrlich. August Grau, and Alfred Mandl.

Russ, Karl. See Wilhelm Wislicenus. Russ, Rudolf, reaction acceleration and retardation in electrical reductions and oxidations, 1903, A., ii, 631.

Russ, Rudolf. See also Fritz Haber. Russ, Sidney, distribution in electric

fields of the active deposits of radium, thorium, and actinium, 1908, A., ii, 552.

electrical charge of the active deposit of actinium, 1908, A., ii, 556.

diffusion of actinium and thorium emanations, 1909, A., ii, 366, 781. radioactive recoil, 1910, A., ii, 475.

Russ, Sidney, and Walter Makower. expulsion of radioactive matter in the radium transformations, 1909, A., ii, 455, 780.

the deflexion by an electrostatic field of radium-B on recoil from radium-

A, 1910, A., ii, 1022.

Russ, Sidney. See also Helen Chambers. Hector A. Colwell, Walter Makower, and B. H. Wedd.

Russe, Frederick William, See Henry Barker Hill, and Charles Loring

Jackson.

Russell, Alfred Ernest, a case of sulphhæmoglobinæmia [thiohæmoglobinæmia], 1907, A., ii, 640.

Russell, Alfred Ernest. See also Leonard Stanley Dudgeon.

Russell, Alexander Smith, specific heat measurements at low temperatures. 1912, A., ii, 232.

effect of temperature on radioactive disintegration, 1912, A., ii, 416. the volatility of radium-C, 1912, A.,

ii. 723.

Russell, Alexander Smith, and Frederick Soddy, the y-rays of thorium and actinium, 1911, A., ii, 88.

Russell, Alexander Smith. See also Robert Alexander Houstonn, Willy Marckwald, and Frederick Soddy.

Russell, Bert, and William John Gies. composition of nasal mucous membrane, 1906, A., ii, 184.

Yandell Russell. Donald G. See Henderson.

Russell, Edward John, the reaction between phosphorus and oxygen. Part I., 1903, T., 1263; P., 207.

the ammonia in soils, 1910, A., ii,

1104.

Russell, William Fraser, amido-oximes and thioamides, 1910, T., 953; P.,

Russell, William Fraser. See also Paul Rabe.

Russenberger, J. H., absorption of liquids by porous substances, 1910, A., ii, 189.

extension of the laws of capillarity to cases where the elements of the capillary system are mobile with respect to one another; extension leading to a new view of the phenomena of swelling of dried wood, of the dissolution of gums, albumins, etc., and of true solutions, 1911, A., ii, 794.

Russi, Giacomo. See Luigi Mascarelli. Russo, Carmelo, iodometric estimation of small quantities of arsenious oxide, 1904, A., ii, 444.

velocity of anodic solution of nickel in normal sulphuric acid, 1911, A.,

ii, 181.

comparison between the velocity of solution and the anodic polarisation of nickel in normal sulphuric acid, 1911, A., ii, 181.

anodic behaviour of nickel in presence of chromous salts, 1911, A., ii, 1056. Russo, Michele. See Otto von Fürth.

Rusting, Nicolaas, detection of sugar in urine, 1907, A., ii, 912.

Arthur G. Ruston. See Charles Crowther.

Rusznyak, Stephan, the individual differences of the red blood-corpuscles on hæmolysis, 1911, A., ii, 1108.

Rutherford, Ernest, excited radioactivity and the method of its transmission, 1903, A., ii, 255.

magnetic and electric deviation of the easily absorbed rays from radium, 1903, A., ii, 256.

radioactivity of uranium, 1903, A., ii, 347.

radioactivity, 1903, A., ii, 348.

slow transformation products of radium, 1904, A., ii, 799; 1905, A., ii, 664.

present problems of radioactivity,

1905, A., ii, 218.

properties of radium in minute quantities, 1905, A., ii, 367.

Rutherford, Ernest, some properties of the a-rays from radium, 1905, A., ii, 495; 1906, A., ii, 139.

charge carried by the a- and B-rays of

radium, 1905, A., ii, 621.

retardation of the a-particle from radium in passing through matter, 1906, A., ii, 642.

mass and velocity of the a-particles expelled from radium and actinium,

1906, A., ii, 719.

velocity and energy of the a-particles from radioactive substances, 1907, A., ii, 63.

production and origin of radium, 1908,

A., ii, 6.

experiments with radium emanation; volume of the emanation, 1908, A., ii, 791.

some properties of the radium emanation, 1909, A., ii, 202.

condensation of the radium emanation, 1909, A., ii, 456.

the action of the a-rays on glass, 1910, A., ii, 175.

theory of the luminosity produced in certain substances by a-rays, 1910, A., ii, 565.

the scattering of a- and β -particles by matter and the structure of the

atom, 1911, A., ii, 453.

the origin of \(\beta\)- and \(\gamma\)-rays from radioactive substances, 1912, A., ii, 1024.

Rutherford, Ernest, and Samuel J. Allen, excited radioactivity and ionisation of the atmosphere, 1903, A., ii, 123.

Rutherford, Ernest, and Howard Turner Barnes, heating effect of the radium

emanation, 1904, A., ii, 223. Rutherford, Ernest, and Bertram Borden Boltwood, relative proportion of radium and uranium in radioactive minerals, 1905, A., ii, 568; 1906, A., ii, 593.

production of helium by radium, 1910,

A., ii, 175.

Rutherford, Ernest, and James Chadwick, a balance method for comparison of quantities of radium and some of its applications, 1912, A., ii, 520.

Rutherford, Ernest, and Hans Geiger, method of counting the number of a-particles from radioactive matter, 1908, A., ii, 555.

charge and nature of the a-particle,

1908, A., ii, 794.

transformation and nomenclature of the radioactive emanations, 1911 A., ii, 955.

Rutherford, Ernest, Hans Geiger, and H. Bateman, the probability variations in the distribution of α-particles, 1910, A., ii, 917.

Rutherford, Ernest, and Otto Hahn, mass of the a-particles from thorium, 1906,

A., ii, 719.

Rutherford, Ernest, and Thomas Royds, spectrum of radium emanation, 1908, A., ii, 787.

action of the radium emanation on

water, 1902, A., ii, 1006.

nature of the α-particle, 1909, A., ii,

203

Rutherford, Ernest, and Frederick Soddy, comparative study of the radioactivity of radium and thorium, 1903, A., ii, 347.

condensation of the radioactive eman-

ations, 1903, A., ii, 462.

radioactive change, 1903, A., ii, 463.
Rutherford, Ernest, and Y. Tuomikoski,
differences in the decay of the radium
emanation, 1909, A., ii, 456.

Rutherford, Ernest. See also Bertram Borden Boltwood, and Hans Geiger.

Rutherford, Thomas A., and Philip Bouvier Hawk, chemical composition of hair, 1908, A., ii, 53.

Ruthing, Alexander. See Wilhelm

Wislicenus.

Ruths, Heinrich. See Paul Wagner. Ruthewitsch, K., the action of calcium and strontium salts on the heart and blood-vascular system, 1909, A., ii, 909,

Rutten, Jan, apparatus for regulating the pressure when distilling under reduced pressure, 1904, A., ii, 384.

Rutten, Jan. See also Willem Paul-

inus Jorissen.

Rutter, Thomas Francis, electrolytic preparation and properties of vanadous and vanadic salts, 1906, A., ii, 366.

vanadium compounds, 1907, A., ii, 273.

Rutter, Thomas Francis, See also

Robert Luther.

Ruys, J. D., titrimetric estimation of sulphur, 1912, A., ii, 1209.

Ruys, J. D. See also D. P. Ross van

Lennen

Ruyter de Wildt, Johannes Catharinus de, Pisia's thionaphthamic acid and the products of the action of aminosulphonic acid on a-naphthylamine; preparation of a-aminonaphthalene-2-sulphonic acid, 1904, A., i, 572.

Ruyter de Wildt, Johannes Catharinus de. See also Bouwe Sjollema.

Ruzicka, Grete. See Josef Herzig. Ružička, Leopold. See Hermann Staudinger. Ružička, Stanislaw, mixed crystals or solid solutions, 1910, A., ii, 399.

Růžička, Vladislav, differences in staining reaction of living and dead protoplasm, 1905, A., ii, 405.

Ryan, A. H. See Charles Claude

Guthrie.

Ryan, Hugh, and Thomas Dillon, Montana (montan) and montanin waxes, 1909, A., i, 629.

Ryan, Hugh, and George Ebrill, synthesis of glucosides; derivatives of arab-

inose, 1904, A., i, 223.

action of emulsin on \(\beta\)-glucosides, 1906, A., i, 918.

synthesis of glucosides; derivatives of

xylose, 1908, A., i, 716.

Ryan, Hugh, and Thomas Joseph Nolan, higher ketones and secondary alcohols derived from the amides of palmitic and stearic acids, 1912, A., ii, 749.

Ryan, J. G., enzyme concentration in

saliva, 1909, A., ii, 496.

Ryan, J. G. See also Anton Julius Carlson.

Ryan, Leon A., and John Marshall, influence of oxygen and nitrogen, sunlight and darkness on the iodine and saponification numbers of olive oil, 1907, A., ii, 722.

Ryan, Leon A., and Edward B. Meigs, the ash of smooth muscle, 1912, A., ii, 274.

Ryan, Leon A. See also John Marshall, and Edward B. Meigs.

Rybár, Stephan, resolution of the spectral lines of lanthanum and cobalt in the magnetic field, 1911, A., ii, 1042.

Ryder, Charles Tripp. See Lawrence

Joseph Henderson.

Ryffel, John Henry, estimation of β-hydroxybutyric acid in urine, 1905, A., ii, 559.

estimation of lactic acid in urine, 1909, A., ii, 707.

lactic acid formation in man, 1910, A., ii, 325.

the amount of iron in the organs in cases of pernicious anæmia, 1910, A., ii, 328.

lactic acid in diabetes, 1910, A., ii, 733.

Ryffel, John Henry. See also Herbert Stanley French, Patrick Playfair Laidlaw, and Ernest William Ainley Walker.

Rykovkoff, A. See Sergius F. Schemt-

schuschny.

Ryn, Willem van, detection and estimation of morphine in organs, 1907, A., ii, 995.

action of finely-divided metals on water, 1908, A., ii, 190. Ryn, Willem van, detection of arsenic in sodium fluoride by means of the Gutzeit and Flückiger reaction and the Marsh apparatus, 1908, A., ii, 224.

effect of glass and traces of organic substances on mercuric chloride solution, 1908, A., ii, 591.

the Kieldahl nitrogen process, 1911, A., ii, 226.

Ryn, Willem van. See also Antoine Paul Nicolas Franchimont.

Ryschenko, P., action of magnesium and allyl bromide on menthone, 1910, A., i, 181.

Ryss, A., and A. Bogomolny, electrolytic deposition of iron from aqueous solutions of its chloride and sulphate, 1906, A., ii, 856.

Rywosch, D., resistance of mammalian red corpuscles towards hæmolytic

agents, 1907, A., ii, 104.

Rywosch, D., and Marie Rywosch, catalysis of hydrogen peroxide by bacteria, 1907, A., ii, 804.

Rywosch, Marie. See D. Rywosch. Rywosch, S., increased rate of diffusion of dextrose, 1911, A., ii, 818.

Rzentkowski, Casimir von, fate of salt solutions in the human stomach, 1904, A., ii, 748.

composition of blood and exudations in disease, 1905, A., ii, 337.

basicity of human blood in health and disease, 1906, A., ii, 686.

S.

Saager, Adolf. See Friedrich Kehrmann, and Julius Schmidt.

Saal, Otto. See Alexander Tschirch. Sabanéeff, Alexander Pavlovitsch, litera-

rute of the colloids, 1906, A., ii, 841.

Sabanéeff, Alexander Pavlovitsch, and
Evgenij Vladimirovitsch Rakowsky,
cyclic isonitriles and their derivatives,
1903. A., i. 814

1903, A., i, 814.

Sabanéeff, Th., characteristics of ethyl lutidonedicarboxylate, 1909, A., i, 832.

Sabaschnikoff, Alexis. See Felix Löhnis.
Sabat, Bronislas, action of radium bromide on the electrical resistance of metals, 1905, A., ii, 219.

influence of radium radiations on the conductivity of electrolytes, 1906, A., ii, 643.

Sabatier, Paul, direct hydrogenation of allyl compounds, 1907, A., i, 458. reduction and oxidation by catalysis, 1911, A., i, 702.

Sabatier, Paul, method for making two substances react in the electric arc, 1911, A., ii, 91.

Sabatier, Paul, and Alphonse Mailhe, cyclohexane and its chloro-deriva-

tives, 1903, A., i, 686.

action of reduced nickel on the halogen compounds of the fatty series in the presence of hydrogen, 1904, A., i, 277.

direct reduction of aromatic halogen derivatives by nickel and hydrogen, 1904, A., i, 303.

synthesis of a new series of tertiary alcohols from cyclohexanol, 1904, A., i, 666.

synthesis of alcohols of the cyclohexane series, 1904, A., i, 809.

the three methylcyclohexanones and the corresponding methylcyclohexanols, 1905, A., i, 275.

monochloro-derivatives of methylcyclohexane, 1905, A., i, 334.

synthesis of three tertiary dimethylcyclohexanols and the derived hydrocarbons, 1905, A., i, 587. catalytic decomposition of alkyl hal-

catalytic decomposition of alkyl haloids by means of anhydrous metallic chlorides, 1905, A., i, 677.

secondary reaction of magnesium alkyl haloids, 1905, A., i, 706.

synthesis of three secondary dimethylcyclohexanols, 1906, A., i, 253.

synthesis of tertiary alcohols derived from 1-methyl-4-cyclohexanone, 1906, A., i, 254.

use of metallic oxides as catalytic oxidising agents, 1906, A., i, 549. direct hydrogenation of carbimides,

1907, A., i, 488.

direct hydrogenation of aliphatic isocyanides [carbylamines], 1907, A., i, 490.

application to pyridine of the direct method of hydrogenation by means of nickel, 1907, A., i, 549.

direct hydrogenation of aliphatic diketones, 1907, A., i, 587.

direct hydrogenation of the anhydrides of aliphatic acids, 1907, A., i, 747.

direct hydrogenation of aromatic diketones, 1908, A., i, 36.

direct hydrogenation of aromatic quinones, 1908, A., i, 278.

hydrogenation of polyphenols, 1908, A., i, 529.

action of metallic oxides on primary alcohols, 1908, A., i, 594; 1910, A., i, 606.

action of metallic oxides on the primary alcohols (case of the reducible oxides), 1908, A., i, 594.

Sahatier, Paul, action of metallic oxides on the primary alcohols (irreducible

oxides), 1908, A., i, 713.

further applications of the general method of hydrogenation based on the use of finely-divided metals, 1909, A., i, 131.

new general method for preparation of aliphatic amines, 1909, A., i, 292. action of metallic oxides on methyl

alcohol, 1909, A., i, 546.

mechanism of catalytic dehydration of alcohols by different metallic oxides, 1910, A., i, 294.

formation and decomposition of thiols; synthesis of dialkyl sulphides, 1910,

A., i, 536.

general method for the direct preparation of thiols from alcohols by cata-

lysis, 1910, A., i, 546.

catalytic preparation of mixed ethers from alcohols and phenols, 1910, A., A., i, 668.

catalytic preparation of phenylic and diphenylic ethers, 1910, A., i, 669. direct esterification by catalysis; pre-

paration of benzoic esters, 1911, A.,

i, 258.

direct esterification and hydrolysis by catalysis, 1911, A., i, 258. catalytic scission of esters by certain

metallic oxides, 1911, A., i, 348. catalytic esterification of alcohols by fatty acids: case of formic acid, 1911, A., i, 416.

catalytic decomposition of formic acid,

1911, A., i, 515.

new method of preparation of benzylamine and hexahydrobenzylamine, 1911, A., i, 627.

preparation of alkylamines by catalysis,

1912, A., i, 103.

catalytic decomposition of formic

esters, 1912, A., i, 156.

catalytic formation of saturated aliphatic esters from formic esters, 1912, A., i, 157.

new method for the catalytic preparation of aldehydes from acids, 1912,

A., i, 238.

catalytic preparation of phenolic and diphenylene oxides; mixed oxides,

1912, A., i, 767.

Sabatier, Paul, and Marcel Murat, direct hydrogenation of alkyl benzoates by catalysis; preparation of alkylcyclohexanecarboxylates, 1912, A., i, 353.

preparation of phenylcyclohexane and dicyclohexyl; direct hydrogenation of diphenyl, 1912, A., i, 547.

Sabatier, Paul, and Marcel Murat, direct hydrogenation of diphenylethanes; preparation of dicyclohexylethanes, 1912, A., i, 617. preparation of four dicyclohexylpro-

panes, 1912, A., i, 757.

Sabatier, Paul, and Jean Baptiste Senderens, catalytic decomposition of ethyl alcohol by finely-divided metals; regular formation of aldehyde, 1903, A., i, 393.

catalytic decomposition of alcohols by finely-divided metals; saturated primary alcohols, 1903, A., i, 453.

catalytic decomposition of alcohols by finely-divided metals; allyl and benzyl alcohols; secondary and tertiary alcohols, 1903, A., i, 454.

transformation of aldehydes and ketones into alcohols by catalytic hydrogenation, 1903, A., i, 733.

direct preparation of cyclohexanol and hexanone from phenol, 1904, A., i,

156.

direct hydrogenation of aniline; synthesis of cyclohexylamine and of two new amines, 1904, A., i,

direct reduction of the homologues of

aniline, 1904, A., i, 660.

reaction distinguishing between primary, secondary, and tertiary alcohols, 1905, A., i, 254.

application to nitriles of the method of direct hydrogenation by catalysis; synthesis of primary, secondary, and tertiary amines, 1905, A., i, 267.

new general methods of hydrogenation and of molecular reactions based on the use of finely divided metals. I.,

1905, A., i, 333.

general methods of hydrogenation and decomposition based on the use of finely divided metals. Part II. Molecular decompositions and condensations, 1905, A., i, 401.

Sabatini, Angel, influence of chlorides on the estimation of nitrates in waters by Grandval and Lajoux's process,

1909, A., ii, 935.

Sabatini, G. See Italo Bellucci.

Sabbatani, Luigi, physico-chemical considerations as to the pharmacological and toxicological action of mercury, 1908, A., ii, 718.

detection of phosphorus by means of the photographic plate, 1909, A., ii, 616.

Sablon. See Leclerc du Sablon.

Sabo, Charles. See Friedrich Kehrmann.

Sabot, R. See Louis Duparc.

Saccharin-Fabrik Aktien-Gesellschaft vorm. Fahlberg, List & Co., preparation of a readily soluble acid sodium borate, 1912, A., ii, 642.

Sacerdote, Paul, alteration in the colour of the diamond under the action of various physical agents, 1910, A., ii, 8.

Sacerdoti, Luigi, volumetric estimation of manganese in steel, 1908, A., ii, 228.

Sacerdoti, Renzo, electrode potentials in the electrolytic manufacture of chlorine and alkali, 1911, A., ii, 789.

Sacerdoti, Renzo. See also Giovanni Pellini.

Sachanoff, Alexander Nicolaevitsch, electrical conductivity of solutions in aniline, methylaniline, and dimethylaniline, 1910, A., ii, 1027.

electrical conductivity of solutions in esters with small dielectric constants, 1911, A., ii, 247.

electrical conductivities of solutions in acetic and propionic acids, 1911, A., ii, 689.

abnormal conductivity changes, 1911, A., ii, 691; 1912, A., ii, 422.

solvents with small dielectric constants, 1912, A., ii, 730.

electro-affinity and complex formation as factors of electrolytic dissociation, 1912, A., ii, 731.

Sachanoff, Alexander Nicolaevitsch. See also Iwan A. Kablukoff.

Sacharoff, G. P., the action of tetrahydro-\$-naphthylamine on the bodytemperature and circulation, 1910, A., ii, 433.

Sacharoff, G. P., and Hans Sachs, hemolytic action of photodynamic substances, 1905, A., ii, 465.

Sacharoff, M. See Alexei Vasilevitsch Saposhnikoff.

Sacharoff, N. See Alex. D. Bogojaw-lenski.
 Sacher, Julius Friedrich, assay of red

lead, 1908, A., ii, 228.
estimation of sulphuric acid as barium

sulphate, 1909, A., ii, 343. estimation of sulphuric acid as barium sulphate in solutions containing

chlorides, 1909, A., ii, 828. the most rapid wet lead assay, 1910, A., ii, 75.

volumetric estimation of lead with alkaline permanganate, 1910, A., ii, 158

the action of hydrogen sulphide on white lead, 1910, A., ii, 712.

a very sensitive indicator, 1910, A., ii, 1106.

Sacher, Julius Friedrich, Falk's white lead, 1911, A., ii, 40.

the colouring matter of red radishes, 1911, A., ii, 148.

the simplest arrangement for reading burettes, 1911, A., ii, 650.

the volumetric estimation of lead peroxide, 1911, A., ii, 770.

the reaction between concentrated solutions of barium acetate and aluminium sulphate, 1912, A., ii, 161.

Sachnowsky, B. See Wladimir Georg Schaposchnikoff.

Sachs, A., esterification of phosphorous acid, 1903, A., i, 733.

Sachs, A., and N. Levitsky, investigations on phosphorous acid and some of its derivatives, 1903, A., i, 733.

Sachs, Arthur, apatite from Rhenish Prussia, 1903, A., ii, 654.

potash-soda-mica as a druse-mineral at Striegau, 1903, A., ii, 656.

relation of rubidium to potassium and cæsium as illustrated by the crystalline forms of uranyl double salts, 1904, A., ii, 30.

crystalline form of indium, and its position in the periodic system, 1904, A., ii, 38.

gismondite from Silesia, 1904, A., ii, 420.

jordanite from Upper Silesia, 1905, A., ii, 96.

kleinite, a hexagonal mercury oxychloride from Texas, 1906, A., ii, 176.

composition of kleinite, 1906, A., ii, 369.

crystalline form of cabrerite, 1906, A., ii, 369.

cinnabar from Sonoma Co., California; gypsum and calcite from Terlingua, Texas, 1907, A., ii, 182.

tschermigite from Brüx, Bohemia, 1907, A., ii, 791.

Sachs, Franz, p-halogen-o-nitrobenzaldehydes, 1904, A., i, 506.

preparation of aminonaphthols, 1906, A., i, 949; 1907, A., i, 914.

Sachs, Franz, and Paul Alsleben, condensations of nitroso-compounds of the pyrazole series, 1907, A., i, 356.

Sachs, Franz, Paul Alsleben, and Viktor Herold, triketones. IV., 1907, A., i, 628.

Sachs, Franz, and Ernst Appenzeller, tetramethyl-2:4-diaminobenzaldehyde, 1908, A., i, 186.

new derivatives of m-phenylenetetramethyldiamine, 1908, A., i, 227. Sachs, Franz, Ernst Appenzeller, Viktor Herold, Bruno Mylo, Kurt Schädel, and Theodor Sutter, a new method of preparing aromatic amines, 1906, A.,

Sachs, Franz, and Guido Bargellini, condensation of flavinduline with methylene compounds. II., 1905, A.,

i. 488.

Sachs, Franz, and Petre Becherescu, ketopyrazolone. II. 1:3-Diphenyl-4ketopyrazolone, 1903, A., i, 529.

Sachs, Franz, and Erich Berthold, 1:2-naphthaquinone-4-sulphonic acid.

III., 1907, A., i, 651.

Sachs, Franz, Erich Berthold, and Bruno Zaar, condensations with 1:2-naphthaquinone-4-sulphonic acid.

1907, A., i, 426.

Sachs, Franz, and Percy Brigl, ring formation in the peri-position of the naphthalene series. IV. Attempts to prepare a six-membered carbon ring, 1911, A., i, 719.

Sachs, Franz, and Wladimir Brunetti, new derivatives of 2:4-dinitrobenzalde-

hyde, 1907, A., i, 756.

Sachs, Franz, Wladimir Brunetti, J. Damm, Georg Meyerheim, Hans Möhrke, Bruno Mylo, Max Schwabacher, M. Steiner, and Arthur Voss, ring formations in the peri-position of the naphthalene series, 1909, A., i,

Sachs, Franz, and Mario Craveri, condensations with 1:2-naphthaquinone-4-sulphonic acid, 1905, A., i, 909. Sachs, Franz, and Willibald Everding,

s-trinitrobenzaldehyde, 1903, A., i, 425.

Sachs. Franz, and Robert Benjamin Forster, ring formation in the periposition in the naphthalene series. III. Derivatives of 2':4'-dinitrophenyl-1:8-naphthylenediamine, 1911, A., i,

Sachs, Franz, and Siegfried Hilpert, chemical action of light, 1904, A., i,

876.

nitrostilbenes, 1906, A., i, 241.

Sachs, Franz, and Hans Kantorowicz, action of organo-magnesium compounds on arsenious oxide, 1908, A., i, 1031.

action of Grignard reagents on vat dyes. I. Indigo, 1909, A., i, 425.

Sachs, Franz, and Hermann Kantorowicz, para-substituted o-nitrobenzaldehydes, 1906, A., i, 908.

Sachs, Franz, and Richard Kempf, phalogen-o-nitrobenzaldehydes, 1904,

A., i, 62.

Sachs, Franz, and Willy Kraft, condensation of methylaniline with acetaldehydecyanohydrin, 1903, A., i,

Sachs, Franz, and Willy Lewin, pdimethylaminobenzaldehyde, 1903,

A., i, 37.

p-dimethylaminobenzylideneacetone]; a correction, 1906, A., i, 966.

Sachs, Franz, and Hermann Loevy, behaviour of thiocarbimides towards magnesium 'organic compounds, 1903, A., i, 334.

organo-magnesium compounds. II. Action on phosgene, 1903, A., i,

tribenzylcarbinol, 1903, A., i, 820.

action of organo-magnesium compounds on thiocarbimides and on carbylamines. II., 1904, A., i, 307.

Sachs, Franz, and Alexander Ludwig, action of organo-magnesium compounds on alkylated phthalimides, 1904, A., i, 266.

Sachs, Franz, Georg Meyerheim, and Władimir Brunetti, azinpurines, 1909,

A., ii, 65.

Sachs, Franz, and Franz Michaelis, dialkylaminobenzaldehydes. 1906, A., i, 575.

Sachs, Franz, and Gerhard Mosebach, acenaphthene, 1910, A., i, 726; 1911,

A., i, 960.

Sachs, Franz, and Ludwig Sachs, behaviour of tertiary amines towards organo-magnesium compounds, 1904, A., i, 925.

replacement of the aldehyde oxygen atom by two univalent hydrocarbon radicles by means of Grignard's reaction, 1905, A., i, 190.

p-dimethylaminobenzaldehyde. Action of magnesium organic com-

pounds, 1905, A., i, 202.

reaction between tertiary amines and organo-magnesium compounds, 1905, A., i, 274.

Sachs, Franz, and Emil Sichel, action of light on dinitrobenzylideneaniline, 1904, A., i, 156.

p-substituted o-nitrobenzaldehydes,

1904, A., i, 593.

Sachs, Franz, and M. Steiner, ring formation in the peri-position in the naphthalene series. II., 1909, A., i,

Sachs, Franz, and Paul Steinert, pdimethylaminobenzaldehyde. 1904, A., i, 506.

Sachs, Franz, and Richard Thonet, hydroxyfuchsones, 1904, A., i, 878.

Sachs, Franz, and Watter Weigert, pdimethylaminobenzaldehyde. VI. and VII., 1907, A., i, 1046, 1047.

action of magnesium organic compounds on p-dimethylaminocinnamaldehyde, 1907, A., i, 1048.

Sachs, Franz, Franz von Wolff, and Alexander Ludwig, action of organomagnesium compounds on alkylated saccharins, 1904, A., i, 876.

Sachs, Franz, Wilhelm Wolff, and Willy Kraft, triketones. III., 1903,

A., i, 792.

Sachs, Franz. See also Paul Ehrlich, and Theodor Stanislaus Warunis.

Sachs, Fritz, nuclease, 1906, A., i, 126. the influence of inosite on the frog's heart, 1907, A., ii, 117.

the values of different colour reactions of pentoses, 1907, A., ii, 135.

the digestion of egg-white by papain, 1907, A., ii, 563.

hemolysis by soaps, 1908, A., ii, 866. degradation of leucine in the liver, 1910, A., ii, 790.

Sachs, Fritz. See also Alfred Benrath, Max Friedemann, and Arthur Heffter.

Sachs, Hans, antipepsin, 1903, A., ii, 316.

complementoids, 1906, A., ii, 462.

Sachs, Hans. See also Jacobus Henricus van't Hoff, Preston Kyes, and G. P. Sacharoff.

Sachs, Ludwig. See Franz Sachs. Sachs, Paula. See Ludwig Vanino.

Sachs, Stanislaus, observations on the ions and fog-nuclei which are produced in gases by ultra-violet light, 1911, A., ii, 246.

Sachsel, Eugen. See Friedrich Willy

Hinrichsen.

Sack, Johannes, fat of the palm fruit of Surinam, 1906, A., ii, 386.

wax of the bark of Jatropha curcas, 1906, A., ii, 386.

products containing tannin, 1906, A., ii, 386.

Sack, Johannes, and Bernhard Tollens, products similar to cholesterol in bresk from Borneo, 1904, A., i, 1011.

lupeol from the bark of Roucheria griffithiana, 1904, A., i, 1011,

griffithiana, 1904, A., i, 1011. occurrence of tyrosine in elderberries (Sambucus nigra), 1904, A., ii, 836.

Sack, Johannes. See also Maurits Greshoff.

Sack, Michael, formation and significance of sodium alloys in cathodic polarisation, 1903, A., ii, 349. Sack, Michael, bibliography of the metal alloys, 1903, A., ii, 595.

Sackett, Walter G., bacteriological studies of the fixation of nitrogen in certain Colorado soils, 1912, A., ii, 670.

Sackett, Walter G., Andrew J. Patten, and Charles W. Brown, solvent action of soil bacteria on the insoluble phosphates of raw bone-meal and natural raw rock phosphate, 1908, A., ii, 415. Sackheim, M. See Fritz Ephraim.

Sackur, Otto, electrical conductivity and viscosity of casein solutions, 1903,

A., ii, 4.

lead-tin alloys. I. Chemical equilibrium of lead and tin in presence of solutions of their salts, 1904, A., ii, 336.

passivity of metals, 1904, A., ii, 721. anodic dissolution of metals and their

passivity, 1904, A., ii, 802. constitution of lead-tin alloys, 1904,

A., ii, 818.

the constant for the rate of decay of radium emanation, 1905, A., ii, 367. radioactivity of thorium, 1905, A., ii, 368.

anodic solution of hydrogen and its

passivity, 1906, A., ii, 261.

osmotic pressure of concentrated solutions of non-electrolytes, 1908, A., ii, 931.

reaction between silver sulphide and silver sulphate; production of a dark-colured glass, 1908, A., ii, 1036.

chemical kinetics, 1910, A., ii, 113. the thermal formation of manganates,

1910, A., ii, 214; 1911, A., ii, 400. the thermal formation of manganates. II. Molecular-weight determinations in fused alkali carbonates, 1910, A., ii, 215.

osmotic pressure of concentrated solutions of non-electrolytes, 1910, A., ii,

273.

application of the kinetic theory of gases to chemical problems, 1912, A., ii, 145.

fused salts as solvents. I. Cryoscopic investigations. II. Solubility determinations, 1912, A., ii, 233.

fused salts as solvents; the ionisation of dissolved salts, 1912, A., ii, 744. [fused salts as solvents], 1912, A., ii,

836. significance of the elementary quantum for the theory of gases and the calculation of chemical constants,

1912, A., ii, 1151.

Sackur, Otto, and J. Alvares, passivity

in acid solutions, 1909, A., ii, 305. Sackur, Otto, and Ernest Fritzmann, solubility of manganous hydroxide and the dissociation pressure of manganese dioxide, 1909, A., ii, 960.

Sackur, Otto, Paul Mauz, and Alexander Siemens, copper-zinc alloys, 1905, A.,

ii, 524.

Sackur, Otto, and Hans Pick, copper-tin

alloys, 1908, A., ii, 496.

Sackur, Otto, and O. Stern, osmotic pressure of concentrated solutions of carbon dioxide, 1912, A., ii, 904.

Sackur, Otto, and W. Taegener, potassium permanganate and manganate in aqueous solution, 1912, A., ii, 916.

Sackur, Otto. See also Fritz Bahr, Otto Hahn, and Ernst Laqueur.

Sadikoff, Vladimir Sergeivitsch, animal glutins. I. Sinew glutin, 1904, A., i, 125.

animal glutins. II. Cartilage-glutins

(gluteins), 1904, A., i, 126. animal glutins. III. Reactions with salt solutions, 1904, A., i, 462.

animal glutins. IV., 1906, A., i, 224.

animal glutins. V. Preparation of gelatins, 1906, A., i, 777. thioglutin, 1907, A., i, 740.

formation of oxalic acid from gelatinous substances, 1909, A., i, 750.

behaviour of gelatinous substances or collains towards carbon disulphide, 1910, A., i, 211.

the influence of strychnine on bacteria,

1911, A., ii, 1018.

the biolytic seission of gelatin. and II., 1912, A., ii, 794.

Sadler, Charles A., homogeneous corpuscular radiation, 1910, A., ii, 251.

transformation of the energy of homogeneous Röntgen radiation into energy of corpuscular radiation, 1911, A., ii, 839.

Sadler, Charles A., and Paul Mesham, Röntgen radiation from substances of low atomic weight, 1912, A., ii, 719.

Sadler, Charles A. See also Charles Glover Barkla.

Sadowski, C. See Nicola Pappadà. Sadtler, Samuel S., reaction of aromatic

and fatty aldehydes, 1904, A., ii, 300.

estimation of certain aldehydes and ketones in essential oils, 1904, A., ii, 372; 1905, A., ii, 867.

inner crucible method for estimating sulphur and halogens in organic substances, 1905, A., ii, 760.

Sadtler, Samuel S., estimation of ash in graphite, 1908, A., ii, 225.

Saeland, Sem, photographic action of metals and hydrogen peroxide (socalled metallic radiation), 1908, A., ii, 789.

so-called metallic radiation, 1909, A., ii, 8.

Saeland, Sem. See also Philipp Lenard. Sänger, Wilhelm. See Emil Knoevenagel.

Saether, Lelf. See Henrik Bull.

Sage, M. W. See Maurice de Kay Thompson.

Sagelmann, Aron. See Efim Semen London.

Sageman, Philip John. See John Holmes.

Saget, G., benzidine-blue and some reactions of benzidine, 1903, A., i, 49. Saget, P. See P. Joseph Tarbouriech.

Saha. Haridas, and Kumud Nath Choudhuri, the action of ammonia on mercurous chloride, 1910, A., ii,

the action of ammonia on mercurous nitrate, 1911, A., ii, 804.

action of ammonia on mercurous bromide and iodide, 1912, A., ii, 1174.

Sahlbom, (Miss) Naima, capillary analysis of colloidal solutions, 1911, A., ii, 100.

Sahlbom, (Miss) Naima, and Friedrich Willy Hinrichsen, radioactivity of thermal springs in Aachen, 1906, A., ii, 716.

titration of hydrofluosilicie acid, 1906,

A., ii, 798.

Sahlbom, (Miss) Naima. See also Fritz Fichter, Friedrich Willy Hinrichsen,

and Hjalmar Sjögren.

Sahmen, Rudolf, mixed crystals of monganese sulphate and zinc sulphate between 0° and 39°, 1906, A., ii,

copper-cadmium alloys, 1906, A., ii,

alloys of copper with cobalt, iron, manganese, and magnesium, 1908, A., ii, 187.

ternary mixed crystals, 1912, A., ii, 438.

Sahmen, Rudolf, and Gustav Tammann, finding of transition points with a self-registering dilatograph, 1903, A., ii. 356.

Sahmen, Rudolf, and A. von Vegesack. application of thermal analysis to ternary systems, 1907, A., ii, 532, 847.

Saiki. Tadasu, enzymatic action of radishes, 1906, A., ii, 796.

digestibility and utilisation of some polysaccharides derived from lichens and marine algæ, 1906, A., ii, 870. anti-inulase, 1907, A., ii, 973.

non-striated mammalian muscle, 1908,

A., ii, 712.

liquid extraction with the aid of Soxhlet's apparatus, 1910, A., ii, 117. lactic acid in the autolysed dog's liver, 1910, A., ii, 142.

chemistry of cancer. II. Purine bases, creatine, and creatinine, 1910, A.,

ii, 146.

physiological behaviour of iminoallantoin and of uroxanie acid,

1910, A., ii, 432

Saiki, Tadasu, See also Stanley Rossiter Benedict, Katsuji Inouye, Lafuyette Benedict Mendel, and Frank Pell Underhill.

Sailer, Wilhelm, detection of methyl alcohol, 1912, A., ii, 301, 392.

Saillard, Emile, cultivation of sugarbeet; potassium manuring of beet soils, 1908, A., ii, 618.

manurial experiments with sugar-beet,

1911, A., ii, 145.

estimation of sugar in beet by warm aqueous digestion, 1912, A., ii, 698.

Saint-Martin, Louis Gigaut de, spectrophotometric estimation of small quantities of carbon monoxide in the air, 1904, A., ii, 589. modification of the Orsat apparatus,

1906, A., ii, 304.

Saito, K., influence of nutrition on the diastase formation of yeast, 1910, A., ii, 644.

production of lactic acid by moulds, 1911, A., ii, 321.

Saito, K. See also Paul Lindner.

Saito, Takeo, and Junji Yoshikawa, formation of dextrorotatory lactic acid during the autolysis of animal organs. IV., 1909, A., ii, 910.

Sakurai, Joji, and Kikunaye Ikeda, international atomic weights, 1904,

A., ii, 553.

Sala, B. See Giuseppe Bruni.

Saladin, O. See Reginald Oliver Herzog. Salant, William, effect of alcohol on secretion of bile, 1907, A., ii, 40. influence of alcohol on glycogen metabolism, 1907, A., ii, 976.

Salant, William, and George W. Knight, caffeine glycosuria, 1910, A., ii, 735.

Salant, William, and Gustave M. Meyer, the elimination of radium, 1907, A., ii, 979.

Salant, William, and J. B. Rieger, influence of alcohol on protein metabolism in dogs, 1911, A., ii, 411.

Salant, William. See also Claude S. Hudson, and Samuel James Meltzer.

Salaskin, Sergei, absorption of protein in the dog's stomach, 1907, A., ii, 281.

Salaskin, Sergei, and Katharina Kowalewsky, the action of pure gastric juice (from the dog) on hæmoglobin and globin, 1903, A., ii, 559.

fate of glycine in the dog's system when injected intravenously, 1904,

A., ii, 674.

fate of phenylurea and of oxanilic acid in the organism of the dog, 1907, A., ii, 641.

Salaskin, Sergei, and Z. Pupkin, estimation of the alkalinity of blood.

1904, A., ii, 795.

Salaskin, Sergei. See also Maria Law-

Salecker, Paul, and Albert Stutzer, diminution of the digestibility of proteins, 1906, A., ii, 691.

Salessky, Wladimir, indicators for acids

and a!kalis, 1904, A., ii, 319. Salibill, Józef, the action of light on the bromination of tertiary o- and pbutyltoluene and the chlorination of tert.-butylbenzene and o-butyltoluene, 1911, A., i, 276.

Salimbeni, A. T., action of certain esters of glycerol on the tubercle

bacillus, 1912, A., ii, 971.

Salimei, G. See Rosario Spallino. Salkind, Julius, condensation of alde-

hydes with ketones in presence of potassium cyanide, 1905, A., i, 732. the action of magnesium on ethyl bromoisobutyrate, 1907, A., i, 22.

Salkind, Julius, and (Mme.) T. Beburischwili, synthesis of ketones by means of organo-magnesium compounds, 1910, A., i, 11.

Salkowski, Ernst [Leopold], estimation of glycogen, 1903, A., ii, 47, 516. detection of bromine in urine, 1903,

A., ii, 571.

behaviour of aspartic acid in the animal organism, 1904, A., ii, 674. urine of herbivora, 1904, A., ii, 753, xanthine bases, 1907, A., i, 656.

colloidal nitrogenous substances, insoluble in alcohol, in urine, 1907,

A., ii, 114.

pathological-chemical notes; [detection of cholesterol esters, carbamide, urobilin and bilirubin, and of sugar], 1907, A., ii, 307.

Salkowski, Ernst [Leopold], isolation of cholesterol from fats, 1908, A., i.

sugar formation and other fermentative processes in yeast, 1908, A., ii,

detection of arsenic in urine, 1908, A.,

ii, 734.

the behaviour of iron arseno-paranucleate and of arsenious acid in the organism, 1908, A., ii, 973.

detection of indican in urine, 1908, A.,

ii, 999.

cholesterol in ox-bile, 1908, A., ii,

Kjeldahl's method, 1908, A., ii, 1070. Schmiedeberg's ferratin, 1909, A., i,

the combination of iron and the nucleoprotein of the liver, 1909, A., i, 274.

behaviour of gelatin and protease to bromine water, 1909, A., ii, 104.

invertin (invertase) of yeast. 1909, A., i, 752.

autolysis and preservatives, 1909, A., ii, 1035.

the occurrence of inactive lactic acid in a meat extract, 1910, A., ii, 55. cholesterol esters in the human epider-

mis and their reactions, 1910, A., ii, 142.

the cholesterol esters of the horny

layer, 1910, A., ii, 630. the optical behaviour of lactic acid in a meat preparation, 1911, A., i, 6.

phytosterol and cholesterol, 1911, A., i. 45.

yeast-gum, 1911, A., i, 825. a characteristic behaviour of alkali phosphate, 1911, A., ii, 39.

the behaviour of yeast-gum in autolysis and in alcoholic fermentation, 1911, A., ii, 62.

an improvement in Scherer's reaction

for inositol, 1911, A., ii, 73. easy detection of arsenic; rapid separation of arsenic and some other metals from liquids, 1911, A., ii, 153.

I. Presence of dextrose and notes. creatinine in hen's egg. II. Contents of a dermoid cyst. III. Some properties of hæmatin. IV. Estimation of peptone in the presence of V. The quantitative albumoses. estimation of sulphur in urine and the significance of neutral sulphur, 1911, A., ii, 626.

detection of mercury in urine, 1911,

A., ii, 771, 934.

Salkowski, Ernst [Leopold], the behaviour of milk to ammonium sulphate, and a new method for the estimation of lactose, 1912, A., ii, 610.

Trommer's test [for sugar] in urine,

1912, A., ii, 697.

Salkowski, Ernst, and Carl Neuberg, conversion of d-glycuronic acid into l-xylose, 1903, A., i, 7.

biochemical transformation of carbohydrates of the d-series into those of the l-series, 1903, A., i, 551.

phenolglycuronic acid, 1907, A., ii,

188.

Salkowski, Heinrich [Hermann], 3:5dinitro-4-hydroxybenzoic acid, 1909, A., i, 648.

rotatory power of usnic acid and other lichen derivatives. III., 1910, A., i. 851.

detection of potassium as cobaltinitrite,

1912, A., ii, 686.

Salkowski, Heinrich, and Bernhard Sendhoff, estimation of bismuth and separation from the heavy metals as phosphate, 1906, A., ii, 55.

Salle, Ed., general method of estimating nitrie nitrogen, 1910, A., ii, 451.

Salles, Edouard, diffusion of gaseous ions, 1908, A., ii, 931; 1910, A., ii, 1024.

Edouard. Salles. See also André

Mayer.

Salm, Eduard, determination of the concentration of the hydrogen ions in a solution by means of indicators, 1904, A., ii, 536.

colorimetric measurement of affinity,

1906, A., ii, 218.

affinity constants of organic acids determined with the help of indicators, 1908, A., ii, 677.

Salm, Eduard, and Hans Friedenthal, acidimetric and alkalimetric indica-

tors, 1907, A., ii, 389.

Salmon, E. A., method for making two substances react in the electric arc,

1911, A., ii, 15.

Salmony, Alfred, and Hugo Simonis, derivatives of dibromo- and dichloromaleic acids and their conversion into indigo, 1905, A., i, 631.

Salomon, Alfred, apparatus for testing saturation and boiler-gases, 1906, A.,

ii, 580.

Salomon, Harry. See Gustav Embden, and Rudolph Fittig.

Salomon, Hugo. See Otto Porges.

Salomone, Giovanni, manganese and the development of plants, 1906, A., ii, 792; 1907, A., ii, 982.

Salomone, Giovanni, new reactions for abrastol, 1907, A., ii, 412.

acetylmethylcarbinol in certain Italian wines, 1907, A., ii, 903.

the products of explosion of hydrogen cyanide, 1912, A., i, 686.

Salomone, Giovanni. See also Zaccaria

Treves.

Salomonsen, Carl Jul., and Georges Dreyer, physiological effects of radium, 1904, A., ii, 577.

coloration produced by Becquerel rays; application to crystallography; colorimetric estimation of radioactivity, 1904, A., ii, 691.

radioactivity, 1904, A., ii, 691. Salomonsen, K. E., urochrome. II.,

1908, A., i, 1028.

Salpeter, Jakob, a method for the determination of the constants of radium-A ions, 1910, A., ii, 250.

Saltet, R. H., the action of carbon dioxide on the frog's heart, 1906, A.,

1, 35

Salvadori, Roberto [Oreste Maria], decomposition of ammonium chloride in presence of calcium carbide, 1903, A. i, 11.

lead carbonate, 1904, A., ii, 336.

reaction of ammonia with commercial calcium carbide, 1905, A., i, 513.

lecture experiments, 1905, A., ii,

determination of the calorific value of lignite and peat with the Lewis-Thomson calorimeter, 1906, A., ii, 900.

hydrazine chlorate and perchlorate,

1907, A., ii, 759.

complex compounds of cobalt with chloric and perchloric acids, 1910, A., ii, 959.

ammonium perchlorate as a reagent; metalammine perchlorates, 1910, A.,

ii, 1002.

hydrates and ammonia compounds of cobalt, nickel, manganese, cadmium, zinc, and copper perchlorates, 1912, A., ii, 649.

compounds of uranium with hydrazine,

1912, A., ii, 1177.

Salvadori, Roberto, and Cesare Speroni, chemical investigations for a cement quarry, 1907, A., ii, 686.

Salvadori, Roberto. See also Raffaele

Nasini.

Salvendi, Hugo, action of photodynamic substances on colourless corpuseles, 1907, A., ii, 37.

Salvin-Moore, John E. See John Bret-

land Farmer.

Salvo, N. See Francesco Carlo Palazzo.

Salway, Arthur Henry, the action of nitric acid on the ethers of aromatic hydroxyaldehydes, 1909, T., 1155; P., 160; discussion, P., 161.

the synthesis of substances allied to cotarnine, 1909, T., 1204; P.,

175.

synthesis of cotarnine, 1910, T., 1208; P., 98, 138; discussion, P., 138.

action of sodium amalgam on methylene ethers, 1910, T., 2413; P., 293.

the orientation of the nitro-group in nitromyristicinic acid, 1911, T., 266; P., 20.

synthesis of 4:6-dimethoxy-2-\beta-methylaminoethylbenzaldehyde, 1911, T.,

1320; P., 191.

chemical examination of Calabar beans, 1911, T., 2148; P., 273.

researches on the constitution of physostigmine. Part I., 1912, T, 978; P., 125.

alkaloidal assay of Calabar beans, 1912,

A., ii, 503.

Salway, Arthur Henry, and Frederic Stanley Kipping, atmospheric oxidation of β-methylhydrindone, 1909, T., 166; P., 16.

Salway, Arthur Henry, and Walter Thomas, chemical examination of the barks of Brucea antidysenterica and Brucea sumatrana, 1907, A., ii, 807.

Salway, Arthur Henry. See also Arthur Hantzsch, Frederic Stanley Kipping, and Frederick Belding Power.

Salzberg, D. See David Maron.

Salzbergwerk Neu-Stassfurt, preparation of tetra- and hexa-chloroethanes from acetylene, 1907, A., i, 169.

Salzer, Franz, electrolysis of formic and oxalicacids and of potassium carbonate,

1903, A., ii, 129.

Salzer, Franz. See also Alfred Werner.

Salzmann, Max, the narcotic action of substances of the alcohol group with the simultaneous administration of fat, on the ground of their partition coefficients in fat and water; a new antidiabetic "barzarin," 1912, A., ii, 1196.

Salzmann, Max. See also Heinrich

Walbaum.

Samanek, R. See Alfred Werner.

Samec, Maximilian, condensation of formisobutaldol with dimethylaniline, 1905, A., i, 489.

trimethylacetaldehyde [aa-dimethyl-propaldehyde], 1907, A., i, 286.

Samec, Maximilian, the pinacone from diethyl ketone, and its derivatives formed by the action of acids, 1907, A., i, 746. leucine from the ligamentum nuchae

of oxen, 1908, A., i, 231.

I. The solution colloids. swelling of starch in presence of of crystalloids, 1912, A., ii, 144.

Samec, Maximilian. See also Wolfgang

Pauli.

Samel, Oskar. See Emil Knoevenagel. Samelson, S., substances which constrict and dilate the blood-vessels of the frog, 1912, A., ii, 181.

Samkow, S., physiology of Bacillus prodigiosus, 1904, A., ii, 198.

Sammet, George Viktor, chemical and electrical study of the equilibria $6H' + 5I' + IO_3' = 3I_2 + 3H_2O$ and $6H' + 5Br' + BrO_3' = 3Br_2 + 3H_2O_3$ 1906, A., ii, 153.

Sammet, George Viktor. See also Robert Luther, and Arthur Amos Noves.

Sammet, O., estimation of indican in urine, 1912, A., ii, 703.

Sammis, John Langley, action of mercaptides on quinones, 1905, A., i, 797.

relation of chemical activity to electrolytic conductivity, 1906, A., ii, 835.

Sammis, John Langley, and Edwin Bret Hart, the relation of different acids to the precipitation of casein and to the solubility of cheese curds in salt solution, 1909, A., i, 538.

Samoiloff, Jakob V., turgite-ores in Russia, 1904, A., ii, 133.

mineralogical significance of vegetation experiments, 1910, A., ii, 534.

Russian phosphorites, 1912, A., ii,

Samsonow, Alexander, a new uranium colloid, 1911, A., ii, 207.

the Becquerel effect in solutions of uranyl sulphate, quinine sulphate, chlorophyll, 1912, A., ii, and 528.

Samter, Victor, some time- and laboursaving apparatus in American chemical laboratories, 1909, A., ii, 393.

Victor. See also Arthur Samter, Rosenheim

Samuel, Ernst. See Otto Manasse.

Samuely, Franz, amino-acids in normal and pathological urine, 1906, A., ii, 470.

relation of glycine to uric acid, 1908,

A., i, 226.

Samuely, Franz. See also Emil Abderhalden.

Sanchez, Juan A., estimation of nickel in presence of cobalt, 1909, A., ii,

new volumetric method for the estimation of copper, 1910, A., ii, 158.

estimation of tin in presence of antimony, 1910, A., ii, 1003.

halogenimetry, 1911, A., ii, 434.

quantitative separation of iron and manganese, 1911, A., ii, 1138.

systematic analysis of phenols, 1912, A., ii, 209.

Carnot's reagent and the preparation of sodium bismuth thiosulphate, 1912, A., ii, 562.

Sand, Henry Julius Salomon, electrolysis with rapidly-moving electrodes,

1904, A., ii, 605.

the measurement of the potential of the electrodes in stationary liquids; the determination of changes of concentration at the cathode during electrolysis, 1905, A., ii, 134.

rôle of diffusion during catalysis by colloidal metals and similar sub-

stances, 1905, A., ii, 233.

the rapid electro-analysis of metals; preliminary note, 1906, P., 43.

the rapid electro-analytical deposition and separation of metals. Part I. The metals of the silver and copper groups and zinc, 1907, T., 373; P., 26; discussion, P., 26.

the rapid electro-analytical deposition and separation of metals. Part II. Antimony and tin; the employment of a diaphragm, 1908, T., 1572; P.,

the rapid electro-analytical deposition and separation of metals. Part III.; preliminary note, 1909, P., 228.

apparatus for the rapid electro-analytical separation of metals, 1910,

A., ii, 66.

electro-analytical determination of lead as peroxide, 1910, A., ii, 456.

Henry Julius Salomon, and Thomas Porteous Black, transfer resistance in the case of "reversible" electrolytic metal deposition, 1910, A., ii, 259.

Sand, Henry Julius Salomon, and John Edward Hackford, the electrolytic estimation of minute quantities of arsenic, 1904, T., 1018; P., 123; dis-

cussion, P., 123.

Sand, Henry Julius Salomon, and Douglas John Law, employment of the electrometric method for the estimation of the acidity of tan liquors. I., 1911, A., ii, 233.

Henry Julius Salomon, and William Miles Smalley, new apparatus for the electro-analytical estimation of metals; a glass-frame anode for use with silver and nickel cathodes, 1911, A., ii, 434.

Sand, Henry Julius Salomon. See also Robert Martin Caven, Arthur Slator,

and Joseph Turney Wood.

Sand, Julius, cobaltous and cobaltic thiocyanogen compounds, A., i, 467.

inorganic additive compounds of unsaturated substances, 1904, A., i,

strength of hypochlorous acid, 1904, A., ii, 612.

salts of the crystal-violet group, 1905,

A., i, 948.

hypochlorous acid. III. Formation and decomposition of chloric acid, 1905, A., ii, 156.

hydrolysis of dichromates polymolybdates, 1906,

equilibria involving the addition of

ethylene, 1907, A., i, 814. Sand, Julius, and G. Bökman, pentamminecobalt salts with several nuclei, 1908, A., ii, 44.

Sand, Julius, and Fritz Breest, chemical statics and kinetics of the mercuryethylene compounds, 1907, A., ii,

Sand, Julius, and Oskar Krafft Heinrich Burger, complex molybdenum thiocyanates, 1905, A., i, 923.

oxidation of chromous salts, 1906, A.,

i, 487.

reduction of molybdic acid in thiocyanic acid solution, 1906, A., i, 487.

Sand, Julius, and Fritz Eisenlohr, I. Progressive polymolybdates. neutralisation of commercial ammonium molybdate, 1907, A., ii,

polymolybdates. II. Action of the iodide-iodate mixture on ammonium molybdate, 1907, A., ii, 179.

Sand, Julius, and Otto Genssler, pentamminenitrosocobalt salts, 1903, A., ii, 549; 1904, A., i, 24.

mercury compounds of ketones, 1904, A., i, 24.

Sand, Julius, and Franz Grammling, molecular weight of the greyishblue hydrate of chromic chloride. Neutralisation of the salt by sodium hydroxide, 1908, 293.

Sand, Julius, and Franz Grammling, molecular weight of the greyish-blue hydrate of chromic chloride. Hydrolysis of the salt by potassium iodide and iodate, 1908, A., ii, 294.

Sand, Julius, and K. Kaestle, dichromate and chromate, 1907, A., ii, 178.

Sand, Julius, and Johanna Maas, compounds of quadrivalent molyb-

denum, 1908, A., i, 11. Sand, Julius, and Fritz Singer, action

of mercuric salts on unsaturated alcohols and oximes, 1904, A., i,

mercuric acetate and acetic anhydride, 1904, A., i, 25.

nitric oxide and Grignard's reagent, 1904, A., i, 38.

Sand, Julius. See also Johanna Maas, and Walther Nernst.

Sandberg, Fani. See Herman Decker. Sander, Alexander. See Gustav Schultz. Sander. Heinrich. See Hermann Matthes.

Sander, Karl, preparation of hydrogen sulphide water for use in analysis, 1904, A., ii, 145. Sander, W. See Wilhelm Traube.

Sander, Wilhelm, solubility of carbon dioxide in water and certain other solvents at high pressures, 1912, A., ii, 251.

the alloys of palladium and antimony,

1912, A., ii, 651.

Sanders, James McConnell, pipitzahoic acid, 1906, P., 134.

an improved Beckmann apparatus for molecular weight determinations, 1906, P., 165.

a simple gas generator for analytical operations, 1907, P., 232.

improved form of extraction

apparatus, 1910, P., 227. Candelilla wax, 1911, P., 250.

a convenient method for determining the density of heavy petroleums, 1911, P., 250.

determination of sulphur in petroleum, 1911, P., 329; 1912, T., 358.

Sanderson, James Cox, the probable influence of the soil on local atmospheric radioactivity, 1911, A., ii, 846.

Sandgren, J. See Ivar Bang, and H. Lyttkens.

Sandilands, John Edward, epidemic diarrhœa, 1906, A., ii, 109.

Sandkuhl, Hermann. See Julius Bredt. Sandmeyer, Traugott, and Alfred Conzetti, synthesis of indigotin from thiocarbanilide, 1903, A., i, 486.

Sandonnini, Carlo, formation of salts from the physico-chemical standpoint, 1910, A., ii, 383.

double salts of lead fluoride and the other haloids of the same metal,

1911, A., ii, 284, 491.

thermal analysis of mixtures of cuprous chloride with chlorides of univalent elements, 1911, A., ii, 606.

thermal analysis of binary mixtures of the chlorides of univalent metals,

1911, A., ii, 800.

the thermal analysis of binary mixtures of chlorides of elements of the same valency, 1912, A., ii, 47.

- thermal analysis of binary mixtures of calcium chloride with chlorides of other bivalent elements, 1912, A., ii, 50.
- thermal analysis of binary mixtures of the chlorides of bivalent elements, 1912, A., ii, 160, 350, 1172.

thermal analysis of the system : AgCl-

Ag₂S, 1912, A., ii, 759.

thermal analysis of the system: cuprous chloride-cupric chloride, 1912, A., ii, 918.

tendency of alkali haloids to combine with silver haloids. I., 1912, A.,

ii, 941.

Sandonnini, Carlo, and P. C. Aureggi, thermal analysis of binary mixtures of the chlorides of univalent elements, 1912, A., ii, 162, 764.

reducing power of stannous chloride in the fused state, 1912, A., ii,

455.

Sandonnini, Carlo, and G. Scarpa, thermal analysis of binary mixtures of the chlorides of bivalent metals, 1911, A., ii, 984.

thermal analysis of binary mixtures of the chlorides of univalent elements.

IV., 1912, A., ii, 918.

Sandonnini, Carlo. See also Giuseppe Bruni.

Sandoz. See Chemische Fabrik vorm. Sandoz.

Sandqvist, Håkan, phenanthrene-3sulphonic acid and certain of its derivatives, 1909, A., i, 779.

phenanthrene-2-sulphonic acid and some of its derivatives, 1911, A., i, 190.

phenanthrene-10-sulphonic acid and certain of its derivatives, 1912, A., i, 843.

Sané, Shrirang M. See Fritz Ullmann.
Saneyoshi, Sumio, B-butanolglycuronic acid, 1911, A., i, 836.

Saneyoshi, Sumio. See also Carl Neuberg.

Sanford, Fernando, the significance of the periodic law, 1911, A., ii, 874.

Sanger, Charles Robert, and Otis Fisher Black, estimation of arsenic by the Gutzeit method, 1908, A., ii, 64. estimation of arsenic in urine, 1908,

A., ii, 65.

Sanger, Charles Robert, and Willis A. Boughton, estimation of morphine in cases of poisoning, 1910, A., ii, 763.

Sanger, Charles Robert, and James Andrew Gibson, estimation of small amounts of antimony by the Marsh-Berzelius method, 1907, A., ii, 654.

Sanger, Charles Robert, and Emile Raymund Riegel, estimation of antimony by Gutzeit's method, 1910, A., ii, 161

101

pyrosulphuryl chloride and chlorosulphonic acid, 1912, A., ii, 752. Sanger, F. See George Stuart Graham-

Smith.

Sanglé-Ferrière, and L. Cuniasse, estimation of essences in absinths, 1903, A., ii, 247.

the iodine number of essences, 1903,

A., ii, 336.

analysis of absinth, 1903, A., ii, 337.

analysis of bitters, 1903, A., ii, 337. detection of methyl alcohol in absinths, 1903, A., ii, 393.

Sani, Giovanni, phytosterol contained in olive oil, 1903, A., i, 250. action of benzylamine on ethyl α-

crotonate, 1906, A., i, 653.

chemico-physiological investigations on the tubercles of *Vicia faba*, 1910, A., ii, 993.

action of monocalcium phosphate in the preservation of green fodder, 1912, A., ii, 980.

Sanin, A., estimation of nitrite, 1909, A., ii, 935.

removal of tannin from its solutions by cotton wool, 1912, A., ii, 435.

Sanna, Andrea, effect of sea-salt on plants; flora of the salines at Cagliari, 1904, A., ii, 762. action of bromodinitrobenzene on

action of bromodinitrobenzene or glycine, 1905, A., i, 48.

new extractor, 1905, A., ii, 58.

Sanna, Andrea. See also Efisio Mameli. Sanna, G. See Luigi Francesconi.

Sano, Torata, the behaviour of the brain towards strychnine, 1908, A., ii, 974.

action of strychnine and caffeine, 1908, A., ii, 974. Sans, J., a colour reaction for colophony, 1909, A., ii, 442.

Sante de Grazia. See Grazia.

Santesson, Karl Gustaf, action of poisons on enzymatic processes, 1908, A., ii, 1061; 1910, A., ii, 331.

the action of potassium bromate, 1910,

A., ii, 431.

Santi. Luigi, poisoning by barium salts : presence of barium in the urine and the absorption and elimination of the metal, 1904, A., ii, 137.

dissociation of ammonium chloride in its analytical relations, 1905, A., ii,

new salt of quinine, 1906, A., i, 977. quinine salts of anhydromethylenecitrylsalicyclic acid, 1908, A., i, 451

phototropy of the hydrazones of furfuraldehyde, 1911, A., i, 1030.

Santi, Luigi. See also Maurizio Padoa. Sapin, A., arrow poison of the Lukarets, 1905, A., ii, 413.

Saporetti, Umberto, estimation of mercuric chloride in pastilles, 1908, A.,

ii, 133.

detection of salicyclic acid in wine, milk, butter, and preserved toma-

toes, 1909, A., ii, 101.

new reaction to distinguish between α- and β-eucaines; distinction from cocaine and its substitutes, 1909, A., ii, 771.

new adulteration of pyramidone, 1909,

A., ii, 772.

Saporta, Antoine de, gasometric estimation of "cream of tartar" and of potassium, 1903, A., ii, 701.

simplified apparatus for gas analysis at a high temperature, 1909, A., ii,

reduced alcoholometry, 1910, A., ii, 356.

Saporta, Antoine de. See also Joseph de Girard.

Saposhnikoff, A. See N. N. Andréeff. Saposhnikoff, Alexei Vasilevitsch, determination of the molecular weight of nitro-starch, 1903, A., i, 402.

properties of mixtures of nitric and sulphuric acids. I., 1904, A., ii, 251, 558, 614; 1905, A.,

crystallisation of tin and zinc by the electrolysis of their salts, 1905, A., ii, 395.

decomposition of cellulose nitrate at temperatures below that of ignition, 1907, A., i, 390.

Saposhnikoff, Alexei Vasilevitsch, theory of the nitration of cellulose, 1907. A., i, 390; 1910, A., i, 156.

hardness of aluminium zinc alloys,

1908, A., ii, 284.

hardness of tin and lead alloys, 1908, A., ii, 294.

hardness of alloys. II., 1908, A., ii. 600.

specific heat of metallic alloys, 1910.

A., ii, 182. molecular weight of nitrous acid in aqueous solution, 1910, A., ii, 200.

Saposhnikoff, Alexei Vasilevitsch, and Michael Borisoff, decomposition of nitrocellulose at temperatures below that of ignition, 1904, A., i, 799.

Saposhnikoff, Alexei Vasilevitsch, and Peter Helwig, alloys of o-nitrophenol and naphthalene, 1904, A., i, 398.

alloys of 2:4-dinitrophenol and naphthalene, 1904, A., i, 398.

Saposhnikoff. Alexei Vasilevitsch, and W. Jagellowitsch, decomposition of nitrocellulose at temperatures below that of ignition, 1906, A., i, 68.

Saposhnikoff, Alexei Vasilevitsch, and I. Kanewsky, hardness and microstructure of alloys of lead and anti-

mony, 1907, A., ii, 869.

Saposhnikoff, Alexei Vasilevitsch, and Wladimir Rdultowsky, alloys of pieric acid and naphthalene, 1904, A., i, 399.

alloys of trinitrocresol and naphtha-

lene, 1904, A., i, 399.

Saposhnikoff, Alexei Vasilevitsch, and M. Sacharoff, hardness and microstructure of alloys of cadmium and zinc, 1907, A., ii, 869.

Saposhnikoff, J., the action of metals on fused picric acid, 1912, A., i,

105.

the inflammable capacity of mixtures of methyl chloride and air, 1912, A., i, 329.

Sapper, August. See Otto Fischer. Sarasin Edouard, Charles Eugène Guye, and Jules Micheli, radioactivity of the waters of Lavey-les-Bains, 1908, A., ii, 143.

Sarasin, Edouard, and Thomas Tommasina, action of slight rise of temperature on the induced radioactivity,

1911, A., ii, 244.

Sarasin, Edouard, Thomas Tommasina, and Jules Micheli, genesis of temporary radioactivity, 1905, A., ii, 3.

Sarcoli, Luigi. See Celso Ulpiani. Johann. Sargarian, See Steinkopf.

Sargent, George J., the decomposition of bromoform, 1912, A., i, 674.

Sargent, George J. See also Charles

Lathrop Parsons.

Sargent, George William, use of ferric potassium chloride for the solution of steel in making the estimation of carbon, 1903, A., ii, 332.

Sargent, Ledyard W. See Gilbert

Newton Lewis.

Sarow, Willfried, See Arthur Rosenheim.

Sarthon, J., presence of an anæroxydase and catalase in milk, 1910, A., ii, 57, 226, 326.

indirect determination of bacterial richness of cow's milk; catalasi-

metry, 1910, A., ii, 326.

comparison of results given by acidity determinations and by catalasimetry in estimating the freshness of milk, 1910, A., ii, 667.

studies of oxidation; the rôle of oxidising enzymes; oxydases containing iron; application of the new ideas to diseases of nutrition, 1912, A., ii, 962.

Sarti, C. See C. Gazzetti.

Sartori, A., injurious action of certain inorganic and organic substances on fishes, 1907, A., ii, 982. Meyer's reagent for the detection of

blood, 1911, A., ii, 947.

detection of fluorine, 1912, A., ii, 384.

Sartorius, Albert, rapid preparation of antimony pentasulphide (golden sulphide), 1908, A., ii, 859.

Sarvonat, F., simultaneous estimation of chlorine, bromine and iodine, 1912,

A., ii, 680.

Sarvonat, F., and Roubier, experimental poisoning by oxalic acid; localisation of the poison in the various organs, 1911, A., ii, 815.

Kumoji, the non-dialysable material of the urine, 1907, A., ii,

Sasaki, Takaoki, a benzoylpolypeptide from asparagine, 1907, A., i, 776.

activation of hæmolysin by aminoacids, 1909, A., ii, 249.

a new and sensitive reaction of scatole, A., ii, 166; 1911, A., 1910, ii, 80.

the behaviour of furylpropionic acid in the animal body, 1910, A., ii,

the degradation of polypeptides by bacteria. J., 1912, A., ii, 669.

Sasaki, Takaoki, and Ichiro Otsuka, the formation of hydrogen sulphide from cystine and other sulphur compounds by means of bacteria, 1912, A., ii, 475.

Sasaki, Takaoki, See also Emil Abderhalden.

Sasanoff, W., nitrification in black soils; influence of different factors on nitrification and the amounts of nitrates in the soil at different times of the year. 1908, A., ii, 614.

Sasse, Erich. See Otto Diels.

Sasse, Otto, volumetric estimation of lead, 1906, A., ii, 581.

Sassu, Matei. See Herman Decker.

Satie, Conrad. See Paul Jeancard. Sato, Tsunemaro, the nucleo-protein of spleen, 1910, A., ii, 56.

the origin of ethereal sulphates in the organism, 1910, A., ii, 58.

new reactions of thiocarbamide, 1910,

A., ii, 166.

Satta, Giuseppe, formation of acetone in the body, 1904, A., ii, 829; 1905, A., ii, 406; 1906, A., ii, 105.

the distribution of nitrogen in the

urine, 1905, A., ii, 407.

See also Riccardo Satta, Giuseppe. Luzzatto.

Satterly, John, amount of radium emanation in the atmosphere, 1908, A., ii, 918.

the amount of radium emanation in the lower regions of the atmosphere and its variation with the weather, 1910, A., ii, 676.

the absorption of radium emanation by cocoanut charcoal, 1910, A., ii,

the radium content of waters of the Cam, Cambridge tap water, and some varieties of charcoal, 1910, A., ii, 1025.

the radium-content of salts of potassium, 1911, A., ii, 243.

radium emanation contained in the air of various soils, 1912, A., ii, 117. radioactivity of marsh gas, 1912, A.,

ii, 118.

the radium content of various fresh and sea waters, and some other substances, 1912, A., ii, 118.

the quantities of radium and thorium emanations contained in the air of certain soils, 1912, A., ii, 522.

number of a-particles expelled when an atom of thorium emanation disintegrates, 1912, A., ii, 1123.

Sattler, analysis of lecithin, 1912, A., ii,

307.

Sattler. Hubert, absorption and excretion of iron in the alimentary canal of dogs and cats, 1905, A., ii, 333.

Sauer, Eberhard. See Erich Müller,

and Julius Schmidt.

Sauer, Ludwig, standard electrodes, 1904, A., ii, 307.

Sauerland, F., the presence of iron in true nucleic acids, 1910, A., i, 345. the resorption of drugs from ointments made from different bases, 1912, A., ii, 584.

Saugon, Louis. See Edouard Urbain. Saunier, R., estimation of volatile acidity in wines, 1906, A., ii, 812.

Saurel, Paul [Louis], the triple point, 1903, A., ii, 15.

a theorem of Tammann, 1903, A., ii,

critical states of a binary system, 1903,

A., ii, 132. stability of equilibrium of a homogeneous phase, 1904, A., ii, 550.

stability of the equilibrium of bivariant

systems, 1904, A., ii, 643. stability of the equilibrium of multivariant systems, 1904, A., ii, 715

indifferent points, 1904, A., ii, 715; 1905, A., ii, 683.

the displacement of the equilibrium and of bivariant of univariant systems, 1906, A., ii, 339.

Sautermeister, Anton. See Heinrich Kiliani.

Sautermeister, Constantin. See Carl Bülow.

Sauton, Benjamin. See Maurice Javillier, and Auguste Trillat.

Sautter, Richard. See August Klages. Sauvage, E. See Emile Louise.

Sauvage, Roger, action of phosphorus chlorides on organo-magnesium derivatives of the aromatic series, 1904, A., i. 1072.

Sauzéat, D., estimation of uric acid and xantho-uric compounds, 1912, A., ii,

Sava, Georges A. See Friedrich Kehrmann.

Savage, William George, gelatin surfacecolonies of Bacillus coli communis, 1904, A., ii, 362.

coagulation of milk by Bacillus coli communis, 1904, A., ii, 833.

bacteriological examination of tidal mud, 1905, A., ii, 341. streptococci and leucocytes in milk,

1906, A., ii, 298.

Savarè, Biagio, iodometric estimation of lævulic acid, 1906, A., ii, 907.

Savare, Biagio. See also Maurizio Padoa.

Savare, Michelangelo, the ferments of the placenta, 1907, A., ii, 111.

the amount of non-dialysable material in the urine of women in health and disease, 1907, A., ii, 494.

nucleo-protein of the placenta, 1908, A., i. 69.

Savariau, a method of preparation of cyclic aldehydes, 1908, A., i, 188.

Saveanu, D. See Fritz Weigert. Savès, A. See L. Lematte.

Savory, Horace. See Frederick Gowland Hopkins.

Sawa, Seitaro. See Oscar Loew.

Sawamura, Shin, the large bacillus observed in flacherie, 1905, A., ii, 472. micro-organisms of natto, 1906, A., ii, 880.

composition of teacleaves at various stages of development, 1908, A., ii, 125.

Sawitsch, W. W., London's polyfistula method, 1910, A., ii, 422.

question as to the identity of pepsin and chymosin, 1910, A., ii, 876.

Sawitsch, W. W. See also Th. J. Migay. Sawjaloff, W. W., a soluble modification of plastein, 1903, A., i, 451.

identity of pepsin and chymosin (rennin), 1906, A., ii, 98.

muscular work and protein metabolism, 1906, A., ii, 561.

plastein, 1908, A., i, 234.

Sawyer, Harris Eastman, potassium oxalate as a lead precipitant in sugar analysis, 1905, A., ii, 210.

Saxl, Paul, the relative proportions of the proteins of muscle in physiological and pathological conditions, 1906, A., ii, 872.

autolysis and fatty degeneration, 1907, A., ii, 980.

fat and ester hydrolysis in tissues, 1908, A., ii, 873.

Saxl. Paul. See also Lee Hess.

Saytzeff, Alexander M., action of zinc allyl iodide on the anhydrides of monobasic acids, 1908, A., i, 73.
Saytzeff, Alexander M., Theodosius

Petroff, Nicolaus Musuroff, Sergius Chowansky, Gregorius Andréeff, Bronislaw F. Chonowsky, and Andreas Luniak, action of zinc allyl iodide on anhydrides of monobasic acids, 1907, A., i, 815.

Saytzeff, Alexander M. See also Nico-

laus Saytzeff.

Saytzeff, Michael, action of zinc on a mixture of the haloid ester and anhydride of saturated monobasic acids, 1911, A., i, 419.

Savtzeff. Michael, action of zinc on a mixture of 1-methylcyclohexan-3one and allyl iodide, 1911, A., i, 444.

action of zinc on a mixture of menthone and all vl iodide, 1911, A., i, 474.

action of zinc on a mixture of cyclohexanone and allyl iodide, 1912, A., i, 777.

Saytzeff, Michael, and Unanoff, synthesis of methylethylnonylcarbinol,

A., i, 415.

Saytzeff, Nicolaus, and Alexander M. Saytzeff, behaviour at high temperatures of salts of the dihydroxystearic acid obtained by the oxidation of oleic acid by alkaline potassium permanganate solution, 1904, A., i, 368.

Sazanoff, P. See Volkmar Kohlschütter. Sazerac. Robert, an oxidising bacterium and its action on alcohol and glycerol,

1903, A., ii, 606.

Sazerac, Robert. See also Henri Agulhon. Sbarsky, B. See Alexis Bach.

Sborgi, Umberto, anodic behaviour of uranium, 1912, A., ii, 321.

anodic behaviour of niobium [colum-

bium], 1912, A., ii, 1132.

Scaffidi, Vittorio, equilibrium between proteins and electrolytes. V. Completion of the equilibrium surfaces in the system: globulin, magnesium sulphate, and water 1907, A., i,

the iron of the liver, 1908, A., ii, 210. action of cæsium on the normal and fatty heart, 1908, A., ii, 411

antagonistic action of barium chloride and sodium sulphate on the heart

action, 1908, A., ii, 520.

the changes in gaseous metabolism after exclusion of the hepatic circulation, 1908, A., ii, 1051.

nucleo-protein of the pig's liver.

1909, A., i, 196.

purine metabolism in selachians. 1909, A., ii, 683.

the gaseous exchange of nerve fibres after section, 1910, A., ii, 522.

purine metabolism. II. The capacity for destroying uric acid of the organs of Scyllium catulus, 1910, A., ii, 626.

purine metabolism. III. The total nitrogen and purine nitrogen in the organs of Scyllium catulus, 1910,

A., ii, 626.

metabolism. IV. The behaviour of the purine substances in the autolysis of the liver of Scyllium catulus, 1910, A., ii, 626.

Scaffidi, Vittorio, purine metabolism. V. The behaviour of the purine bases in muscle during work, 1911, A., ii, 216.

purine metabolism. VI. metabolism under the influence of diminished oxidative processes of the organism, 1911, A., ii, 507.

purine metabolism during starvation, 1911,

A., ii, 625.

purine metabolism. VIII. The content in purine bases of various kinds of muscular tissue, 1911, A., ii, 625.

Scagliarini, Gino, unstable nitrites fixed by means of organic bases. I. and II., 1912, A., ii, 941, 942.

Scagliarini, Gino. See also Riccardo Ciusa, and Maurizio Padoa.

Scal, Clair. See Georges Urbain.

Scala, Alberto, probable constitution of the diastase of rennet, 1904, A., i, 541.

vetches in cereal meal and in human food, 1904, A., ii, 365.

the probable chemical constitution of rennet, 1908, A., i, 236.

certain volatile and non-volatile compounds formed in rancid fats, 1908, A., i, 387.

Scala, Alberto, and Giuseppe Bonamartini, compounds of copper with eggalbumin, 1910, A., i, 146.

Alberto. See also Margherita

Traube-Mengarini.

Scalinci, Noè. See Filippo Bottazzi. Scandola, Everardo, hydroxynitrosylsulphuric acid, 1911, A., ii, 273.

the action of metallic sodium on hydrazine hydrate, 1911, A.,

colorimetric estimation of strychnine, 1911, A., ii, 553.

ketones derived from isomyristicin, 1912, A., i, 196.

Scandola, Everardo. See also Domenico Ganassini, and Giuseppe Oddo.

Scarafia, Piétro. See Luigi Francesconi. Scarborough, Harold Archibald. Hamilton McCombie.

Martin McRae. Scarbrough. Yandell Henderson.

Scarlat, Georg, preparation of diethylxanthine, 1905, A., i, 160.

Scarlata, Giuseppe. See Antonio Denaro.

Scarpa, G. See Carlo Sandonnini.

Scarpa, Oscarre, determination of the viscosity of phenol in the liquid state, 1903, A., ii, 640.

Scarpa, Oscarre, viscosity of mixtures of water and phenol, 1904, A., i, 492. magnetic and optical investigations

on certain magnetic colloids, 1906, A., ii, 829.

synthesis of nitrogen trioxide by Helbig's method, 1907, A., ii, 760.

does Beer's law hold for colloidal solutions? 1908, A., ii, 244. theory of solutions, 1908, A., ii, 473.

diffusion [of dissolved substances]. 1910, A., ii, 1044; 1911, A., ii, 472.

analysis of the radioactivity of some thermal waters of the island of Ischia, 1911, A., ii, 8.

measurement of the viscosity of liquids and of lubricants, 1911,

A., ii, 17.

apparatus for the measurement of transport numbers, 1912, A., ii,

calculation of diffusion experiments, 1912, A., ii, 904.

Scelsi, Giuseppe, See Francesco Carlo Palazzo.

Schaak, Milton Franklin, estimation of boric acid, 1904, A., ii, 640.

Schaal, Oscar. See Carl Hell.

Schaal, Richard, acids of high melting point in Japanese wax, in particular, nonadecamethylenedicarboxylic acid, 1908, A., i, 3.

Schachner, Alois, condensation formisobutaldol with acetaldehyde.

1905, A., i, 171. Schacht, P. See See Adolf Grün.

Schade, Heinrich, fermentation of sugar without enzymes, 1906, A., i, 931; 1907, A., ii, 857.

the phenomena of fermentation from the catalytic point of view, 1908, A., i, 136.

colloido-chemical theory of the constitution of water, 1910, A., ii, 696.

formations of concretions in the process of the separation of emulsion colloids, 1910, A., ii, 835.

coexistence of the crystalline and colloidal states, 1910, A., ii, 835.

Schade, Heinrich. See also Eduard Buchner.

See Arthur Binz, and Schädel, Kurt. Franz Sachs.

Schaefer, Clemens, infra-red absorption spectrum of carbon dioxide as affected by pressure, 1905, A., ii, 129.

Schaefer, Curt. See Ernst Erdmann. Schaefer, Emil, tungsten compounds, 1904, A., ii, 178.

Schaefer, Emil. See also Georg von Knorre.

Schäfer, Ernst, estimation of arsenic. antimony, and sulphur in ores by heating in a current of chlorine or of carbon dioxide charged with bromine, 1906, A., ii, 394.

Schäfer, Edward Albert, and Herbert Johann Scharlieb, action of chloroform on the heart and blood-vessels, 1903. A., ii, 437; 1905, A., ii, 105.

Schæfer, Guillaume F., normal occurrence of arsenic in the human organism,

1907, A., ii, 371.

Schaefer, George L., solubility of alkaloids of cinchona bark and their salts in water at 25°, 1910, A., i. 418.

ethylmorphine and ethylmorphine hydrochloride (dionine), 1912, A.,

i. 797.

Schäfer, Hans, electroaffinity of anions. I. The oxalate ion, 1905, A., ii, 499.

Schäfer, Hermann, and Bernhard Tollens, formation of bases from acetophenone, formaldehyde, and ammonium chloride, 1906, A., i, 574.

Schaefer, Konrad, absorption spectra of

nitrates, 1910, A., ii, 562.

Schaefer, Konrad. See also Edward Charles Cyril Baly, and Heinrich Ley. Schäfer, Kurt. See Alfred Wohl.

haefer, Oscar C., and Herman Schlundt, dielectric constants of the Schaefer, halogen hydrides, 1910, A., ii, 12.

Schaefer, Oscar C. See also Herman Schlundt.

Schäfer, Paul, hæmolytic extracts of organs, 1911, A., ii, 996.

Schäfer, Paul. See also Julius Morgenroth.

Schäfer, Robert. See Wilhelm Wisli-

Schaefer, Walter. See Max Guthzeit. Schaeffer, A., [estimation of] iron and copper in cheese curds, 1909, A., ii, 941.

Schaeffer, Alfred, and A. Murúa, some p-nitrobenzyl-mercaptals and -mercaptoles, 1907, A., i, 609.

Schaeffer, Ernst. See Arthur Kötz. Schaeffer, Georges. See André Mayer.

Schaeffer, Helen, absorption spectra of salts of the rare earths in various solvents, 1907, A., ii, 518.

Schaeffer, John A., double fluorides of titanium, 1909, A., i, 49.

Schäffer, Max. See Richard Stoermer. Schaeppi, Johannes Heinrich. See Martin Onslow Forster.

Schaer, Eduard, physiologico-chemical notes, 1903, A., ii, 344.

Schaer, Eduard, influence of alkaline substances on spontaneous oxidation, 1905, A., i, 434.

a new form of test-tube, 1905, A., ii,

514

use of chloral hydrate, chloral alcoholate, and bromal hydrate solutions in chemical, microscopic, and microchemical investigations, 1908, A., ii. 62.

the behaviour of alkaloids towards quinone and chloral hydrate, 1912,

A., ii, 503.

reactions of hydrocœrulignone, 1912, A., ii, 1216.

Schärer, Otto. See Carl Bülow.

Schärtel, Georg. See Josef Brandl, and Georg Rohde.

Schätzlein, Christian. See Robert Stoll6. Schaffer, Friedrich, detection and estimation of formaldehyde in wine stored in barrels which have been disinfected with formaldehyde, 1909, A., ii, 99.

Schaffer, Friedrich, and Ernst Philippe, the detection of sucrose in wine by Rothenfusser's process, 1911, A., ii, 665.

the quantity of nitrogen compounds in

wines, 1912, A., ii, 676. Schaffer, Friedrich. See also Julius

Mai.
Schagger, A. See Jan von Zawidzki.
Schaidhauf, Alois. See Wilhelm Muth-

mann.
Schairer, Otto, formation of arsenates
from arsenious acid and metallic

peroxides, 1904, A., ii, 166.
Schairer, Otto. See also Julius Schmidt.
Schalhorn, Theodor. See August

Michaelis. Schalk, Willem van der. See Fritz

Ullmann.
Schall, Adolf. See August Michaelis.
Schall, [Joh. Friedrich] Carl, Wessel's dicarbo-base, 1903, A., i, 201.

viscosity of supercooled solutions, 1907, A., ii, 11.

formation of dyes in ultra-violet light, 1908, A., i, 289.

organic and fused salts (conductivity), 1908, A., i, 736.

detection of ultra-violet rays, 1908, A., ii, 139.

demonstration of the absorption of colourless solutions in the ultraviolet, 1909, A., ii, 359.

decomposition of carbon tetrachloride vapour in the high tension electric arc, 1909, A., ii, 399.

carbodiphenylimide, 1910, A., i, 245.

1,

Schall, [Joh. Friedrich] Carl, paper sensitive to ultra-violet light, 1910, A., ii, 249.

measurements of photochemical action in ultra-violet light by means of sensitive films, 1911, A., ii, 835.

alteration of viscosity on solution, 1912, A., ii, 434, 739.

Schall, Carl, and K. Andrich, electrolytic preparation of persulphates, 1912, A., ii, 638.

Schall, Richard. See Julius Schmidt. Schaller, Waldemar Theodore, minerals

from Leona Heights, Alameda Co., California, 1903, A., ii, 489.

spodumene from California, 1904, A., ii, 53.

some Californian minerals, 1904, A., ii, 348.

dumortierite, 1905, A., ii, 262.

mineralogical notes; [gyrolite, prehnite, anhydrite, bournonite, glaucodote], 1905, A., ii, 724.

chalybite and barytes from Maryland, 1906, A., ii, 369.

composition of molybdic ochre, 1907, A., ii, 480.

mineralogical notes [purpurite, etc.], 1907, A., ii, 790.

powellite and molybdite, 1907, A., ii, 971.

composition of hulsite and paigeite, 1910, A., ii, 621.

ludwigite from Montana, 1910, A., ii, 873.

axinite from California, 1910, A., ii, 874.

probable identity of podolite with dahllite, 1910, A., ii, 1076.

identity of stelznerite with antlerite, 1910, A., ii, 1076. barbierite, a monoclinic soda-felspar.

1910, A., ii, 1078.

natramblygonite, a new mineral, 1911, A., ii, 121.

composition of jamesonite and warrenite, 1911, A., ii, 209.

bismuth ochres from San Diego Co., California, 1911, A., ii, 293.

ferritungstite, a new mineral, 1911, A., ii, 903.

composition of nephelite, 1911, A., ii, 992.

the alunite-beudantite group, 1911, A., ii, 1101.

composition of French phosphorite minerals, 1911, A., ii, 1102.

crystallised variscite from Utah, 1911, A., ii, 1103.

crystallised turquoise from Virginia, 1912, A., ii, 173

Schaller, Waldemar Theodore, new manganese phosphates from California, 1912, A., ii, 456.

the rutile group, 1912, A., ii, 773. challer, Waldemar Theodore, and

Schaller, Waldemar William Francis Hillebrand, lawsonite, 1904, A., ii, 350.

Schaller, Waldemar Theodore, and Frederick Leslie Ransome, bismite,

1910, A., ii, 220.

Schaller, Waldemar Theodore. See also B. S. Butler, Frederick A. Canfield, Louis Caryl Graton, William Francis Hillebrand, A. Knopf, and Esper S. Larsen, jun.

Schames, Léon, a new hypothesis relating to the nature of different states of aggregation and of [allotropic] modifications, 1912, A., ii, 738, 1141.

Schander, Richard, formation of hydrogen sulphide by yeast, 1905, A., ii, 647.

Schaper, C., oxidation potential of the oxalates of iron and of the oxalate ion, 1910, A., ii, 380.

Schapire, Bernhard, electrical conductivity of sodium and potassium chlorides in mixtures of water and ethyl alcohol, 1904, A., ii, 801.

Schapiro, A., influence of chloroform on the growth of young animals, 1906,

A., ii, 180.

Schapiro, A. See also Max Wunder. Schaposchnikoff, K., an empirical relationship between the densities of two liquids, 1905, A., ii, 373.
Schaposchnikoff, W. A., secondary \(\beta\)-

rays, 1911, A., ii, 840.

Schaposchnikoff, Wladimir Georg, dihydrophenazine, 1905, A., i, 840. new method of preparing azophenin, 1907, A., i, 948.

synthesis of the safranines, 1910, A., i, 782.

substantive dyeing, 1911, A., ii, 1070.

theory of dyeing, 1912, A., ii, 241.

Schaposchnikoff, Wladimir Georg, and F. Goleff, 1:1'-dichloro-2:2'-dinaph-thylamine, 1905, A., i, 644.

Schaposchnikoff, Wladimir Georg, and N. N. Orloff, synthesis of the simplest safranine: 3:6-diamino-5-phenazonium chloride, 1910, A., i, 783.

Schaposchnikoff, Wladimir Georg, and B. Sachnowsky, analysis of aniline oil by the volumetric method, 1903, A., ii, 395.

Schaposchnikoff, Wladimir Georg, and W. Sventoslavsky, the copper compound of p-nitroaniline-red, 1905, A., i, 161.

Schapper, H. See Charles Eugène Guve. Schardinger, Franz, detection of heated milk by means of methylene-blue,

1903, A., ii, 190. thermophile bacteria from various foods and milk and the products formed when these bacteria are cultivated in media containing carbohydrates, 1904, A., ii, 67.

Bacillus macerans, a bacillus which produces acetone, 1905, A., ii, 646.

the formation by microbial activity from starch of crystalline substances which do not reduce Fehling's solution, 1909, A., ii, 82.

formation of crystalline polysaccharides (dextrins) from starch paste by microbes, 1911, A., i, 181.

Oswald, See Richard Scharfenberg, Anschütz.

Scharfenberg, Wilhelm. See E. Schürmann, Arthur Stähler, and Alfred

Scharff, Ernst, glowing of phosphorus and some of its compounds, 1908, A., ii, 373.

Ernst. See Scharff, also Rudolf Schenck, and Theodor Zincke.

Scharizer, Rudolf, composition and synthesis of romerite: ferropallidite, 1903, A., ii, 555.

constitution and genesis of iron sulphates; synthesis of sodium ferric sulphates, 1905, A., ii, 823.

constitution and genesis of iron sulphates. VI. Coquimbite, römerite,

copiapite, 1907, A., ii, 482. constitution and genesis of natural ferric sulphates. VII, Ihleite, janosite, copiapite, 1909, A.,

Scharlieb, Herbert Johann. See Edward Albert Schäfer.

Scharwin, Wassili W[assilovitsch], action of acetic anhydride and sodium acetate on phenanthraquinone, 1905, A., i, 448.

coloration of solutions of nitrophenols, 1910, A., ii, 396.

Scharwin, Wassili W., N. I. Bjenkoff, S. A. Dmitrieff, A. L. Gandurin, K. A. Kusnezoff, and Wladimir Naumoff, condensation of anthraquinone

with phenols, 1911, A., i, 655. Scharwin, Wassili W., and Kaljanoff, position of entrance of the diazogroup in the formation of azo-dyes,

1908, A., i, 704.

Scharwin, Wassili W., and M. I. Kusnetzoff, condensation of anthraquinone with phenols, 1903, A., i, 640.

Scharwin, Wassili W., S. Naumoff, and A. L. Gandurin, condensation of anthraquinone with phenols, 1904, A., i, 1032.

Wassili W., and Paul Scharwin. Schorigin, oximes of unsymmetrical ketones with two similar nuclei, 1903,

A., i, 635.

Schatz, W., estimation of ferric iron in the presence of ferrous iron, 1910, A., ii, 457.

Schaub, F. See Julius Tröger.

Schaub, Fritz. See Carl Bülow. Schaub, Ira Obed. See James Harvey

Pettit.

Schaum, [Ferdinand] Karl [Franz], photographic activity of ozone, 1905, A., ii, 295.

definition of radioactivity, 1906, A.,

ii, 411. "dimorphism" of benzophenone,

1910, A., i, 391. Schaum, Karl, and Richard von der Linde, oxidation and reduction potentials, 1903, A., ii, 464.

Schaum, Karl, and Heinrich Wüstenfeld, selective absorption and emission,

1912, A., ii, 18.

Schaumann, Georg. See Erwin Rupp. Schaumann, H., estimation of sugar by Allihn's and Meissl's methods, 1908, A., ii, 437.

estimation of phosphoric acid in metabolism experiments, 1909, A., ii, 829. Schaumann, Ludwig. See Leopold

Rügheimer.

Scheda, Kurt, derivatives of bromoacetoanilide, 1903, A., i, 410.

trihydromethylenefurfuranoxime and its compound with hydrogen chloride, 1903, A., i, 509.

Scheda, Kurt. See also Eduard

Buchner.

School, Karl [Friedrich Franz Christian], formulæ for the vapour pressure of water, ice, and dilute sulphuric acid at low temperatures, 1906, A., ii, 422.

refractive indices of gases at the temperature of the room and of liquid

air, 1907, A., ii, 145.

Scheel, Karl, and Wilhelm Heuse, apparent deviations from Mariotte's law and their influence on the measurement of small pressures, 1908, A., ii, 1016.

measurement of the saturation pressure of water vapour below 0°, 1909, A.,

ii, 643.

specific heat, Cp, of air at room and low temperatures, 1912, A., ii, 19.

School, Karl, and Rudolf Schmidt, refractive power of helium, 1908, A., ii, 333.

Scheele, M. H. See Charles Hugh Neilson.

Scheen, Oscar, electrolytic estimation of antimony, 1908, A., ii, 636.

Scheen, Oscar. See also Rudolph Fittig. Scheermesser, Friedrich Wilhelm, pepsin-

glutinopeptone, 1904, A., i, 463. Scheffer, Frans Eppo Cornelis, heterogeneous equilibrium in dissociating compounds. II., 1909, A., ii, 985; 1910, A., ii, 278; 1911, A., ii, 379.

1910, A., ii, 484.

appearance of a maximum and minimum pressure with heterogeneous equilibria at a constant temperature, 1910, A., ii, 697.

sublimation by the dynamical method,

the determination of three-phase pressures in the system: hydrogen sulphide and water, 1911, A., ii,

the system: hydrogen sulphide-water, 1911, A., ii, 870.

gas equilibria, 1912, A., ii, 328,

quadruple points and the continuities of the three-phase line, 1912, A., ii,

the system: ether-water, 1912, A., ii, 1151.

Scheffer, Frans Eppo Cornelis, and J. P. Treub, vapour pressure of nitrogen peroxide, 1912, A., ii, 132, 936.

Scheffer, Frans Eppo Cornelis, See also Andreas Smits.

Scheiber, Johannes, N-a-naphthylhydroxylamine, 1904, A., i, 867. N-alkylketoximes, 1908, A., i, 763.

action of chlorides of dibasic acids on ethyl sodiomalonate, 1909, A., i,

action of phthalylglycyl chloride on ethyl sodioacetoacetate, 1909, A., i, 390.

cuprous acetylide in analysis, 1909, A., ii, 765.

homologous nature of anthranil and methylanthranil, 1911, A., i, 915.

Scheiber, Johannes, and Ernst Beckmann, N-a-naphthylhydroxylamine, A., i, 725.

Scheiber, Johannes, and Paul Brandt, N-a-naphthylhydroxylamines. III., 1908, A., i, 725.

derivatives of 1-amino-\beta-naphthol, 1908, A., i, 726.

N-alkylketoximes, 1908, A., i, 764. Scheiber, Johannes, and A. Deutschland, o-cyanobenzoic acid, 1912, A., i, 863.

Scheiber, Johannes, and Rudolf Flebbe, constitution of copper acetylide, 1908, A., i, 933.

Scheiber, Johannes, Hanns Fleischmann, and Rudolf Flebbe, appearance of stereoisomerism in N-substituted aldoximes, 1909, A., i, 391.

Scheiber, Johannes, Hanns Fleischmann, and Kurt Kloppe, N-alkylated aldox-

imes, 1911, A., i, 382.

Scheiber, Johannes, and Max Knothe, chlorocamphornitrilic acid, A., i, 542.

behaviour of acid dichlorides towards ammonia, 1912, A., i, 701.

Scheiber, Johannes, and P. Lungwitz, action of the chlorides of dibasic fatty acids on ethyl sodioacetoacetate, 1911, A., i, 836.

Scheiber, Johannes, and Paul Oppermann, phthalyl chloride, 1912, A., i,

Scheiber, Johannes, Hans Reckleben, and K. Strauss, constitution of copper acetylide. II., 1911, A., i, 188.

Scheiber, Johannes, and Hubert Wolf, N-alkylketoximes, 1907, A., i, 1028. Scheiber, Johannes. See also Ernst

Beckmann, and Hans Reckleben. Scheibler, Helmuth, the mutual relationship of the optically active forms of \$\beta\beta'-iminodibutyric and \beta-aminobutyric acid, 1912, A., i, 682.

Scheibler, Helmuth, and Alvin Sawyer Wheeler, the Walden inversion. VII. Optically active leucic (a-hydroxyisohexoic) acid and its transformation into a-bromoisohexoic acid, 1911, A., i, 835.

Scheibler, Helmuth, See also Emil Fischer.

Scheid, Karl, a lecture demonstration of lime-burning, 1909, A., ii, 308.

Scheidemandel, Julius. See Wilhelm Muthmann.

See Wladimir E. Paw-Schein, S. D.

Scheit, Arthur. See Josef Emanuel Hibsch.

Scheitlin, Emil, preparation of 4-sulphonamino-1-phenyl-2:3-dimethyl-

5-pyrazolone, 1908, A., i, 688. eparation of 4-dimethylamino-1preparation phenyl-2:3-dimethyl-5-pyrazolone, 1908, A., i, 1019.

Scheitz, Paul, commercial azolitmin, 1910, A., i, 865.

the portion of litmus soluble in alcohol,

1910, A., i, 866. Scheitz, Wilhelm. See Balthasar Pfyl. Scheljapin, A. See Leo Pissarjewsky.

Schell, Curt, photographic-photometric absorption measurements of silver iodide in the ultra-violet spectrum. 1911, A., ii, 831.

Schellack, Eduard. See Otto Wallach. Schellbach, Hans. See Hermann Emde, and O. Steppuhn.

Schelle. Paul. See Hermann Kunz-Krause.

Schelle, Robert, preparation tellurium, 1911, A., ii, 388.

Schellens, Walther, behaviour of vegetable and animal textile fibres with solutions of metallic salts, 1906, A., i, 69.

Scheller, Alfred. See Erich Müller. Scheller, Emil. See Alfred Heiduschka,

and Andreas Lipp. Schellhaass, H. W. Hugo, anomalous anodic polarisation by nitric acid, 1908, A., ii, 249.

Schellhaass, H. W. Hugo. See also Erich Müller.

Schellhase, Willi. See Kurt Schern, Scheloumoff. See S. Kostytscheff. Schemm. A. See Alois Bömer.

Schemtschuschny, Sergius F., alloys of zinc and antimony, 1906, A., ii, 448,

silver-magnesium alloys, 1906, A., ii, 539.

alloys of potassium chloride with potassium chromate, potassium dichromate, and silver chloride, 1907, A., ii, 258,

Schemtschuschny, Sergius F., and S. W. Belynsky, cobalt-tin alloys, 1908, A.,

Schemtschuschny, Sergius F., and N. N. Efremoff, compounds of phosphorus and manganese, 1907, A., ii, 777.

Schemtschuschny, Sergius F., and F. Rambach, alloys of the chlorides of the alkali metals, 1910, A., ii, 204.

Schemtschuschny, Sergius F., and I. Schepeleff, phosphorus compounds of cobalt, 1909, A., ii, 892, 1019.

Schemtschuschny, Sergius F., G. G. Urazoff, and A. Rykovkoff, alloys of manganese with copper and nickel, 1907, A., ii, 777.

Schemtschuschny, Sergius F. See also Nicolai S. Kurnakoff, and Nicolai N.

Nagornoff.

Schenck, Martin, some substances of physiological importance, 1905, A., i, 28.

oxaluramide, 1905, A., i, 267.

guanidine picrolonate, 1905, A., i, 513. nuclein bases produced during the autofermentation of pancreas, 1905, A., ii, 266.

Schenck, Martin, autodigestion of some varieties of yeast, 1905, A., ii, 547. autodigestion of some yeast species (top fermentation yeasts, distillery

and film yeasts), 1906, A., ii, 190. cholic acid, 1910, A., i, 10; 1911, A.,

i, 10.

methylated guanidines, 1910, A., i, 99; 1911, A., i, 842; 1912, A., i, 424, 685.

some guanidine derivatives, 1910, A.,

i, 99.

glycinamide, 1910, A., i, 100.

glycocyamine and glycocyamidine, 1910, A., i, 546.

Schenck, Martin. See also Friedrich

Kutscher.

Schenck, [Friedrich] Rudolf, nature of liquid crystals, 1903, A., ii, 137.
 phosphorus, 1903, A., ii, 363; 1904, A., ii, 117.

[decomposition of carbon monoxide], correction, 1904, A., ii, 28.

red phosphorus, 1905, A., ii, 244.

reduction of ferrous oxide and the three modifications of carbon, 1906, A., ii, 363.

electrolytical conductivity of alloys and the theory of electrons, 1907, A., ii, 429.

preparation of tetranitromethane, 1909,

A., i, 689.

electron theory and solid solutions of metals, 1910, A., ii, 482.

Schenck, Rudolf, and Ernst Buck, molecular weight of solid phosphorus hydride, 1904, A., ii, 252.

Schenck, Rudolf, and Ernst Eichwald, liquid crystals, 1904, A., i, 118. Schenck, Rudolf, and E. Ellenberger,

Schenek, Rudolf, and E. Ellenberger, recognition of tautomerism in liquids, 1904, A., ii, 721.

Schenck, Rudolf, and Victor Falcke, hydrogen persulphide, 1908, A., ii,

762.

Schenck, Rudolf, and Wilhelm Heller, mutual relationships of the different modifications of carbon, 1905, A., ii, 519.

reactions in the reduction of iron, 1905, A., ii, 526.

Schenck, Rudolf, and Jakob Litzendorff, decomposition of di-iodoacetylene, 1904, A., i, 841.

Schenck, Rudolf, and F. Mihr, glowing of Sidot's blende under the influence

of ozone, 1904, A., ii, 732.

Schenck, Rudolf, F. Mihr, and Hans
Banthien, cause of the conductivity
of air which has been in contact with
phosphorus, 1906, A., ii, 326.

Schenck, Rudolf, and Wilhelm Rassbach, equilibrium in the reaction between lead sulphide and its oxidation products, 1907, A., ii, 546, 619; 1908, A., ii, 947.

Schenck, Rudolf, and Ernst Scharff, detection of small amounts of yellow

phosphorus, 1906, A., ii, 392.

Schenck, Rudolf, H. Semiller, and Victor Falcke, experimental studies on the reduction and formation of carbide by iron, 1907, A., ii, 470.

Schenck, Rudolf, and Friedrich Zimmermann, the decomposition of carbon monoxide and chemical equilibrium in the blast furnace, 1903, A., ii,

423,

Schenck, Rudolf. See also Franz Richarz. Schenck zu Schweinsberg, Eduard (Freiherr). See Richard Stoermer.

Schenk, Carl, transformations of the quaternary ammonium hydroxides of acridylpropionic acid, 1906, A., i, 698.

Schenk, Carl. See also Herman Decker. Schenk, Daniel. See Edgar Wedekind. Schenk, Konrad. See August Michaelis.

Schenk, Richard, radioactive properties of air, soil, and water in and around Halle, 1905, A., ii, 432.

Schenke, Vincent, calcium phosphate as an addition to food, 1903, A., ii, 570.

estimation of phosphoric acid by the citrate method; a source of error hitherto overlooked and a modification for avoiding it, 1905, A., ii, 479.

estimation of phosphoric acid by the citrate method, 1906, A., ii, 392.

estimation of potassium by the perchloric acid method in manures, dung, soils, and vegetable substances, etc., 1908, A., ii, 321.

estimation of total nitrogen by E. A. Mitscherlich's method, 1909, A., ii, 699.

000

estimation of nitrogen in nitrates and nitrites, 1909, A., ii, 1051.

Schenke, Vincent, and Paul Krüger, estimation of potassium by the perchloric acid method in manures, soils, crops, etc., 1907, A., ii, 910.

Schenkel, Julius, reactions of 2:4:6-trihydroxypiperidine trisulphite, 1910,

A., i, 875.

Schenkel, Julius. See also Hans Theodor Bucherer, and Emil Fischer.

Schepeleff, I. See Sergius F. Schemtschuschny. Schepss, Wilhelm. See Julius Tafel. Scherenziss, Peter. See Robert Kremann. Schereschewski, Emil. See Alexander Tschirch.

See Chemische Fabrik auf Schering, E.

Aktien vorm, E. Schering.

Scheringa, Klaas, separation of benzoic and cinnamic acids, 1907, A., ii, 823; 1909, A., ii, 191.

relation between the atomic weights of different groups of the periodic system, 1910, A., ii, 491.

colorimetric estimation of lead in potable water, 1910, A., ii, 1112.

detection and estimation of potassium perchlorate in potassium chlorate, 1911, A., ii, 153.

adsorption experiments, 1911, A., ii,

position of the most important elements in the periodic system, 1911, A., ii,

tests for purity, and the washing of precipitates in relation to adsorption, 1911, A., ii, 765.

the periodic system, 1912, A., ii, 36.

Schermbeck, A. J. van, humic acids, 1907, A., ii, 648.

Suchting's method for estimating acidity of soils, 1908, A., ii, 743. humie acid, 1908, A., ii, 994.

Schern, Kurt, the Schardinger reaction for milk, 1909, A., ii, 708.

Schern, Kurt, and Willi Schellhase, study of the guaiacum-guaiacol test,

1912, A., ii, 701. Schernay, N. A., temperatures of maximum density of aqueous hydrogen chloride solutions and the expansion of the latter on heating, 1908, A., ii,

479. Scherpe, Richard, the influence of carbon disulphide on the decomposition of nitrogenous compounds in the soil, 1910, A., ii, 339.

effect of carbon disulphide on decomposition processes in soils, 1910, A.,

ii, 891.

Scherubel, E. F. See William Dorrington Richardson.

Schestakoff, Peter I[vanovitsch], action of hypochlorites on carbamide: new synthesis of hydrazine, 1905, A., i, 332.

Schestakoff, Peter I., and N. Kazakoff, pyrimidines and the reactions of amidines with ethyl acetoacetate, 1912, A., i, 1032.

Schestakoff, Peter I. See also Alexis A. Shukoff.

Schetelig, J., thortveitite, a new mineral, 1912, A., ii, 56.

Schetelig, J. See also Claus Nissen Riiber.

Scheuble, Rudolf, formation of normal diprimary decylene glycol (decanean-diol) by reduction of derivatives of sebacic acid, 1904, A., i, 3.

miscibility of solutions of phenols in aqueous alkalis with organic substances insoluble in water, 1907,

A., i, 313.

preparation of normal oxalic acid esters of lower aliphatic alcohols, 1911, A., i, 419.

Scheuble, Rudolf, and Emmo Loebl, formation of alcohols by reduction of acid amides, 1904, A., i, 466; 1905, A., i, 2.

Schenble, Rudolf. See also Bertrand

Bibus.

Scheuer, Otto, a new apparatus for washing and absorbing gases, 1904, A., ii, 555.

preparation of oxides of nitrogen by high tension discharges in air, 1905,

A., ii, 702.

apparatus for determining the freezing point of mixtures, 1908, A., ii, 928. density of hydrogen chloride; atomic

weight of chlorine, 1909, A., ii, 991. physico-chemical investigation of binary mixtures with an optically active component, 1910, A., ii, 470.

Scheuer, Otto. See also Wilhelm Vaubel. Scheuermann, Rudolf. See Hartwig Franzen.

Scheunert, Arthur, influence of movement of the body on the digestion and absorption of food-stuffs in the horse, 1905, A., ii, 733.

digestion of cellulose in, and ferments of, the cæcum, 1906, A., ii, 463.

comparative study of protein cleavage in the stomach, 1910, A., ii, 322. the digestion of cellulose in domesti-

cated animals. I., 1910, A., ii, 520. the digestion of cellulose in domesticated animals. III. As to the solubility of cellulose in the saliva

of the sheep, 1910, A., ii, 521. Scheunert, Arthur, and Robert Bergholz, pancreatic concrements, 1907, A., ii, 711.

Scheunert, Arthur, and Walther Grimmer, digestion in the horse when fed on maize, 1906, A., ii, 239.

the enzymes contained in food and their rôle in digestion, 1906, A., ii,

462. certain concretions in a cyst of the mammary gland in a horse, 1912, A., ii, 186.

Scheunert, Arthur, and Ernst Lötsch. can the dog digest cellulose or raw fibre ? 1909, A., ii, 905.

estimation of cellulose by the methods of Lange and of Simon and Lohrisch,

1910, A., ii, 464.

Scheunert, Arthur. See also Walther Grimmer.

Scheunert, Karl. See Friedrich Kehrmann.

Schewket, Omer. See Carl Neuberg. Schiavon, Mario Guido, solubility of sodium acetate in water and alcohol, 1903, A., i, 396.

Schicht, Heinrich, and Karl Halpern, estimation of unsaponifiable matters

in fats, 1907, A., ii, 410.

Schick, Georg. See Paul Friedländer. Schick. Karl, solubility of red and vellow mercuric oxide and its dissociation, 1903, A., ii, 147.

Schick, Karl. See also Max Le Blanc. Schidlof, Arthur. See Charles Eugène

Guye.

Schidrowitz, Philip, proteolytic ferment

of malt, 1903, A., ii, 680.

detection and estimation of mineral acid in acetic acid and vinegar, 1903, A., ii, 700.

estimation of the proteolytic capacity

of malt, 1904, A., ii, 460.

estimation of morphine in opium,

1904, A., ii, 524. estimation of higher alcohols (fusel oil) in distilled liquors, 1907, A., ii, 585.

Schidrowitz, Philip, and Harold Albert Goldsbrough, detection and estimation of small quantities of antimony, 1911,

A., ii, 338.

Philip, and Frederick Schidrowitz. Kaye, some conditions affecting the ester value of brandy, 1905, A., ii, 486.

estimation of higher alcohols in spirits, 1905, A., ii, 486; 1906, A., ii, 584.

Schieffelin, William Jay, and Thomas W. Cappon, manufacture of lithia from lepidolite, 1908, A., ii, 690.

Schierbeck, N. P., composition of fæces during different diets, 1904, A., ii, 755.

Schierenberg, Fritz. See Ferdinand Henrich.

Schiess, Emanuel. See William Henry Perkin, jun.

Schifani, Calogero. See Arnaldo Piutti. Schiff, Hugo, discrimination between aminic and acidic functions by means of formaldehyde, 1903, A., i, 232.

Schiff, Hugo, acid function of hydroxyloxamide, 1903, A., i. 327,

estimation of formaldehyde, 1903. A., ii. 341.

formation of protocatechuic anilide, 1905, A., i, 45.

crystalline chromic phosphate, 1905, A., ii, 255.

estimation of halogens in organic

substances, 1906; A., ii, 797. phenylbiurets and the biuret reaction.

1907, A., i, 206.

Schiff, Robert, the three isomeric ethyl benzylideneanilineacetoacetates, 1903, A., i, 172.

new cinchonic acid syntheses, 1910,

A., i, 134.

Schiff, Robert. See also G. Bianchi. See Wilhelm Strecker. Schiffer. Paul. Schildbach, R., electrochemical behaviour of cobalt, 1911, A., ii, 13.

Schiller, Emil, thionyltartaric acid esters, 1909, A., i, 552.

Schiller, Emil. See also Otto Ruff.

Schiller, Herbert, Becquerel effect for complex iron and uranium salts, 1912, A., ii, 1127.

Schiller, Josef, ratio of iron and magnesium in olivine and rhombic pyroxene, 1906, A., ii, 770.

Schiller, Nicolai N., significance of the discontinuity of dP/dT in the application of the phase rule, 1906, A., ii, 218.

reciprocal behaviour of solute and solvent, 1906, A., ii. 220.

Schilling, Benomar. See Emil Abderhalden.

Schilling, Claus, M. von Krogh, Walther Schrauth, and Walter Schoeller, the action of organic mercury compounds in infections by Spirochaetae, 1912, A., ii, 1197.

Schilling, H., estimation of chromium in bronzes containing tin and antimony, 1912, A., ii, 809.

gravimetric estimation of zinc, 1912, A., ii, 1212.

Schilling, Johannes, the thorite minerals proper (thorite and orangite), 1903, A., ii, 85.

occurrence of tantalum and niobium, 1905, A., ii, 537.

Schilling, Johannes. See also Paul Jannasch.

Schilling, Karl. See Johann Georg Koenigsberger.

Schillinger, R., the spark spectra of potassium and sodium, 1910, A., ii, 369.

Schiloff, Nikolai, coupling of chemical processes. I., 1903, A., ii, 276.

Schiloff, Nikolai, kinetics of oxidation with permanganate, 1903, A., ii, 720.

Schiloff, Nikolai, and Boris Berkenheim. physico-chemical studies of photographic developers. II. Oxidation of ferrous ion in presence of oxalate ion, 1912, A., i, 937.

Schiloff, Nikolai, and S. Fedotoff, physico-chemical studies of photographic developers. I. Quinol-sulphite developer, 1912, A., i, 966.

Schiloff, Nikolai, and A. Pudofkin, influence of the medium on reaction

velocity, 1910, A., ii, 402.

Schiloff, Nikolai. See also Robert Luther. Schimetschek, Leopold, condensation of dibenzyl ketone with p-nitro-, phydroxy-, p-chloro-, and o-nitro-benzaldehydes, 1906, A., i, 358.

Schimmel & Co., essential oils, 1903, A., i, 185; 1904, A., i, 603; 1905, A., i, 536; 1906, A., i, 524; 1907, A., i, 66, 782; 1908, A., i, 666; 1909, A., i, 112, 313, 816; 1910, A., i, 327, 756; 1911, A., i, 475, 893; 1912, A., i, 369, 880.

preparation of protocatechnic aldehyde from piperonaldehyde or its chloride,

1906, A., i, 513.

Schimmel & Co., and Hans Kleist,

essential oils, 1903, A., i, 569. Schimpff, Hermann, heat capacity of certain metals and compounds of metals, 1910, A., ii, 181.

Schincaglia, Ignazio, invisible radiations from the explosive discharge in air,

1908, A., ii, 796.

Schindelmeiser, Iwan, preparation of camphor from pinene by the action of oxalic acid, 1903, A., i, 267

Russian peppermint oil, 1907, A., i,

el-phellandrene in the oil of Abies

sibirica, 1907, A., i, 863. Russian turpentine oil and Russian

pine tar oil, 1908, A., i, 95. sesquiterpene from Oleum cadinum, 1908, A., i, 353.

Schindelmeiser, Iwan. See also Iwan L. Kondakoff.

Schindler, Alfred, See Robert Gnehm. Schindler, Erich. See Otto Fischer.

Schindler, Josef, detection of citric acid

in wine, 1903, A., ii, 112. Schindler, Josef, and Hanno Svoboda, comparison of the iodide and lime methods for the estimation of glycerol in wine, 1909, A., ii, 706.

Schippers, Heinrich, measurements in the antimony spectrum, 1912, A., ii,

877.

Schippers, J. C., the reactions for bile pigments in urine, 1908, A., ii, 443. autolysis of normal blood, 1910, A., ii, 1081.

hæmolysis by lecithins, 1912, A., ii, 655.

a method for preparing lecithin emulsions and for their quantitative evaluation, 1912, A., ii, 702.

Schirm, Erik, quantitative precipitation of aluminium, chromium, and iron, 1909, A., ii, 834.

precipitation of aluminium, chromium, and iron by ammonium nitrite, 1911, A., ii, 936.

precipitation of iron with hydrazine hydrate, 1911, A., ii, 937.

precipitation of zinc, manganese, cobalt, nickel, copper, and cadmium from their ammoniacal solution with sodium carbonate and phenyltrimethylammonium carbonate, 1911, A., ii, 1138.

automatic filling apparatus for a constant level of liquid, 1912, A., ii, 37.

safety apparatus for preventing undue evaporation or distillation, also for automatically shutting off the gas supply at a given time, 1912, A., ii, 445.

water-bath with constant level, 1912, A., ii, 445.

two laboratory condensers with internal cooling, 1912, A., ii, 750.

Schirm, Erik. See also Arthur Stähler. Schirmeister, H. See Karl Bornemann. Schirmer, Wolfgang, gums and mucilages, 1912, A., i, 609.

some methods of estimating iodides, 1912, A., ii, 1091.

Schirmer, Wilhelm Friederich. Erwin Rupp. Schirokauer, Hans, and G. G. Wilenko,

the estimation of diastase in organs, 1911, A., ii, 675.

Schittenhelm, Alfred, nuclein bases of fæces, 1903, A., ii, 672.

estimation of ammonia in urine, fæces, blood, etc., 1903, A., ii, 688.

urie acid formation in tissue extracts, 1904, A., ii, 752.

ferments which decompose nuclein compounds, 1905, A., i, 108.

formation and decomposition of uric acid in extracts of the organs of oxen, 1905, A., ii, 644.

non-occurrence in the spleen and liver of oxen of a ferment which transforms guanine into xanthine; reply to Jones, Partridge, and Winternitz, 1905, A., ii, 645.

Schittenhelm, Alfred, the uricolytic ferment, 1905, A., ii, 645,

nuclein metabolism and the ferments concerned in man and animals, 1906. A., ii, 102, 779.

nuclein metabolism, 1907, A., ii, 564.

ferments of nuclein metabolism, 1908, A., ii, 960.

the metabolic changes of nucleic acid in the organism of the dog under normal and pathological conditions, 1909, A., ii, 906.

the uric acid combinations with nucleic

acid, 1910, A., i, 344.

the enzymes concerned in nuclein metabolism in lupine seedlings, 1910, A., ii, 52.

the enzymes concerned in nuclein metabolism in human organs, 1910, A., ii, 52.

nuclein metabolism in the pig, 1910,

A., ii, 625.

Schittenhelm, Alfred, and Ernst Bendix, behaviour of guanine in the rabbit, 1905, A., ii, 188.

action of various nucleic acids on the animal organism, 1905, A., ii, 744. purine substances of the urine of ox, horse, and pig, 1906, A., ii, 564.

Schittenhelm, Alfred, and A. Katzenstein, administration of i-alanine to a normal dog, 1906, A., ii, 379.

Schittenhelm, Alfred, and Julius Schmid, nuclein metabolism, 1907, A., ii, 109.

Schittenhelm, Alfred, and Fritz Schröter. decomposition of yeast nucleic acid by bacteria, 1903, A., ii, 679; 1904, A., i, 539; ii, 139.

Schittenhelm, Alfred, and Philipp Seisser, the influence on nitrogenous metabolism of rabbits of nucleic and uric acids and allantoin formation of nucleic-uric acid compounds, 1910, A., ii, 423.

Schittenhelm, Alfred, and Karl Wiener, carbonyldicarbamide as an oxidation product of uric acid, 1909, A., i,

the occurrence and importance of allantoin in human urine, 1910, A., ii, 52.

the cleavage of nucleic acid by organ enzymes, 1912, A., i, 325.

Schittenhelm, Alfred. See also Emil Abderhalden, Ernst Bendix, Theodor Brugsch, Franz Frank, Martin Krüger, and Efim Semen London.

Schivkovitch, Petar, new method of formation of ethers of glycerol with phenols, 1908, A., i, 978.

Schjerning, Henrik, proteins of barley in the grain and during the brewing process, 1907, A., ii, 46.

Wladimir Viktorovitsch, Schkateloff. resins from conifers, and treatment of the resinous sap from Pinus maritima, P. sylvestris, and other species, 1908, A., i. 816,

a dextrorotatory resin acid, 1908, A., i. 890.

Schlaepfer, Carl. See Fritz Fichter, and Fritz Ullmann,

Schläpfer, V. See Eduard Grafe.

Schlagdenhauffen, [Charles] Frédéric, and Emile Reeb, organic compounds of metals in plants, 1905, A., ii, 51.

Schlagdenhauffen, Frédéric. See also

Edouard Heckel.

Schlecht, H. See August Michaelis. Schlegel, Hans. See Ernst Beckmann. Schlegl, Karl. See Moritz Kohn.

Schleicher, A. P., the system : cadmiumtin, 1912, A., ii, 256.

Schleicher, G., rapid formation of lead accumulators with solutions of sulphuric acid and chlorate or perchlorate, 1911, A., ii, 848.

Schleifenbaum, Otto. See Stanislaus von Kostanecki.

Schlemmer, Hugo. See Karl Elbs.

Schlenk, Oskar, reduction of phenylhydrazones in alkaline solution, 1908, A., i, 737.

estimation of bismuth in "bismuthum tribromophenylicum," 1909, A., ii, 705.

Schlenk, Wilhelm, C. Bornhardt, and Leopold Mair, triphenylmethyl and triphenylcarbinol, 1911, A., i, 434.

Schlenk, Wilhelm, and (Miss) Anna Herzenstein, triarylmethyls. Diphenyldiphenylenecarbinol, 1910, A., i, 237.

triarylmethyls. V., 1911, A., i, 122,

Schlenk, Wilhelm, (Miss) Anna Herzenstein, and Tobias Weickel, triarylmethyls. IV., 1910, A., i, 469.

Schlenk, Wilhelm, Hugo Keller, and Angelo Knorr, quinonoid derivatives of diphenyl. II., 1909, A., i, 808.

Schlenk, Wilhelm, and Angelo Knorr, quinonoid derivatives of diphenyl. I., 1909, A., i, 36.

nature of quinhydrones and triphenylmethane dyes, 1909, A., i, 807.

Schlenk, Wilhelm, Julius Renning, and Georg Racky, hexaphenylsilicoethane and some biphenyl-substitution products of ordinary ethane and ethylene, 1911, A., i, 596.

Schlenk, Wilhelm, and Tobias Weickel. analogues of triphenylmethyl in the diphenyl series, 1909, A., i 791.

metallic compounds of diaryl ketones,

1911, A., i, 545.

Schlenk, Wilhelm, Tobias Weickel, and (Miss) Anna Herzenstein, triarylmethyls. II. Triphenylmethyl and analogues of triphenylmethyl in the diphenyl series, 1910, A., i, 236.

Schlesinger, Edward Gustave. See Arthur

Frederick Hertz.

Schlesinger, Hermann, specific heats of solutions. I., 1909, A., ii, 375.

Schlesinger, Hermann, and William Webber Ford, chemical properties of amanita-toxin, 1907, A., i, 870.

Schlesinger, Hermann I., catalysis. Catalysis of imino-esters, 1908, A., ii,

Schlesinger, Hermann I., and R. P. Calvert, conductivity. I. Conductivity of ammonia in (anhydrous) formic acid. 1. "Formic acid hydrolysis," 1912, A., ii, 26.

Schlesinger, M. D. See Henry Clapp

Sherman.

Schlesinger, N., 2:5-dimethylpyrroline-5-carboxylic acid, 1909, A., i, 412.

aa'-ethylenedi-iminodi-isobutyric acid,

1911, A., i, 427.

aa'-ethylenebisimino-acids, 1912, A., i, 555.

Schlesinger, N. See also Nicolai D. Zelinsky.

Schlesinger, Wilhelm, detection of uro-

bilin, 1904, A., ii, 103. lævulose diabetes, 1904, A., ii, 195.

Schlett, Wilhelm, change of density and specific heat of platinum and nickel after treatment, and the dependence of the specific heat on the temperature, 1908, A., ii, 563.

Schleussner, Karl. See Emil Knoe-

venagel.

Schlicht, Albert, estimation of mustard oil, 1903, A., ii, 343.

phosphomolybdic acid as a reagent for potassium, 1907, A., ii, 130.

estimation of potassium as phosphomolybdate, 1909, A., ii, 94.

detection and estimation of methyl alcohol in alcoholic liquids, 1912, A., ii, 1103.

Schliebs, Georg, application of compressed air in superphosphate analysis, 1908, A., ii, 579.

Schliemann, Wilhelm, cellobiose and the acetolysis of cellulose, 1911, A., i, 179.

Schliemann's Export-Ceresin-Fabrik, Ernst, preparation of organic aluminium compounds, 1910, A., i, 651. preparation of an ester from Montana wax, 1912, A., i, 532.

Schliephacke, Gerhard, mutarotation of

maltose, 1911, A., i, 16.

Schliomensun, B., union relationships of heart muscle and digitalis, 1910, A., ii. 976.

Schlochoff, Paul. See Hans Rupe.

Schlæsing, [Alphonse] Théophile, jun., the potassium of the soil soluble in water, and its utilisation by plants, 1904, A., ii, 201.

nitrates and nitrites as manures, 1906,

A., ii, 121.

production of nicotine in tobacco

culture, 1910, A., ii, 743.

Schlesing, [Jean Jacques] Théophile, sen., vegetable soil, 1903, A., ii, 97. mechanical analysis of soils, 1903, A., ii, 681.

chemical study of sea waters, 1906,

A., ii, 176.

the mother liquors of salt gardens (Marais salants), 1911, A., ii, 392. Schlæsinger, N. A. See Leo A. Tschu-

gaeff. Schlæsser, W., the testing of measuring

vessels intended for use in volumetric analysis, 1907, A., ii, 649.

Schlosser, W., and C. Grimm, measurement of standard and other solutions by means of chemical measures, 1906, A., ii. 892.

Schlötter, Max, reduction of alkali bromates with hydrazine sulphate and hydroxylamine sulphate, 1904,

A., ii, 146.

gas-volumetric estimation of bromates, 1904, A., ii, 146. reduction of alkali iodates and chlor-

ates with hydrazine sulphate, 1904,

A., ii, 167. estimation of carbon dioxide in the presence of chlorine, 1904, A., ii,

367. transformation of potassium chlorate into iodate by iodine in presence of nitric acid, 1905, A., ii, 520.

Schloss, Ernst, the detection and physiological relations of glyoxylic acid,

1906, A., ii, 785. the biological action of salts. I., 1909,

A., ii, 598. the biological action of salts. II. Influence of salts on metabolism, 1909, A., ii, 1032.

See Conrad Will-Schloss, Rudolph.

gerodt.

Schlossberg, Hilel, use of hydrogen peroxide in volumetric analysis, 1903. A., ii, 184.

Schlosser, R. C. See Charles Couchet.

Schlossmann, Arthur, and Hans Murschhauser, influence of age and size on the gaseous metabolism of children, 1909, A., ii, 679.

the fundamental bodily needs of the infant, as determined by measurement of the gaseous exchange, 1910,

A., ii. 724.

the influence of moderate changes of temperature of the surrounding atmosphere on the respiratory exchanges of infants, 1912, A., ii,

the influence of crying on the respiratory exchanges of infants, 1912, A.,

ii, 57.

Schlossmann, Arthur, Carl Oppenheimer, and Hans Murschhauser, experiments on the gaseous metabolism of infants carried out by means of Zuntz and Oppenheimer's modification of the Regnault-Reiset respiration apparatus, 1909, A., ii, 67.

Schlotterbeck, Fritz, transformation of aldehydes into ketones by means of diazomethane, 1907, A., i, 185, 478; 1909, A., i, 553.

synthesis of β -ketonic esters by means of ethyl diazoacetate, 1907, A., i, 676; 1909, A., i, 550.

Schlotterbeck, Fritz. See also Emil Fischer.

Schlotterbeck, Julius Otto, colouring matter of Stylophorum diphyllum and Chelidonium majus, 1903, A., i, 193.

Schlotterbeck, Julius Otto, and Walter H. Blome, [the alkaloids of] Bocconia

cordata, 1906, A., i, 36.

Schlotterbeck, Julius Otto, and Harold Cole Watkins, alkaloids of Adlumia cirrhosa, 1903, A., i, 512.

chemistry of chelidonine, 1904, A., i, 85.

Schlubach, Hans. See Otto Wallach.

Schlüchterer, P. See Emil Knoevena-Schluederberg, Carl George, actinic

electrolysis, 1909, A., ii, 6. Schluederberg, Carl George. See also Frank Curry Mathers.

Schlumberger, Ernest, colour reaction of fats, 1909, A., ii, 447.

Schlundt, Herman, optical rotating power of camphor, 1903, A., ii,

dielectric constants of some inorganic solvents, 1904, A., ii, 308.

Schlundt, Herman, and Richard B. Moore, radioactivity of some deep well and mineral waters, 1905, A., ii. 368.

chemical separation of radioactive types of matter in thorium com-

pounds, 1906, A., ii, 2.

anomalous behaviour in the radioactivity of certain uranium compounds, 1908, A., ii, 144.

Schlundt. Herman, and Oscar C. Schaefer, dielectric constant of liquid arsenic hydride, 1912, A., ii, 526.

See also Louis Schlundt, Herman. Kahlenberg, Richard B. Moore, R. C. Palmer, and Oscar C. Schaefer.

Schmachtenberg, Hermann, See Carl

Bülow.

Schmaedel, Wolfgang von. See Otto Dimroth, and Richard Willstätter. Schmähling, Georg. See Carl Adam

Bischoff.

Schmandt. Wilfred. See Max Blanc.

Schmatloch, A. See Julius von Braun. Schmatolla, Otto, phenolphthalein as indicator, 1903, A., i, 95.

volumetric estimation of nitric acid in

water, 1903, A., ii, 101.

aluminium sulphates, 1903, A., ii, 371. estimation of acids combined with aluminium, 1905. A., ii, 357.

tests for the purity of [commercial]

glycerol, 1906, A., ii, 585.

preparation of pure hydrogen peroxide for medical purposes, 1910, A., ii,

Schmeia. Sigismund. See Gustav Heller.

Schmelck, Ludwig, volcanic dust from Martinique, 1903, A., ii, 224.

Schmerda, Fritz, hexabenzylethane and its derivatives, 1909, A., i, 563.

Schmey, Max, iron in the animal body, 1903, A., ii, 740.

Schmid, Alfred, Herman Decker, and Theodor Hock, methyl derivatives of 5-phenylacridine, 1906, A., i, 305.

Schmid, Alfred. See also Fritz Ullmann. Schmid, Arthur. See Leopold Nathan. See Carl Bülow, and Schmid, Carl.

Rudolf Friedrich Weinland.

Schmid, H., modified Soxhlet extraction apparatus, 1912, A., ii, 1161.

Schmid, H. See Robert Burri.

Schmid, Hans (Innsbruck), position of the substituents in hydroxyhomosalicylic [dihydroxytoluic] acid, 1911, A., i, 780.

Schmid, Hans (Tübingen). See Rudolf Friedrich Weinland.

Schmid, Julius, the katabolism of methylated xanthines, 1910, A., ii, 728.

Schmid, Julius. See also Emil Abderhalden, Johannes Biberfeld, Martin Krüger, and Alfred Schittenhelm.

Schmidinger, F. See Josef Herzig.

Schmidlin, Julius, action of sodium on carbon tetrachloride and chlorobenzene; formation of triphenylmethane and hexaphenylethane, 1903, A., i, 687.

phenyl-substitution in the phenyl-methanes, their carbinols and

chlorides, 1903, A., ii, 530. thermochemical studies of colouring matters; rosaniline and pararosaniline, 1903, A., ii, 633.

the poly-acid salts of rosaniline, 1904,

A., i, 698.

additive hydrogen chloride compounds of rosaniline salts; their dissociation, thermochemistry, and constitution, 1904, A., i, 785.

additive compounds of ammonia and rosaniline, 1904, A., i, 785.

nomenclature of the rosanilines, 1904,

A., i, 943.

tetrahydroxycyclohexanerosanilines a new class of colourless derivatives, 1904, A., i, 944, 1061.

1904, A., i, 944, 1061. carbinol salts and cyclohexanerosauilines; decolorisation phenomena,

1904, A., i, 944.

thermochemical comparison of rosanilines and leucanilines, 1904, A., i, 944.

constitution of the rosaniline salts and the mechanism of their formation, 1904, A., i, 1061.

theory of dyes, 1905, A., i, 75.

heats of combustion of triphenylmethyl and some triphenylmethane derivatives, 1905. A., ii, 11.

action of low temperatures on colouring matters, 1905, A., ii, 12.

chemical and thermochemical researches on the constitution of the rosanilines, 1906, A., i, 211.

magnesium compound of organic triphenylmethyl chloride; preparation of triphenylmethane and triphenylacetic acid, 1906, A., i, 392.

triphenylmethyl and tervalent carbon; constitution of benzopinacolin, 1907,

A., i, 26.

hexaphenylethane, 1907, A., i, 27. basic triphenylmethane dyes containing sulphur, 1907, A., i, 93.

triphenylmethyl. II., 1907, A., i, 601. preparation of triphenylmethyl, 1908, A., i, 150.

Schmidlin, Julius, structural formula of triphenylmethyl, 1908, A., i, 150. colourless and coloured triphenyl-

methyl, 1908, A., i, 623.

triphenylmethyl, triphenylacetaldehyde, and triphenylacetic anhydride, 1910, A., i, 367.

explanation of the reaction between pbenzoquinone and hydrogen chlor-

ide, 1911, A., i, 727.

Schmidlin, Julius, and Maximilian Bergmann, preparation of keten from

acetone, 1910, A., i, 816.

Schmidlin, Julius, and Robert von Escher, hexahydrotriphenylcarbinol [cyclohexyldiphenylcarbinol], 1908, A., i, 163.

αβ-dichlorotetraphenylethane, the chlorine derivative of α-benzopinacolin, 1910, A., i, 369.

hexahydrotriphenylmethane and its derivatives, 1912, A., i, 437.

Schmidlin, Julius, and Antonio Garcia-Banús, autoreduction of triphenylmethyl under the action of light, 1912, A., i, 437.

Schmidlin, Julius, and Herbert Henry Hodgson, triphenylacetic and tritolylacetic acids, 1908, A., i, 170.

isomeric organic magnesium compounds, 1908, A., i, 239.

Schmidlin, Julius, and Max Huber, dinaphthylmethane and naphtha-fluorene, 1910, A., i, 832.

Schmidlin, Julius, and Rudolf Lang, theory of organic reactions: molecular compounds as preliminary products in cases of condensation. I. and II., 1910, A., i, 836; 1912, A., i, 473.

Schmidlin, Julius, and Paul Massini, the dinaphthylmethane series, 1909, A., i, 561.

the trinaphthylmethane series, 1909, A., i, 563.

monoperphosphoric acid and perphosphoric acid, 1910, A., ii, 498.

Schmidlin, Julius, and Julius Wohl, pentaphenylethanol, 1910, A., i, 368.

Schmidlin, Julius, Julius Wohl, and Hans Thommen, action of triphenylmethyl on quinones, 1910, A., i, 377.

Schmidlin, Julius. See also Alfred Einhorn, and Emil Fischer.

Schmidt, Albert, reaction between nitroquinaldines and aldehydes, 1906, A., i, 39.

Schmidt, Albert. See also Roland Scholl.

Schmidt, August (Ilmenau), simplified arrangement for the admittance of air into automatic delivery apparatus, 1912, A., ii, 37.

Schmidt, August (Wien). See Moritz

Schmidt, August (Wiesbaden), radioactivity of certain fresh-water springs of the Taunus, 1905, A., ii, 220; 1907, A., ii, 218.

Schmidt, Bodo, bactericidal and antiseptic influence of stable 3 per cent. hydrogen peroxide, 1906, A., ii,

698.

Schmidt, Curt, periodic system [of the

elements], 1911, A., ii, 198.

Schmidt, Carl Heinrich Ludwig, the iodation of proteins. II., 1903, A., i, 135, 450.

Schmidt, Carl L. A., Benedict's method of estimating the total sulphur in

urine, 1911, A., ii, 67.

Schmidt, Carl L. A., and C. P. Finger, potential of a hydrogen electrode in acid and alkaline solutions, 1908, A., ii, 802.

Schmidt, Carl L. A., and D. R. Hoagland, estimation of aluminium in fæces, 1912, A., ii, 605.

Schmidt, Carl L. A. See also Thorburn Brailsford Robertson.

Schmidt, Edgar. See Otto Fischer.

Schmidt, Ernst [Albert], scopolamine and scopoline, 1903, A., i, 51. ketonic bases, 1903, A., i, 427.

alkaloids of some Solanaceæ which induce mydriasis, 1905, A., i, 717.

relations between the chemical constitution and physiological action of some ammonium bases, 1905, A., ii, 105.

conversion of ephedrine into \u03c4-ephedrine, 1906, A., i, 602.

hydrogen aurichloride, 1906, A., ii,

xanthine bases, 1908, A., i, 45.

rhamnosides, 1908, A., i, 437.

ephedrine and \u03c4-ephedrine, 1908, A., i, 452; 1911, A., i, 562. scopoline, 1909, A., i, 173.

alkaloids of the tubers of Corudalis cava, 1909, A., ii, 85.

creatinine, 1911, A., i, 20; 1912, A.,

alkaloids of Datura metel seed, 1911, A., ii, 143.

preparation of glycocyamidine, 1912, A., i, 799.

Schmidt, Ernst, and Alfred Adlung, anethole nitrosochloride, 1904, A., i, 1001.

Schmidt, Ernst, Dirk Hendrik Brauns, and Nicolai A. Waljaschko, rhamnosides, 1904, A., i, 681.

Schmidt, Ernst, Gustav Bümming, and Alfred Goehring, ephedrine and yephedrine, 1909, A., i, 322.

Schmidt, Ernst, and Daniel Bruns. brucine polyhydrosulphides, 1911, A., i. 913.

Schmidt, Ernst, and Franz Wilhelm Calliess, ephedrine and \(\psi\- ephedrine \), 1911, A., i, 742; 1912, A., i, 644.

Schmidt, Ernst, and Hermann Emde, cinnamylamine ("styrylamine" bases and their relation to ephedrine and \(\psi\)-ephedrine, 1906, A., i, 945. ephedrine and ψ -ephedrine, 1906, A.,

i. 978.

Schmidt, Ernst, and Franz Flaecher, synthesis of ephedrine, 1905, A., i, 370.

Schmidt, Ernst, and Rudolf Gaze, scopolamine and scopoline, 1906, A., i,

detection of methylated spirit in tinctures, etc., 1906, A., ii, 57. apomorphine hydrochloride, 1909, A.,

i, 50.

Schmidt, Ernst, Hilderich Hartmann, Gustav Kleine, Franz Maria Litter-Waldemar Wagner, scheid, and choline, neurine, and allied compounds, 1905, A., i, 23.

Schmidt, Ernst, W. Hennig, and Eugen Thumann, creatinine and its oximes,

1912, A., i, 719. Schmidt, Ernst, and Adolf Kircher, alkaloids from species of Datura which induce mydriasis, 1906, A., i, 397.

tropine, 1908, A., i, 675.

Schmidt, Ernst, and Ludwig Krauss, white precipitate, 1908, A., i, 139.

Schmidt, Ernst, and Willmar Schwabe, xanthine bases, 1906, A., i, 449. ψ-theobromine, 1908, A., i, 45.

Schmidt, Ernst, Arthur Schwantke, and Karl Schwantke, aconitine, 1909, A., i. 669.

Schmidt, Eugen, method of distinguishfermentation vinegar from "vinegar essence," 1906, A., ii, 401. volumetric estimation of antimony,

1910, A., ii, 551. a delicate reaction for glue, 1910, A.,

ii, 911.

Schmidt, E. W., influence of pressure on the electrolytic conductivity of solutions in different solvents, 1911, A.,

Schmidt, Ernst Willy, bactericide value of thymol, 1910, A., ii, 882.

Schmidt, Fr. See Robert Stollé.

Schmidt, Franz. See Gustav Embden, and Karl Bernhard Lehmann.

Schmidt, Friedrich, electrolysis with magnesium cathodes, 1909, A., ii, 787.

Schmidt, Friedrich Wilhelm, choline cadmium chloride, 1907, A., i, 1014. white colloidal tin oxysulphide, 1907, A., ii, 358.

Schmidt, Georg. See Alexander Tschirch. Schmidt, Gerhard. See Oscar Doebner.

Schmidt, Gerhard Carl, chemical action of the canal rays, 1903, A., ii, 50. emanation of phosphorus, 1903, A.,

ii, 362; 1907, A., ii, 523. action of canal rays on aluminium and zinc oxides, 1904, A., ii, 307.

law of transformation in stages and radioactivity, 1908, A., ii, 550.

adsorption of solutions [by charcoal], 1910, A., ii, 1041; 1911, A., ii, 969. electric conductivity of salt vapours,

1911, A., ii, 788.

adsorption. III., 1912, A., ii, 236.

Schmidt, Gotthard Nicolaus Stephan, influence of temperature and pressure on the absorption and diffusion of hydrogen in palladium, 1904, A., ii, 312.

Schmidt, Gustav, the absorption of methylene-blue by the intestinal epi-

thelium, 1906, A., ii, 694.

Schmidt, H., occurrence of sulphurous acid in dried fruits and other foods,

1904, A., ii, 638.

Schmidt, H. (Freiburg), oil of phosphorus and its combinations in the organism investigated by means of the electroscopic detection of phosphorus, 1911, A., ii, 815. Schmidt, Hans (Berlin), examination of

the laws of radiation of the bunsen

flame, 1909, A., ii, 789.

Schmidt, Hans (Giessen). See Paul Cermak.

Schmidt, Hans (Strassburg), anisylidene chloride, 1908, A., i, 654.

Schmidt, Hubert. See Emil Abderhalden. Schmidt, Heinrich Willy, measurement of the emanations contained in

liquids, 1905, A., ii, 788. decomposition of radium-A, -B, and

-C, 1907, A., ii, 4.

experiments with B-rays from radium-E, 1907, A., ii, 520.

decay of radium-B and -C at high temperatures, 1908, A., ii, 141. distribution of the radiation radioactive substances, 1908, A., ii,

radiation of uranium-X, 1909, A., ii, 206.

Schmidt, Heinrich Willy, passage of Brays through matter. 1910, A., ii, 7, 378. I. and II..

Schmidt, Heinrich Willy, and Paul Cermak, influence of temperature on the transformation of radioactive substances, 1909, A., ii, 9; 1910, A., ii, 918.

Schmidt, Heinrich Willy, and H. Nick. experiments with weak radium solu-

tions, 1912, A., ii, 414.

Schmidt, Julius, trimethylethylene nitrosite; a reply to Hantzsch, 1903, A., i, 3.

preparation of aminohydroxyphenan-

threne, 1903, A., i, 557.

formula of \(\beta\)-methyl-\(\beta\)-butylene nitrosite, nitrosate, and nitrosochloride, 1903, A., i, 597.

action of nitrogen dioxide on tetramethylethylene [\beta\gamma-dimethyl-\betabutylene], 1903, A., i, 597.

nitro-derivatives of phenanthraquin-

one, 1904, A., i, 69.

bromine derivatives of phenanthraquinone, 1904, A., i, 1033. the fluorene series; a correction, 1910,

A., i, 839.

Schmidt, Julius, and Percy Corlett Austin. decompositions of bistrimethylethylene nitrosate, 1903, A., i, 2.

polymerism and desmotropism of trimethylethylene nitrosochloride (γ-chloro-β-nitroso-β-methylbutane), 1903, A., i, 2.

y-bromo-β-methyl-β-butylene nitros-

ate, 1903, A., i, 597.

the phenanthrene series. VII. 2-Nitrophenanthraquinone and its derivatives, 1904, A., i, 69.

Schmidt, Julius, and Karl Bauer, phenanthrene derivatives. XVIII. Conversion of phenanthrens into fluorene compounds, 1906, A., i, 25.

action of nitric acid on fluorenone, and derivatives of the nitro-compounds thus obtained, 1906, A., i, 27.

action of bromine on fluorene and on fluorenone, 1906, A., i, 28.

Schmidt, Julius, and Hedwig Dieterle, esters of aliphatic nitroso- and nitro-

carboxylic acids, 1910, A., i, 813. Schmidt, Julius, and Ernst Fischer, fluorene perhydride; reply Spiegel, 1909, A., i, 19. preparation of 9:10-dihydrophenan-

threne, 1909, A., i, 19. Schmidt, Julius, Ernst Glatz, and Otto Schairer, phenanthrene series. XXIX. Phenantriazines, 1911, A., i, 239.

Schmidt, Julius, and August Haid, ethyl α-nitrosoisoheptoate and the action of nitrous gases on allyl-, dimethyl-, and diethyl-acetoacetic esters, 1910, A., i, 813.

Schmidt, Julius, and Eugen Heinle, phenanthrene series. XXXI. Nitroand amino-phenanthenes, 1911, A., i,

626

Schmidt, Julius, and Erhard Junghaus, the phenanthrene series. XI. Phenanthraquinone dibromide, 1904, A., i, 1033.

the phenanthrene series. XII. 2-Bromophenanthraquinone and its derivatives, 1904, A., i, 1033.

the phenanthrene series. XIII. 2:7-Dibromophenanthraquinone and its derivatives, 1904, A., i, 1034.

Schmidt, Julius, and Adolf Kämpf, the phenanthrene series. VIII. 4-Nitrophenanthraquinone and its derivatives, 1904, A., i, 69.

the phenanthrene series. IX. 2:7-Dinitrophenanthraquinone and its derivatives, 1904, A., i, 70.

the phenanthrene series. X. 4:5-Dinitrophenanthraquinone and its derivatives, 1904, A., i, 71.

Schmidt, Julius, and Gustav Ladner, the phenanthrene series. XIV. 3-Bromophenanthraquinone and its derivatives. 1904. A., i. 1034.

derivatives, 1904, A., i, 1034.
the phenanthrene series. XV. Bromosand bromonitro-derivatives of phenanthrene, 1904, A., i,

studies in the phenanthrene series. XVI. 9:10-Dichloro- and 9:10-dibromo-phenanthrenes; a new mode of formation of o-dichlorobenzene, 1905, A., i, 43.

Schmidt, Julius, and Fritz Leipprand, polymerism and desmotropy of trimethylethylene nitrosobromide (β-bromo-γ-nitroso-β-methylbutane), 1904, A., i, 278.

tetramethylethylene nitrosobromide [β-bromo-γ-nitroso-βγ-dimethylbut-

ane], 1904, A., i, 279.

phenanthrene derivatives. XVII. Conversion of 4:5-dinitrophenanthraquinone into 4:5-aminohydroxyphenanthraquinone, 1906, A., i. 25.

Schmidt, Julius, and Hermann Lumpp, phenanthrene series. XXV. Phenanthrene derivatives from 9:9-dichloro-10-phenanthrone 1909, A., i, 34. Schmidt, Julius, and Hermann Lumpp, phenanthrene series. XXVI. Conversion of 9-chloro-10-hydroxy-phenanthrene into other phenanthrene derivatives, 1910, A., i, 165. phenanthrene series. XXVII. Action

phenanthrene series. XXVII. Action of ammonia and amines on 9-hydroxyphenanthrene, 9:10-dihydroxyphenanthrene (hydrophenanthraquinone), and 3-bromo-9(10)-hydroxyphenanthrene, 1910, A., i, 312.

new and very delicate colour test for nitric acid and nitrates, 1910, A., ii,

450.

Schmidt, Julius, and Robert Mezger, 9-dihydroxyfluorene and stereoisomeric 9-acetoxyfluorenes, 1907, A., i. 43.

phenanthrene series. XXI. Hydrophenanthrenes, 1907, A., i, 1022.

phenanthrene series. XXII. 2:7-Dibromophenanthrene and 2:7-dibromophenanthraquinone, 1908, A., i, 16.

hydrogenation of fluorene, 1908, A.,

i, 16.

Schmidt, Julius, Friedrich Retzlaff, and August Haid, fluorene series. III., 1912, A., i, 695.

Schmidt, Julius, and Adolf Saager, oxidation product from p-tolylenediamine,

1904, A., i, 512.

Schmidt, Julius, and Eberhard Sauer, phenanthrene series. XXXII. Transition from the phenanthraquinone to the phenanthrene series, 1912, A., i, 35.

Schmidt, Julius, and Otto Schairer, phenanthrene series. XXX. Preparation of 4-hydroxy- from 4-nitro-phenanthraquinone, 1911, A., i, 386.

Schmidt, Julius, and Richard Schall, hydroxydiphenic acids, 1906, A., i,

23

phenanthrene series. XIX. 2:9:10-Trichlorophenanthrene and 2-chlorophenanthraquinone, 1907, A., i, 26.

syntheses of pyrrole derivatives of high molecular weights, 1907, A., i, 724.

dihydrocarbazole, 1907, A., i, 792.

Schmidt, Julius, and August Sigwart, conversion of carbazole into dimethyldicyclopentyl, a hydrocarbon present in petroleum, 1912, A., i, 616.

Schmidt, Julius, and Julius Söll, phenanthrene series. XX. Constitution and colour of phenanthraquinone derivatives, 1907, A., i, 630.

derivatives of fluorenoneoxime; contribution II. to the theory of colour, 1907, A., i, 1054. Schmidt, Julius, and Julius Söll, phenanthrene series. XXIV. Morpholquinone from phenanthrene, 1908, A., i, 995.

phenanthrene series. XXIII. 3-Nitrophenanthraquinone and its deriva-

tives, 1908, A., i, 996.

Schmidt, Julius, and Otto Spoun, phenanthrene series. XXVIII. Bromination and nitration of 9-hydroxyphenanthrene, 1910, A., i, 553.

Schmidt, Julius, and Max Strobel, 9nitrophenanthrene and its reduction products (studies in the phenanthrene series. VI)., 1903, A., i, 691.

Schmidt, Julius, and Hermann Stützel, 9-aminofluorene, 1908, A., i, 415. the fluorene series, L. 1910, A., i, 29.

the fluorene series. I., 1910, A., i, 29.
Schmidt, Julius, and Hans Wagner,
9:9-dichlorofluorene and its conversion into bidiphenylene-ethene,
1910, A., i, 550.

conversion of the bromonitrobenzenes into the corresponding dichlorobenzenes by phosphorus pentachloride, 1912, A., i, 175.

halogen derivatives of fluorene and bisdiphenylene-ethylene, 1912, A., i, 178.

Schmidt, Julius, and Karl Th. Widmann, new synthesis of iso-oxazoles, 1908, A., i, 456; 1909, A., i, 524.

ethyl nitrososuccinate, 1909, A., i, 134.

true nitroso-derivatives of the esters of aliphatic carboxylic acids, 1909, A., i, 453.

Schmidt, Ludwig. See Ernst Mohr.

Schmidt, Marg., fused mixtures of oligoclase with enstatite and augite, 1909, A., ii, 590.

Schmidt, Max von, cork, 1904, A., i, 501; 1910, A., i, 540; 1912, A., i, 72.

Schmidt, Maximilian P., seission of azodyes by halogens, 1912, A., i, 322.

Schmidt, Maximilian P. See also Hans Theodor Bucherer.

Schmidt, Maurice Roland, basicity of acids as determined by their conductivities, 1908, A., ii, 1011.

colorimetric estimation of manganese in presence of iron, 1910, A., ii, 899.

Schmidt, Maurice Roland, and Harry Clary Jones, conductivity and viscosity in mixed solvents containing glycerol, 1909, A., ii, 717.

Schmidt, Omur. See August Michaelis. Schmidt, Oscar, and Edgar Wedekind, azo-dyes of the rantonin series, 1903, A., i, 777.

Schmidt, Oscar. See also Edgar Wede-kind.

Schmidt, Otto, physico-chemical [constants of] organic amides; (constitution of nitrosoalkylurethanes, acid amides, anthranil, regularities in the boiling points of acid amides, analogy between formylamines and nitrosoamines, 1903, A., i, 681.

o-methylaminobenzaldehyde, 1905, A.,

i, 213.

a new method of formation of diazocompounds and a general method for determining the constitution of azo-dyes, 1905, A., i, 951; 1906, A., i, 52.

sulphonation of thioaniline, 1906, A.,

i, 243.

action of formaldehyde on as-dimethylp-phenylenediaminethiosulphonic acid and a new method of preparing benzothiazoles, 1906, A., i, 711.

compounds of thiosulphuric acid with aldehydes, 1906, A., i, 711; 1907,

A., i, 282.

artificial production of camphor from turpentine oil, 1906, A., i. 868.

preparation of alkali cyanides, 1907, A., i, 299, 903.

spectrochemistry of nitrogen, 1907, A., ii, 321.

Schmidt, Otto, and Rudolf Böcker, oxidation of ammonia, 1908, A., ii, 349. Schmidt, Otto. See also Richard Anschütz.

Schmidt, Paul, lead poisoning and its

detection, 1908, A., ii, 412.

Schmidt, R. See Walther Borsche. Schmidt, R. See Alfred Werner.

Schmidt, Richard, and Karl Weilinger, new ethereal oils, 1906, A., i, 299.

Schmidt, Rudolf, diffusion of argon and helium, 1904, A., ii, 643.

spectrum of a new gas contained in the atmosphere, 1906, A., ii, 821.

Schmidt, Rudolf. See also Karl Scheel, and Siegfried Valentiner.

Schmidt, Robert Eduard, anthraquinone-1-sulphonic acids, 1904, A., i, 256.

Schmidt, Theodor. See Fritz Ephraim, and Gustav Ulrich.

Schmidt & Cie, W., new gas generating apparatus, 1906, A., ii, 433.

Schmidt, Werner, radiation from drying oils, 1908, A., ii, 796.

Schmidt, W. A., fatty acids from mummies, 1908, A., ii, 878.

precipitin reactions, 1909, A., ii, 69. the rate of inactivation of the precipitate substance by alkalis, 1910, A. ii, 319.

Schmidt, W. A., a precipitin for differentiating between boiled (coagulated) proteins, 1912, A., ii, 655.

Schmidt-Nielsen, Signe, and Sigval Schmidt-Nielsen, destruction rennet by light, 1909, A., i, 75.

influence of acids on the loss of activity of rennet caused by shaking, 1910, A., i. 83.

inactivation of rennet by shaking,

1910, A., i, 801.

Schmidt-Nielsen, Sigval, autolysis in fish-flesh, 1903, A., ii, 163.

is muscle juice a result of autolysis?

1903, A., ii, 659.

action of concentrated electric light and radium emanations on rennin (chymosin) renninogen, and antirennin, 1904, A., ii, 422.

action of radium emanations chymosin, 1905, A., ii, 48.

the supposed identity of pepsin and rennin, 1906, A., i, 720.

enzymes in relation to concentrated electric light, 1906, A., i, 780.

the relation of whey-protein to rennet action, 1907, A., i, 571.

the salting-out of caseinogen and casein by sodium chloride, 1907, A., i, 571.

Schmidt-Nielsen, Sigval. See also Signe Schmidt-Nielsen.

Schmiedeberg, [Johann Ernst] Oswald, nucleic acids in animals, 1908, A., i, 70.

estimation of the pharmacological activity of the dried leaves of Digitalis purpurea, 1910, A., ii, 559.

See August Schmiedekampf, Enoch. Michaelis.

Schmiedt, Friedrich, electrolytic oxidation of copper, 1908, A., ii, 946.

Schmierer, Friedrich. See Conrad Will-

Schmincke, Alexander, and Ferdinand Flury, the behaviour of the red-blood corpuseles in chronic oleic acid poisoning, 1911, A., ii, 125.

Schmitt, Charles, new derivatives of cyanoacylacetic esters, 1903, A., i,

condensation products of cyanoacetic esters with acylcyanoacetic esters,

1904, A., i, 480.

new method of preparation of esters of mesoxalic acid; condensation with esters of cyanoacetic acid, 1905, A.,

derivatives of mesoxalic esters, 1905, A., i, 585.

Schmitt, Charles, condensation of ethyl oxalacetate and ethyl cyanoacetate in the presence of piperidine, 1907, A., i, 112.

condensation of the esters of mesoxalic or oxalacetic acid with the esters of cyanoacetic acid, 1907, A., i, 1007.

Schmitt, E., nitrogenous impurities of glycerol and fats, 1905, A., ii, 769.

Schmitt, Jos. See Walther Löb.

Schmitt, Karl, viscosity of certain gase's and gas mixtures at different temperatures, 1909, A., ii, 867.

Schmittmann, Josef. See Theodor Curtius.

Schmitz & Co., preparation of camphor, 1909, A., i, 246.

Schmitz, B., estimation of phosphoric acid and magnesium pyrophosphate, 1906, A., ii, 705.

Schmitz, Ernst, the behaviour of B-phydroxyphenyl-a-lactic acid and p-hydroxyphenylpyruvic acid in the surviving liver, 1910, A., ii, 984.

the behaviour of glycerol during artificial perfusion through the liver,

1912, A., ii, 1071.

Schmitz, Ernst. See also Julius von Braun, Paul Ehrlich, Gustav Embden, and Otto Wallach.

Schmitz, Fritz. See Richard Anschütz. Schmitz, H. See Max Siegfried.

Schmitz, Herman Emil, determination of specific heats, especially at low temperatures, 1903, A., ii, 632.

Schmitz, Karl, measurements in the barium spectrum, 1912, A., ii, 877.

Schmitz, Leonhard. See Georg Schroe-

Schmitz, Richard, excretion of quinine in human urine, 1907, A., ii, 494.

Schmitz, Walter, estimation of antimony in red caoutchouc ware, 1912, A., ii, 496.

Schmitz, Wilhelm. See Emil Fischer. Schmiz, Ed., compounds of hexamethylenetetramine with mercuric salts, 1910, A., i, 365.

Schmoelling, Leo von, copal oils, 1905, A., ii, 775.

Schmoldt, Philipp. See Emil Fromm. Schmoll, E., the composition of caseous deposits in tubercle, 1905, A., ii, 272.

Schmutzer, J., rocks from Central

Borneo, 1909, A., ii, 156.

Schnabel, Richard. See Arthur Rosen-

Schnackenberg, Hans, and Roland Scholl. p-dimethoxybenzhydrol, 1903, A., i,

Schneider, Bruno. See Otto Kühling.

Schneider, Edward C., the hæmagglutinating and precipitating properties of the bean, Phaseolus multiflorus, 1912, A., ii, 288.

a nutrition investigation on the insoluble carbohydrates or marc of the apple, 1912, A., ii, 658.

Schneider, Edward C. See also Claude Gordon Douglas.

Schneider, Gustav. See Emil Knoevenagel, and Roland Scholl.

Schneider, Hans, energy of the electrons emitted by glowing calcium oxide, 1912, A., ii, 316.

Schneider, Hans. See also Franz Kunckell

Schneider, Heinrich. See Otto Dimroth. Schneider, Josef. See Johannes Thiele. Schneider, Kurt. See Emil Fromm.

Schneider, Leopold, analysis of blast furnace dust, 1903, A., ii, 188.

Schneider, Otto, secondary minerals from Otavi, German S.W. Africa: a new cadmium mineral, 1906, A., ii, 620.

Schneider, Philipp, a new incinerator, 1904, A., ii, 722.

plant analysis as an aid in estimating the manurial requirements, with special reference to hops, 1905, A., ii, 755.

Schneider, Philipp. See also Eberhard Rimbach, and Ferdinand Wohltmann.

Schneider, Sebastian. See Max Busch. Schneider, Wilhelm (Berlin). See Hermann Leuchs.

Schneider, Wilhelm (Breslau), the Sichler "sinacid butyrometry," 1905, A., ii, 560.

Schneider, Wilhelm (Breslau). See also Theodor Pfeiffer.

Schneider, Wilhelm (Heidelberg). See Ernst Mohr.

Schneider, Wilhelm (Jena), cheirolin, the alkaloid containing sulphur obtained from wallflower seeds, 1909, A., i, 118, 826.

cheirolin, the thiocarbimide in wall-flower seeds; its synthesis and degradation, 1910, A., i, 658.

Schneider, Wilhelm, Wilhelm Beck, Wilhelm Lohmann, and Max Müller, simple fatty amines containing sulphur, 1912, A., i, 191.

Schneider, Wilhelm, and Gustav Hüllweck, thiocarbimides; ethyl allyliminothiolcarbonate, 1912, A., i, 954.

Schneider, Wilhelm, and Hans Kaufmann, erysolin, a thiocarbimidosulphone from Erysimum perowskianum, 1912, A., i, 837. Schneider, Wilhelm, and Wilhelm Lohmann, thiocarbimides: the glucoside of cheirolin, 1912, A., i, 1007.

Schneider, Wilhelm (Jena). See also Frederick George Donnan, Ludwig

Knorr, and Paul Rabe.

Schneider, Wilhelm (Marburg). See Theodor Zincke.

Schneiders, Franz. See Theodor Curtius. Schneidewind, Wilhelm, value of "forty per cent. potassium salts" as compared with kainite, 1904, A., ii, 145.

Schneidewind, Wilhelm, and Diedrich Meyer, action of different forms of nitrogen, especially ammonia and sodium nitrate, on potatoes and oats, 1904, A., ii, 765.

different behaviour of potatoes and mangolds towards crude and pure potassium salts, 1904, A., ii, 765.

action of the phosphoric acid of faces; comparison of Wolter phosphate with superphosphate and basic slag, 1904, A., ii, 769.

Schneidewind, Wilhelm, Diedrich Meyer, and Hans Frese, action of fresh green manure (peas, beans, and vetches mixed) and beet leaves, compared with sodium nitrate, 1907, A., ii, 502.

experiments with phosphoric acid on different kinds of soils, 1907, A., ii, 502.

action of the phosphoric acid of high and low per cent. basic slag, 1907, A., ii, 502.

Schneidewind, Wilhelm, Diedrich Meyer, Hans Frese, Friedrich Münter, and J. Graff, action of sodium nitrate, ammonium salts, calcium cyanamide, and Norwegian calcium nitrate, 1909, A., ii, 697.

Schneidewind, Wilhelm, Diedrich Meyer, and Friedrich Münter, enzymes in [diastase], 1908, A., ii, 879.

Schneidewind, Wilhelm, and O. Ringleben, action of crude and pure potassium salts with different forms of calcium, 1904, A., ii, 769; 1905, A., ii, 197.

Schnell, Josef, [detection of sesame oil in] earthnut oil, etc., 1903, A., ii, 191.

Schnerr, Al. See Tadeusz Estreicher. Schnitzler, Joseph. See Victor Henri. Schnurmann, Karl. See Paul Pfeiffer.

Schobel, Heinz. See Hans Rupe.
Schoch, Eugene Paul, red and yellow mercuric oxides and the mercuric oxychlorides, 1903, A., ii, 428.

study of reversible oxidation and reduction reactions in solutions, 1905, A., ii, 19.

Schoch, Eugene Paul, electromotive force of nickel and the effect of occluded hydrogen, 1909, A., ii,

behaviour of the nickel anode and the phenomena of passivity, 1909, A.,

ii, 370.

Schoch, Eugene Paul, and Alcan Hirsch, electrolytic deposition of nickel-zinc

alløys, 1907, A., ii, 473.

Schoch, Eugene Paul, and C. P. Randolph, behaviour of iron and nickel anodes in various electrolytes, 1911, A., ii, 14.

Schölberg, Harold Alfred, and Robert Lauder Mackenzie Wallis, chemical changes produced in milk by bacteria and their relation to the epidemic diarrhœa of infants, 1911, A., ii, 512.

Schölberg, Harold Alfred. See Robert Lauder Mackenzie Wallis. See also

Schöler, G. See Alfred Werner.

Schöler, Gustav, a quick-acting potash apparatus, 1905, A., ii, 481.

Schöller, Max Reinhold. See Hermann

Staudinger.

Schoeller, Walter, and Walther Schrauth, synthesis of a-hydroxymercuri-fatty acids. II. Methyl hydroxymercurimethylmalonate and its product of hydrolysis, a-hydroxymercuripropionic anhydride, 1909, A., i, 218.

[preparation of the mercury derivatives of fatty acids], 1909, A., i, 464.

preparation of aqueous soluble compounds from the anhydrides of hydroxymercurycarboxylic acids. 1910, A., i, 459.

gravimetric estimation of chromium; quantitative hydrolysis of sesqui-

oxides, 1910, A., ii, 77.

disinfecting power of complex organic mercury compounds. I. Aromatic mercuricarboxylic acids. II., 1912, A., ii, 376.

the chemical mechanism of the toxic and curative actions of organic mercury compounds, 1912, A., ii, 1198.

Schoeller, Walter, Walther Schrauth, and Paul Goldacker, synthesis of mercuriated a-anilino-fatty acids, 1911, A., i, 699.

Schoeller, Walter. See also Emil Fischer, Franz Müller, Claus Schilling, and Walther Schrauth.

Schöllhorn, F. See Hermann Will.

Schoellkopf, Hartford & Hanna Co., preparation of polyazo-dyes from 8-aminoa-naphthol-3:6-disulphonic acid, 1904, A., i, 954.

Franz, abnormal dispersion of metallic vapours, 1908, A., ii, 334.

Schoen, Marcel. See Auguste Fernbach. Schoen, P., quartz protecting tubes in thermal analysis, 1908, A., ii, 1015.

the freezing-point diagram of the binary system: silver sulphide-iron sulphide, 1912, A., ii, 159.

the freezing-point diagram of the binary system: manganese-arsenic, 1912, A., ii, 164.

Schoen, P. See also K. Friedrich.

Schön, Paul. See Leopold Rügheimer. Schönbach, R. See Josef Herzig.

Schoenborn, Erwein (Graf) von, trypsinogen and trypsin in urine, 1910, A., ii, 430.

carbohydrate metabolism in Carcinas maenas, 1910, A., ii, 1083.

oxidation processes in the regeneration and heteromorphosis of Tubularia, 1912, A., ii, 464.

Schöndorff, Bernhard, Kjeldahl's method, 1903, A., ii, 687.

the total glycogen in dogs, 1903, A., ii,

separation of fat in normal dog's urine, 1907, A., ii, 493.

the distribution of nitrogen in urine under the influence of different types of food, 1907, A., ii, 493.

estimation of urea in normal urine and in urine containing sugar, 1907, A., ii, 591.

excretion of sugar in healthy men and the estimation of small quantities of sugar in urine, 1908, A., ii, 311.

Schöndorff, Bernhard, Georg Francke, and Peter Junkersdorf, glycogen analyses by the use of dilute potassium hydroxide, 1909, A., ii, 443.

Schöndorff, Bernhard, and Friedrich Grebe, the origin of glycogen from formaldehyde, 1911, A., ii, 306.

Schöndorff, Bernhard, Victor Hessen, and Peter Junkersdorf, estimation of glycogen, 1909, A., ii, 354.

Schöndorff, Bernhard, Paul Heyden, and Peter Junkersdorf, estimation of glycogen, 1909, A., ii, 354.

Schöndorff, Bernhard, and Fritz Suckrow, the influence of phloridzin on glycogen formation in the liver, 1911, A., ii, 306.

Schöndorff, Bernhard, and C. Victoroff. the influence of alcohol on hydrolysing enzymes, 1907, A., ii, 283.

Schöndorff, Bernhard. See also Eduard

Pflüger.

Schönewald, Albert. See Wilhelm Traube.

Schönewald, Hans, and Konrad Bartelt, influence of various kinds of glass on the accuracy of Kjeldahl's nitrogen process, 1905, A., ii, 201.

Schönewald, Hans. See also Konrad

Bartelt.

Schönherr, Paul, action of phosgene on p-aminophenol, 1903, A., i, 477.

Schönholzer, Albert. See Robert Gnehm. Schönrock, Otto, dependence of the temperature coefficient of the specific rotation of sucrose on the temperature and wave-length, 1903, A., ii, 764.

Schönthan, Hans von. See Alfred Stock. Schoep, Alfred, filtration of colloidal solutions; a new filter, 1910, A., ii, 1049.

Schörk, Walther. See Wilhelm Lossen.
Schöttle, Johann, velocities of reaction
of acetone and lutidone with phenylhydrazine and hydroxylamine under
various conditions, 1911, A., ii,
1079.

the action of hydroxylamine and phenylhydrazine on benzoyldehydracetic acid, 1912, A., i, 915.

Schöttle, Johann. See also Pavel Iw. Pe-

trenko-Kritschenko.

Schofield, James A., lecture and laboratory apparatus, 1910, A., ii, 1053.

Scholefield, Fred. See Arthur George Green.

Scholes, Samuel Ray. See Harry Ward Foote, and Henry Lord Wheeler.

Scholl, A., preparation of alcoholic potassium hydroxide solution and apparatus for storing the same, 1908, A., ii, 425.

Scholl, A. See also Walter Greifenhagen.

Scholl, Emil, preparation of pure chitin from Boletus edulis, 1908, A., ii, 1065.

Scholl, Emil. See also Otto von Fürth, and Leopold von Portheim.

Scholl, George P., electrolytic estimation of manganese and its separation from iron and zinc, 1904, A., ii, 89.

Scholl, Hermann, photoelectric phonomena exhibited by moist silver iodide, 1905, A., ii, 297.

Scholl, Max Eugen. See Richard

Anschütz.

Scholl, Roland, synthesis of aromatic nitriles from benzenoid hydrocarbons by means of mercury fulminate and aluminium chloride, 1903, A., i, 254.

[constitution of primary dinitro-hydrocarbons], 1903, A., i, 331.

indanthren and flavanthren. I., 1904, A., i, 109. Scholl, Roland, preparation of anthracene derivatives from α-dianthraquinonyl, 1908, A., i, 428.

an experiment to demonstrate the reducing properties of cellulose, 1911.

A., i, 525.

colloidal chemical observations on the pyranthrone vat dyes, 1911, A., i, 656.

preparation of benzanthrone and its derivatives, 1912, A., i, 195.

the synthetic application of ethyl methanetricarboxylate, 1912, A., i, 238.

preparation of anthraquinone-1:2-dicarboxylic acids, 1912, A., i, 361.

Scholl, Roland, and Hans Berblinger, indanthren and flavanthren. II., 1904, A., i, 110.

bromination of 1:5-diaminoanthraquinone, 1905, A., i, 88.

indanthren and flavanthren. VI. Action of quinoline and acyl chlorides on indanthren, 1907, A., i, 257.

Scholl, Roland, Hans Berblinger, and A. Künzel, indanthren and flavanthren. VIII. Products of reduction of indanthren, 1907, A., i, 354.

Scholl, Roland, Hans Berblinger, and Johannes Mansfeld, indanthren and flavanthren. III. The halogen derivatives of indanthren, 1907, A., i,

Scholl, Roland, and Fritz Eberle, nature of the indanthren fusion of 2-amino-anthraquinone: 2-hydroxylamino- and 2:2'-azoxyanthraquinone, 1912, A., i, 141.

Scholl, Roland, Fritz Eberle, and Walter Tritsch, azines and quinonediazides of the anthraquinone series, 1912, A., i, 143.

Scholl, Roland, and Siegfried Edibacher, degradation of indanthren to dihydroxypyrazinoanthraquinone and its behaviour with benzoyl chloride and sodium ethoxide, 1911, A., i, 755.

Scholl, Roland, and Joseph Hilgers, aldoximation of anisole by means of mercury fulminate and aluminium oxy-

chloride, 1903, A., i, 347.

Scholl, Roland, and Karl Holdermann, constitution of nitroimines and action of phenylearbimide on methylnitroamine, 1906, A., i, 767.

indanthren and flavanthren. X. Products of reduction of flavanthren and the relation between their colour and constitution, 1908, A., i, 696.

Scholl, Roland, Karl Holdermann, Max Albert Kunz, Johannes Mansfeld, and Carl Stoll, constitution and synthesis of flavanthren. IX., 1907, A., i, 540.

Scholl, Roland, and Philipp Kačer, formation of aldoximes from the homologues of benzene by means of mercury fulminate and aluminium oxychloride, 1903, A., i, 254.

2:3-diaminoanthraquinone and azines of the anthraquinone series, 1905,

A., i, 88.

Scholl, Roland, and August Kremper, aldoximation of phenetole by means of mercury fulminate and aluminium oxychloride, 1903, A., i, 348.

Scholl, Roland, and Albert Krieger, constitution of dibromo-1:6-diaminoanthraquinone, 1905, A., i,

action of aromatic bases on the nitroamino-groups of 2:7-dibromo-4:9-dinitro-1:6-dinitroaminoanthraquinone, 1905, A., i, 145.

Scholl, Roland, Kurt Liese, Karl Michelson, and Ernst Grunewald, new synthesis of 4:4'-dimethylpyranthrone, 1910, A., i, 264.

Scholl, Roland, and Johannes Mansfeld, indanthren and flavanthren. IV.

Action of nitric acid on indanthren, 1907, A., i, 255.

Scholl, Roland, Johannes Mansfeld, and Julius Potschiwauscheg, vat dyes of the anthracene series. XV. Mesobenzdianthrone (helianthrone), mesonaphthadianthrone, and a new method of preparing flavanthren, 1910, A., i, 494.

Scholl, Roland, and Werner Neovius, indanthren and flavanthren. XI. Reduction products of flavanthren,

1908, A., i, 740.

introduction of several phthalic acid groups into aromatic compounds. IV. Experiments with carbazole,

1911, A., i, 567.

Scholl, Roland, Werner Neovius, and Karl Holdermann, introduction of several phthaloyl groups into aromatic I. Experiments with hydrocarbons. diphenyl, 1911, A., i, 452.

Scholl, Roland, Walther Neuberger, Walter Tritsch, and Julius Potschiwauscheg, the methyl-1:2-benzanthraquinone series. II., 1912, A., i,

562.

Scholl, Roland, and B. Nyberg, ethyl mercuri-aci-nitroacetate anhydride, 1906, A., i, 563.

Scholl, Roland, and B. Nyberg, conversion of a-nitro-B-phenyl-a-methylcarbamide into s-nitrophenylmethylcarbamide, 1906, A., i, 656.
Scholl, Roland, and M. Parthey, action

of ammonia on alizarin, 1906, A., i,

439.

Scholl, Roland, Julius Potschiwauscheg. Josef Lenko, and Emil Böcker, synthetical experiments in the pyranthrone series, 1911, A., i, 1007.

Scholl, Roland, Julius Potschiwauscheg. and Christian Seer, pyranthrone, a non-nitrogenous methine analogue of flavanthren, and dimethylpyranthrone, 1910, A., i, 271.

Scholl, Roland, and Albert Schmidt, dinitroethanedinitronic acid (s-tetranitroethane), 1903, A., i, 137.

Scholl, Roland, Gustav Schneider, and Fritz Eberle, nitroamines of the anthraquinone series, 1905, A., i, 70.

Scholl, Roland, and Emil Schwinger, conversion of 1:2-benzanthraquinone (naphthanthraquinone) into anthraquinone-1:2-dicarboxylic acid, 1911, A., i, 995.

Scholl, Roland, and Christian Seer, introduction of several phthaloyl groups into aromatic compounds. II. Derivatives of diphenyl, 1911, A., i, 453.

identity of Graebe's isochrysofluorene with dihydrobenzanthrene, 1911,

A., i, 626.

catalytic elimination of hydrogen from aromatic nuclei and the synthesis of condensed systems by means of aluminium chloride, 1912, A., i, 271.

Scholl, Roland, Christian Seer, and Walter Tritsch, introduction of several phthalic acid groups into aromatic compounds. III. Experiments with thianthren, dimethylthianthren, thiodiphenylamine, and N-methylthiodiphenylamine, 1911, A., i, 557.

Scholl, Roland, Christian Seer, and Richard Weitzenböck, perylene, a highly condensed aromatic hydrocarbon, C20H12, 1910, A., i, 616.

Scholl, Roland, and Philipp Stegmuller, indanthren and flavanthren. VII. Products of reduction of indanthren, 1907, A., i, 354.

Scholl, Roland, and Wilhelm Steinkopf. additive compounds of organic haloids with silver nitrate, 1907, A., i, 116.

Scholl, Roland, Wilhelm Steinkopf, and A. Kabacznik, indanthren and flavanthren. V. Reduction products of indanthren, 1907, A., i, 256.

Scholl, Roland, and Walter Tritsch, the methyl-1:2-benzanthraquinone group. I., 1912, A., i, 36.

Scholl, Roland, Albert Otto Weil, and Karl Holdermann, nitrimines and nitriminic acids, 1905, A., i, 181.

Scholl, Roland, and G. von Wolodkowitsch, existence of quinonoid properties in anthraquinone derivatives, 1911, A., i, 888.

Scholl, Roland. See also Oscar Bally, Karl Holdermann, Philipp Kacer, and

Hans Schnackenberg.

Schollenberger, Charles J., estimation of total potassium in minerals, 1912, A., ii, 1095.

Schols, Ch., the influence of silicon on the maximum solubility of iron carbide in y-iron, 1910, A., ii, 1071.

Scholtz, Max [Erwin], isomeric coninium iodides, 1904, A., i, 1044; 1905, A., i, 296.

mixed indicators, 1904, A., ii, 771. standardisation of normal solutions,

1905, A., ii, 57.

titrimetric estimation of chlorates and bromates, 1905, A., ii, 651.

sparteine alkyl haloids, 1906, A., i, 379.

iodometric estimation of sulphates, 1906, A., ii, 195.

alkaloids of pareira root, 1907, A., i, 79; 1911, A., i, 913.

double salts of alkaloids and iron, 1908, A., i, 202.

stereoisomerism of compounds containing asymmetric carbon and asymmetric quinquevalent nitrogen atoms, 1908, A., i, 678.

iron double salts of organic bases,

1910, A., i, 96.

stereochemistry of quinquevalent nitrogen, 1910, A., i, 634. asymmetry of the quinquevalent

system Na₂bcd, 1911, A., i, 326.

action of acetic anhydride on a-picoline, 1912, A., i, 385.

nature of picolide and pyrrocoline, 1912, A., i, 648.

solubility of alkaloids in basic solvents, 1912, A., i, 895.

Scholtz, Max, and Richard Abegg, equilibria between potassium chromate and barium sulphate and carbonate, 1906, A., ii, 602.

Scholtz, Max, and Konrad Bode, quaternary ammonium compounds of the

alkaloids, 1905, A., i, 79. Scholtz, Max, and Ludwig Huber, behaviour of p-aminoacetophenone towards aldehydes, 1904, A., i, 253.

Scholtz, Max, and Friedrich Kinke, condensations of piperony acraldehyde and of piperonal, 1904, A., i, 508. Scholtz, Max, and W. Meyer, condensa-

tion of aldehydes with methyl nonyl ketone, a-naphthyl methyl ketone and p-methoxyacetophenone, and the formation of pyridine derivatives from the condensation products, 1910, A., i, 561.

Scholtz, Max, and P. Pawlicki, products of the addition of alkyl haloids to sparteine, 1904, A., i, 1045. stereoisomeric conhydrinium iodides,

1905, A., i, 473.

Scholtz, Max, and E. Wassermann, steric hindrance of ring-formation by o-substituting groups, 1907, A.,

stereoisomerism of compounds containing a quinquevalent asymmetric nitrogen atom and an asymmetric carbon atom, 1907, A., i, 340.

Scholtz, Max, and Alfred Wiedemann, synthesis of 2:6-disubstituted pyridines; constitution of pyridine, 1903, A., i, 436.

Scholtz, Max, and Richard Wolfrum, syntheses with o-xylylene bromide, 1910, A., i, 771.

Scholtz, Theodor, See Conrad Willgerodt.

Scholtze, Karl. See Arthur Hantzsch. Scholz, A., ferrous and ferric double salts of polybasic acids, 1908, A., i, 603.

a convenient stirring thermometer, 1912, A., ii, 735.

Scholz, Alfred. See Oscar Haenle. Scholz, Harry, origin of indican in the animal body, 1903, A., ii, 563.

Scholz, Herman A. See James Henri Walton, jun.

Scholz, Victor. See Heinrich schmidt.

Scholz, Wilhelm, metabolism in cretins, 1906, A., ii, 102.

Scholze, A., 2-methyl-6-pyrophthalone, 1905, A., i, 825; 1906, A., i, 33.

Scholze, E. See Alfred Werner, Schoorl, Nicolaas, oxidation and reduc-

tion, 1905, A., ii, 692. assay of "formalin," 1907, A., ii, 310.

indicators, 1907, A., ii, 388. microchemical analysis; the silver group, 1908, A., ii, 432.

microchemical analysis. III. Arsenic, antimony, tin, 1908, A., ii, 777.

microchemical analysis. IV. Mercury, bismuth, lead, copper, cadmium, 1909, A., ii, 96.

Schoorl, Nicolaas, microchemical analysis. V. Analysis of the iron group, 1909, A., ii, 521.

microchemical analysis. VI. Alkali earths group (barium, strontium,

calcium), 1909, A., ii, 762.

microchemical analysis. VII. The last group (magnesium, lithium, potassium, and sodium), 1909, A., ii, 831.

microchemical analysis. VIII. The insoluble substances, 1909, A., ii,

microchemical reaction for aluminium with cæsium chloride, 1911, A., ii, 443.

reducing power of sugars, 1912, A., i,

reducing power of sugars (monosaccharides) and its bearing on the definition of these substances, 1912,

A., i, 750.

Nicolaas, and Leonardus Marinus van den Berg, decomposition of chloroform under the influence of light and air, 1906, A., i. 57.

decomposition of bromoform under the influence of light and air, 1906, A.,

comparison of the decomposition of chloroform, bromoform, and iodoform under the influence of light, 1906, A., i, 474.

decomposition of chloral hydrate by exposure to light and air, 1906, A.,

i, 481.

influence of incandescent gas light on certain pharmaceutical preparations,

1906, A., ii, 411.

Schoorl, Nicolaas, and P. C. J. van Kalmthout, colour reactions of important sugars, 1906, A., ii, 204.

Schoorl, Nicolaas. See also Wilhelm

Schorigin, P. See Max Trautz.

Schorigin, Paul, condensations under the influence of sodium, 1907, A., i, 753.

condensation of aldehydes with phenols; condensation of quinol with benzaldehyde and formaldehyde, 1907, A., i, 1031. syntheses by means of sodium and

alkyl haloids, 1908, A., i, 866.

sodium-alkyl compounds and syntheses made therewith, 1908, A., i,

new synthesis of aromatic carboxylic acids from hydrocarbons, 1908, A., i, 886; 1910, A., i, 556.

Schorigin, Paul, crystalline form of 3:4'dimethylbenzophenone, 1909, A., i,

alkyl derivatives of sodium and their reactions with ethers, 1910, A., i,

Schorigin, Paul. See also Wassili W. Scharwin.

Schorndorff, Paul. See Alfred Werner. Schorr, Karl, changes in internal friction due to protein degradation, 1908, A., ii, 931.

the changes in physical conditions of colloids. XII. The properties of the protein ions, 1912, A., i, 56.

See Friedrich Schossberger, Endre. Wilhelm Semmler.

Schott, Eduard, the behaviour of gluconic and saccharic acids in the organism, 1911, A., ii, 514.

Schott, Ehrhart. See Erich Ebler.

Schott, F., colorimetric estimation of salicylic acid and copper, 1912, A., ii, 305.

Schott, Heinrich, p-nitroaminodiphenylamine, 1904, A., i, 35.

Schott. Heinrich. See also Wirth.

Schottky, Hermann, thermodynamics of salts containing water of crystallisation, 1908, A., ii, 1016.

changes in metallic foils on heating. due to surface tension, 1912, A., ii,

Schottmüller, Arnold. See Josef Houben. Schotz, Schachno Peisach. See George Gerald Henderson.

Schoulz, Romeo. See Robert Kremann. Schrader, Hans, the existence of chemical compounds of short-lived radioactive

elements, 1912, A., ii, 722.
Schrader, Hans. See also Emil Fischer, and Alfred Stock.

Schraube, Georg. See Kurt Arndt.

Schrauth, Walther, Julius Rother, and Walter Schoeller, influence of nuclear alkyl groups on the mercuriation of aniline and its nitrogen substitution products, 1912, A., i, 930.

Schrauth, Walther, and Walter Schoeller, synthesis of a-hydroxymercuri-fatty acids. I. Methyl mercuridimalonate and its product of hydrolysis, hydroxymercuriacetic anhydride, 1908,

A., i, 617.

[organo-mercury compounds], 1909,

A., i, 93.

the disinfecting power of complex organo-mercury compounds. I. Aromatic mercury-carboxylic acids. 1911, A., ii, 63.

Schrauth, Walther, and Walter Schoeller. biochemical investigations with aromatic mercury compounds, 1911, A.,

ii, 637; 1912, A., ii, 75.

Schrauth, Walther, Walter Schoeller, and Richard Struensee, complex mercury compounds of methyl cinnamate and cinnamic acid, 1910, A., i, 347.

complex mercury compounds of cinnamic acid and its esters, 1911, A.,

i, 595.

ether derivatives of B-phenylhydracrylic acid (B-hydroxy-B-phenylpropionic acid), 1911, A., i, 641.

Schrauth, Walther. See also Emil Fischer, Franz Müller, Claus Schil-

ling, and Walter Schoeller.

Schrefeld, O., apparatus and methods for the investigation of raw sugar, fuels, and beet seeds, 1906, A., ii,

influence of clarification with lead acetate on the estimation of invert

sugar, 1908, A., ii, 1076. calculation of the concentration of sucrose solutions from the specific gravity by means of the tables of the "Normal Eichungs Kommission," 1912, A., ii, 499.

Schreiber, Berthold. See Stanislaus von

Kostanecki.

Schreiber, Ernst, manurial experiments with Damara and Peruvian guano, 1903, A., ii, 177.

Schreiber, F., catalytic preparation of ammonia from compounds containing nitrogen and carbon, 1911, A., ii, 881.

Schreiber, Herman, determination of the saponification number of lubricating oils containing saponifiable fats, 1907, A., ii, 314.

estimation of total sulphur in organic

matter, 1910, A., i, 894. Schreiber, Herman, and Walter C. Taber. estimation of tin in canned food, 1912,

A., ii, 95. Schreiber, Herman. See also Percy

Hargraves Walker.

Schreier, Arthur, and Franz Wenzel, reactivity of substituted phloroglucinols in the formation of fluorones, 1904, A., i, 517.

Schreier, Arthur. See also Franz Wen-

Schreinemakers, Frans Antoon Hubert. vapour pressures of ternary mixtures, 1903, A., ii, 530.

vapour pressures in the system: benzene, carbon tetrachloride, and ethyl alcohol. I., 1904, A., ii, 311, 538.

Schreinemakers, Frans Antoon Hubert, mixed crystals in systems of three substances, 1905, A., ii, 154, 376, 685; 1906, A., ii, 342; 1907, A., ii,

ternary equilibria, 1905, A., ii, 804. potassium chromates 1905, A., ii, 818.

ammonium chromates, 1905, A., ii, 820. lithium chromates, 1906, A., ii, 24. alkali chromates, 1906, A., ii, 287.

a tetra-component system with two liquid phases, 1907, A., ii, 337.

equilibria in quaternary systems, 1908, A., ii, 571, 935.

the system: water, ammonium, barium and cupric chlorides, 1909, A., ii, 30. solubility of manganese sulphate in mixtures of water and alcohol, 1909,

A., ii, 317. double salts of ammonium sulphate and manganese sulphate, 1909, A.,

ii, 317.

the system: copper sulphate-copper chloride-ammonium sulphate-ammonium chloride and water at 30°, 1909, A., ii, 403.

certain deductions for quaternary

systems, 1909, A., ii, 559.

equilibria in quaternary systems; the system: sodium oxide, barium oxide, hydrochloric acid, and water, 1909, A., ii, 986.

non-dehydration of hydrates by absolute alcohol, 1910, A., i, 294.

equilibria in quaternary systems; the system: lithium sulphate-ammonium sulphate-ferrous sulphate and water, 1910, A., ii, 195.

raising and lowering of the freezing

point, 1910, A., ii, 389.

the transformation point of double

salts, 1910, A., ii, 489.

equilibrium in the system: watersodium sulphate-sodium chloridecopper sulphate-cupric chloride, 1911, A., ii, 592.

Schreinemakers, Frans Antoon Hubert, and (Miss) Woutrine Constance de Baat, the system: water, and sodium, barium, and copper chlorides, 1908, A., ii, 1020.

equilibria in quaternary systems; the system: water-ethyl alcohol-sodium chloride-sodium sulphate, 1909, A., ii, 872.

the system: water-ammonium nitrate -silver nitrate, 1910, A., ii, 489.

equilibria in the system : sodium chloride, sodium sulphate, cupric chloride, cupric sulphate, and water at 25°, 1911, A., ii, 381.

Schreinemakers, Frans Antoon Hubert, and Johan Theodorus Bornwater, influence of lithium sulphate on the formation of layers in the system: water-alcohol-ammonium sulphate, 1907, A., ii, 23.

Schreinemakers, Frans Antoon Hubert, and Daniel Herman Cocheret, equilibrium in the system: ammonium sulphate, lithium sulphate, and water,

1906, A., ii, 424.

Schreinemakers, Frans Antoon Hubert, and Joseph J. B. Deuss, the system : water-alcohol-manganous sulphate,

1912, A., ii, 441.

- Schreinemakers, Frans Antoon Hubert, and Willem Anne van Dorp, jun., solubility of lithium sulphate in mixtures of water and alcohol, 1907, A., ii, 23.
- Schreinemakers, Frans Antoon Hubert, and Th. Figee, the system: watercalcium chloride-calcium hydroxide at 25°, 1911, A., ii, 983.

Schreinemakers, Frans Antoon Hubert. and Hendrik Filippo, rubidium chrom-

ates, 1906, A., ii, 445.

- Schreinemakers, Frans Antoon Hubert, and Petrus Hubertus Jacobus Hoenen, double salts of ammonium sulphate and ammonium nitrate, 1909, A., ii, 236.
- Schreinemakers, Frans Antoon Hubert, and J. L. M. van der Horn van der Bos, the system: water-phenol-hydrochloric acid at 12°, 1912, A., ii, 543.

Schreinemakers, Frans Antoon Hubert, and A. Massink, some compounds of nitrates and sulphates, 1912, A., ii, 553.

Schreinemakers, Frans Antoon Hubert, and D. J. Meyeringh, casium chrom-

ates, 1909, A., ii, 41.

Schreinemakers, Frans Antoon Hubert, and J. Milikan, [oxy-salts of the alkaline-earth metal haloids], 1912, A., ii,

Schreinemakers, Frans Antoon Hubert, and Antonius Jacobus Cornelis de Waal, the system: water, lithium sulphate, and aluminium sulphate, 1906, A., ii, 855.

Schreiner, Erling, some hydrocarbons of the diphenyl series, 1910, A., i, 367.

derivatives of ethylbenzene and of isopropylbenzene, 1910, A., i, 467. higher homologues of benzene, 1910,

A., i, 661. Schreiner, Oswald, colorimetric estimation of [small amounts of] phosphoric acid in the presence of silica, 1904, A., ii, 85.

- Schreiner, Oswald, estimation of phosphoric acid in aqueous extracts of soils and plants, 1904, A., ii,
 - colorimetric methods; a simple colorimeter for general use, 1905, A., ii, 760.
 - symptoms shown by plants under the influence of different toxic com-

pounds, 1911, A., ii, 427. Schreiner, Oswald, and Bailey Edgar Brown, colorimetric estimation phosphates, 1905, A., ii, 117.

Schreiner, Oswald, and George Henry Failyer, absorption of phosphates by soils, 1906, A., ii, 485.

absorption of potassium by soils, 1906,

A., ii, 575.

Schreiner, Oswald, and William S. Ferris, colorimetric estimation of magnesium, 1904, A., ii, 681.

Schreiner, Oswald, and Elbert C. Lathrop, dihydroxystearic acid in good and poor soils, 1911, A., ii, 923.

the chemistry of steam-heated soils,

1912, A., ii, 981.

- Schreiner, Oswald, and Howard Sprague Reed, the rôle of the oxidising power of roots in soil fertility, 1907, A., ii,
 - power of sodium nitrate and calcium carbonate to decrease toxicity in conjunction with plants growing in solution cultures, 1908, A., ii, 420.
 - rôle of oxidation in soil fertility, 1909, A., ii, 1048.
- Schreiner, Oswald, and Edmund C. Shorey, secondary decomposition products of proteins in soils, 1907, A., ii, 716.

isolation and toxic properties of an organic soil constituent, 1908, A., ii,

isolation of picolinecarboxylic acid from soils and its relation to soil fertility, 1908, A., ii, 889.

isolation of dihydroxystearic acid from soils, 1908, A., ii, 1067.

agrosterol: a cholesterol substance in soils, 1909, A., i, 152.

the presence of arginine and histidine in soils; pyrimidine derivatives and purine bases in soils, 1911, A., ii,

chemical nature of soil organic matter, 1911, A., ii, 147.

some acid constituents of soil humus, 1911, A., ii, 147.

cholesterols in soils: phytosterol, 1911, A., ii, 327.

Schreiner, Oswald, and J. J. Skinner, ratio of plant nutrients as affected by harmful soil compounds, 1910, A., ii, 740.

Schreiner, Oswald, and Michael Xavier Sullivan, the products of germination affecting soil fertility, 1907, A., ii, 715.

toxic substances arising during plant metabolism, 1908, A., ii, 422.

soil fatigue, 1909, A., ii, 428.
concurrent oxidising and reducing

power of roots, 1910, A., ii, 741.
Schreiner, Oswald, Michael Xavier Sullivan, and F. R. Reid, studies in soil oxidation, 1911, A., ii, 146.

Schreiner, Otto. See Johannes D'Ans. Schreiner, Wilhelm. See Ludwig Wolff. Schrenk, Alfred. See Karl Auwers.

Schreuer, Max, the effect of abundant protein food on metabolism, 1906, A., ii. 101.

Schreuer, Max. See also Johannes Frentzel.

Schreyer, F. See Karl Bornemann.

Schreyer, Friedrich. See Theodor Zincke.

Schrimpff, August, improved hydrogen sulphide apparatus, 1905, A., ii, 383.

Schrobsdorff, Hans, derivatives of chrysazin and of hystazarin, 1903, A., i, 840.

Schroeder, August, foreign fats and oils, 1906, A., ii, 131.

Schröder, Ernst. See Richard Anschütz. Schröder, Fritz. See Emil Knoevenagel.

Schroeder, G., influence of potassium cyanide on the respiration of Aspergillus niger, with remarks on the mechanism of the action of hydrocyanic acid, 1908, A., ii, 413.

Schroeder, Heinrich (Bonn), enzymes in the spores of Fuligo varians, 1907,

A., ii, 123.

the resistibility of wheat and barley to poisons and its importance for sterilisation, 1910, A., ii, 1103.

Schröder, Heinrich (Hedwigburg), the utilisation of native iron-aluminium phosphates, 1908, A., ii, 500.

Schröder, Heinrich (Heidelberg). See Julius Wilhelm Brühl.

Schröder, Iwan, apparatus for lecture demonstration in physical chemistry, 1906, A., ii, 727.

Schroeder, Johann von, the tanning pro-

ress, 1910, A., i, 129.

Schroeder, Johannes, pyridine as a solvent and ionising medium for inorganic metallic salts, 1905, A., ii, 306. Schroeder, Johannes, formation of a double compound of mercuric cyanide and pyridine, 1908, A., i. 252.

ide and pyridine, 1908, A., i, 252. demonstration of the formation of ammonium amalgam by electrolysis of ammonium chloride, 1908, A., ii, 270.

solubility of potassium chloride in aqueous pyridine at 10°, 1908, A., ii,

277.

behaviour of ethyl ether on the passage of an electric current, 1909, A., ii, 462.

apparatus for the determination of solubilities at the boiling point of the solvent, 1909, A., ii, 646,

simple apparatus for extraction in the cold and for the determination of solubility at room temperature, 1909, A., ii, 647.

estimation of nicotine in concentrated tobacco juice, 1911, A., ii, 163, 552.

quantity of carbon dioxide in the atmosphere at Monte Video, 1911, A., ii, 1086.

Schröder, Johannes, and Hans Dammann, the amounts of hydrogen cyanide produced by different varieties of sorghum, 1912, A., ii, 197.

Schroeder, Johannes, and Hans Steiner, molecular weights of inorganic salts in methyl acetate, 1909, A., ii, 212.

Schroeder, Johannes. See also Alexander Naumann.

Schröder, Karl, influence of copper on the titration of iron by the Zimmermann-Reinhardt method, 1909, A., ii, 186.

volumetric estimation of thiocyanic acid and the causes of the low results, 1909, A., ii, 948.

the part taken by atmospheric oxygen in the oxidation of oxalic acid by the higher oxides of manganese, 1910, A., ii, 899.

the purification and analytical control of potassium ferrocyanide, 1911, A.,

11, 1143

Schroeder, Paul von, phenomena of the setting and swelling of gelatin, 1903, A., ii, 721.

Schroeder, Paul von. See also Richard Abegg.

Schrödter, Max. See Daniel Vorländer. Schroeff, H. J. van der. See Hartog Jakob Hamburger.

Schrömbgens, Josef. See August Michaelis.

Schröter, Fritz, estimation of hexamethylenetetramine (urotropine) in urine, 1911, A., ii, 343.

- Schröter. Fritz. See also Alfred Schitten-
- Schröter, Fritz. See Friedrich Wilhelm Semmler.
- Schröter, Fritz (Berlin), See Franz Fischer.
- Schroeter, Georg, action of carbon dioxide on magnesium phenyl bromide, 1903, A., i, 821; 1907, A., i, 576.

B-methylcinnamic acid, 1904, A., i, 415. formation of methronic acid, 1906, A., i, 598.

bimolecular anhydrides of anthrauilic acid, 1907, A., i, 529, 620.

preparation of transformation products of ketens and carbinides, 1910, A.,

rearrangements. III., 1911, A., i, 505. Schroeter, Georg, and Otto Buchholz, B. alkyleinnamic acids. III., 1908, A., i, 169.

Schroeter, Georg, and Carl Caspar, the Beckmann, Hofmann-Curtius, benzilic acid intermolecular rearrangements, 1909, A., i, 617.

Schroeter, Georg, and Otto Eisleb, bimolecular anhydrides of anthranilic

acid, 1909, A., i, 575.

Schroeter, Georg, and Gustav Herzberg, methionic [methanedisulphonic] acid, 1905, A., i, 851.

Schroeter, Georg, Hans Kesseler, Carl Otto Leverkus, and Friedrich Wülfing, B-alkylcinnamic acids. II., 1907, A., i, 530.

Schroeter, Georg, and Hans Meerwein. a peculiar case of isomerism, 1903, A., i, 831.

Schroeter, Georg, and Oskar Motschmann, rearrangements, 1909, A., i,

Schroeter, Georg, and Georg Rösing, acylation of anilinesulphonic acids, 1906, A., i, 415.

Schroeter, Georg, and Hubert Rössler, naphthastyril, 1903, A., i, 117.

Schroeter, Georg, Leonhard Schmitz, and Rudolf Schwamborn, symmetrical dialkyl esters of citric acid, 1905, A., i. 738.

Schroeter, Georg, Rudolf Schwamborn, and Carl Stassen, \(\beta\)-aminotricarballylic

acid, 1905, A., i, 819.

Schroeter, Georg, and Walther Sondag, new method for the preparation of diamyl ether and ethers of the higher alcohols, 1908, A., i, 497.

Schroeter, Georg, and Carl Stassen, formation of a tetramethylene ring by condensation of s-ethyl dimethylacetonedicarboxylate, 1907, A., i, 532.

Schroeter, Georg. See also Arthur Binz, and Hans Meerwein.

Schröter, Otto. See Karl Auwers.

Schröter, Walther. See Robert Gnehm. Schrötter, Hermann von, and Nathan Zuntz. physiological experiments during two balloon journeys, 1903, A., ii, 161.

Schrötter, Hermann von. See also Adolf Loewy.

Schrötter, Hugo, cholesterol. I., 1903, A., i, 625.

Schrötter, Hugo, and Josef Flooh, phenylhydrazone of salicyclic acid, 1907, A., i, 929.

Schrötter, Hugo, and Richard Weitzenbock, connexion of cholesterol and cholic acid with camphor and turpentine oil, 1908, A., i, 636.

nature and constitution of rhizocholic

acid, 1908, A., i, 900.

Schrötter, Hugo, Richard Weitzenböck. and Reinhold Witt, cholesterol, cholic acid, and a common degradation product of the same, 1908, A., i, 532.

Schrott-Fiechtl, Hans, comparison of the estimation of fat in milk by Gottlieb's and Gerber's methods and by Wollny's refractometer, 1906, A., ii, 204.

Schrumpf, Peter, preparation of pepsin, 1905, A., i, 556.

Schrumpf, Peter, and B. Zabel, antimony poisoning in compositors, 1910, A., ii,

Schryver, Samuel Burnett, biochemical synthesis, 1904, A., ii, 190.

autolysis. II. The influence of the thyroid, 1905, A., ii, 267.

chemical dynamics of animal nutrition,

1906, A., ii, 292. apparatus for continuous dialysis, 1908, A., ii, 465.

toxicology of tin with special reference to the metallic contamination of canned foods, 1909, A., ii, 1043.

the photochemical formation of formaldehyde in green plants, 1910, A., ii, 334.

[modification of Rimini's test for formaldehyde], 1910, A., ii, 357.

the state of aggregation of matter. I.—III., 1911, A., i, 245; ii,

preparation of the unconjugated acids

of ox bile, 1912, A., i, 537. Schryver, Samuel Barnett. See also John Molyneux Hamill, and (Miss) Janet Elizabeth Lane-Claypon.

See Carl

Schtschegolew, Michael. Adam Bischoff.

Schtscherback, Johannes, secretion of salts by the leaves of Statice quelini, 1910, A., ii, 442.

Schtscherbakoff, M. A., relation of lead iodide to water and oxygen, 1905,

A., ii, 711.

Schtvan, W., bromination of certain tetrahydropyrone compounds, 1909, A., i, 504.

Schubert, Alwin. See Eberhart Rimbach.

Schubert, Carl. See Walther Hempel. Schubert, Friedrich, the glycol obtained from isobutaldehyde and cuminaldehyde, and its behaviour with dilute sulphuric acid, 1903, A., i, 626.

rapid measuring vessel and rapid pipette, 1908, A., ii, 424.

estimation of starch, 1911, A., ii, 75. Hermann. See Ludwig Schubert. Knorr.

Schuberthowna, (Mlle.) M., oxyprotosulphonic acid from casein, 1912, A., i, 1041.

Schubetski, Ludwig. See Carl Adam Bischoff.

Schubnikoff, A., symmetry of crystals of potassium dichromate, 1912, A., ii,

Schuch, Julius, estimation of fluorine, 1905, A., ii, 552.

formaldehyde and its reactions, 1906, A., ii, 500.

Schuchard, E. See Alfred Stavenhagen. Schucht, F., marsh soils, 1906, A., ii, 45.

Schucht, H. See Herbert Freundlich. Schucht, Ludwig, free acid in superphosphate, 1905, A., ii, 610.

titration of phosphoric acid, 1906, A.,

ii, 899.

volumetric estimation of water-soluble phosphoric acid in superphosphates, 1909, A., ii, 92.

Schucht, Ludwig, and Wilhelm Möller, analysis of hydrofluosilicic acid, 1906, A., ii, 901.

Schübel, Konrad. See Hermann Pauly. Schück, Bernhard, See Nikodem Caro. and Hermann Grossmann.

Schükareff, A. N., the gaseous-liquid state, 1903, A., ii, 710; 1906, A., ii, 271.

internal energy of dissolved substances, 1908, A., ii, 462.

properties of solutions at their critical solution-temperatures, 1910, A., ii, 192.

Schükaroff, A. N., and Marie Tschuprowa, the gaseous-liquid state. III., 1906, A., ii, 271.

Schükareff, A. N. See also Wladimir Fedorowitsch Luginin.

Schüler, Adolf, diphenyl derivatives of hydroxyquinol trimethyl ether [1:2:4trimethoxybenzene]; action of nitric acid on hydroxyquinol trimethyl ether, 1907, A., i, 700.

Schüler, Adolf. See also Hermann Thoms. Schüler, Paul. See Arthur Kötz.

Schülke & Mayr, preparation of phenyl ortho-oxalates, 1911, A., i, 125.

Schülke & Mayr, and Paul Flemming, preparation of complex compounds from halogenated phenols and their homo'ogues, 1912, A., i, 848.

Schülke, Kurt. See Gustav Heller. Schüller, A., sodium amalgams, 1904, A., ii, 657.

Schüller, Jos., phloridzin- and phloretinglycuronic acids. I., 1911, A., ii, 814. Schurch, A. See Josef Tambor.

Schurhoff, P., cause of the oxidising action of urine, 1905, A., ii, 740.

Schurmann, E., estimation of phosphorus in bronze, brass, and similar alloys in the presence of arsenic, 1910, A., ii, 545.

estimation of tin in white metals by electrolysis, 1910, A., ii, 1115.

a new method of analysing white metal, 1911, A., ii, 158.

Schürmann, E., and Hans Arnold, analysis of bronzes, brass, and similar alloys, 1908, A., ii, 898.

a process for the analysis of bronze, brass, and other alloys, and the electrolytic estimation of tin in the same, 1910, A., ii, 549.

Schurmann, E., and Wilhelm Scharfenberg, analysis of white metal and similar alloys, 1908, A., ii, 537.

Schurr, J., rate of dissolution of salts in their aqueous solutions, 1904, A., ii, 543.

Schütte, Otto, determination of the saponification number of dark-coloured oils, 1910, A., ii, 464.

Schütte, Wenzel. See August Michaelis. Schütz, Emil, the affinity of sulphur for metals, 1907, A., ii, 947.

Schütz, Emil. See also Rudolf Ruer. Schütz, Franz. See Theodor Zincke. Schütz, Julius, proteolytic enzyme of

yeast, 1903, A., i, 379. inhibition of pepsin activity by salts,

1904, A., ii, 573.

the influence of pepsin and the amount of hydrochloric acid on the intensity of digestion, especially in the absence of free hydrochloric acid, 1909, A., ii, 1031.

Schütz, Julius. See also Otto von Fürth.

Schütz, Max. See Robert Pschorr.

Schütze, Albert. See Martin Jacoby. Schütze, H. See Danckwart Acker-

Schugowitsch, A: See Rudolf Wegscheider.

Schukoffsky, G. J., lithium amalgams, 1911, A., ii, 882.

Schukowsky, Gregor von. See Georg Bredig, and Nicolai S. Kurnakoff,

Schulemann, Otto, spark spectrum of indium, 1912, A., ii, 1.

Schulemann, Werner, selective tissue colouring (vitalfarbung) and chemicotherapeutics, 1912, A., ii, 791.

selective tissue colouring and chemicotherapeutics. II. Sources of experimental errors, 1912, A., ii, 859.

Schuler, Josef. See Emil Abderhalden. Schuller, Alois, distillation under diminished pressure in quartz vessels, 1904, A., ii, 109.

Schuloff, J., production of proteins by higher plants in darkness, 1912, A., ii, 1203.

Schuloff, J. See also Dmitri N. Prianischnikoff.

Schuloff, J. W., solubility of phosphorite under the influence of physiologically-acid salts, 1904, A., ii, 286.

Schuloff, R. See Paul Friedländer.

Schulte, Willy, precipitation of antimony from thioantimonate solutions, 1909, A., ii, 522.

Schulte-Bäuminghaus, Clemens, effect of some mineral substances on cows, 1903, A., ii, 569.

Schulten, August [Benjamin] (Baron) de, crystallisation of sparingly soluble substances, 1903, A., ii, 533.

a peculiar property of some hydrated salts, 1903, A., ii, 647.

crystalline bismuth salts, 1903, A., ii,

crystallised magnesium phosphate and arsenate: artificial production of bobierrite and hærnesite, 1903, A.,

artificial production of erythrite, annabergite, and cabrerite, 1903, A., ii,

artificial production of köttigite and adamite, 1903, A., ii, 655.

simultaneous production of struvite and newberyite and of arsenical struvite and rösslerite, 1903, A., ii, 655.

Schulten, August [Benjamin] (Baron) de, rosslerite and wapplerite, 1904, A., ii. 134.

artificial production of brushite and monetite, 1904, A., ii, 491.

artificial production of newberyite, 1904, A., ii, 492.

artificial production of pharmacolite and haidingerite, 1904, A., ii, 492.

composition of fiedlerite, 1905, A., ii, 173.

artificial production of hopeite, 1905, A., ii, 174.

artificial production of barium- and strontium-haidingerite, 1905, A., ii, 174.

artificial production of barium-, lead-, and strontium-monetite, and of arsenated monetites, 1905, A., ii, 174.

artificial production of hureaulite and cadmium-hureaulite, 1905, A., ii, 175.

artificial production by a wet method of anhydrous chromates of barium,

lead, and strontium, 1905, A., ii, 175. isomorphism of northupite and tychite, 1906, A., ii, 769.

crystallographic examination of some silicides, carbides, and borides obtained by Moissan and his pupils, 1911, A., ii, 486.

crystallographic examination of fluorides obtained by Moissan and his

pupils, 1911, A., ii, 605.

crystallographic constants of some artificial apatites, 1911, A., ii, 615. Schulten, August de. See also Albert Granger, and Alfred Lacroix.

Schultz, Gustav [Theodor August Otto], aminophenolsulphonic and aminocresolsulphonic acids, 1906, A., i, 837.

aminophenolsulphonic and aminocresolsulphonic acids. II. 3-Nitroand 3-amino-o-cresolsulphonic acids, 1907, A., i, 1030.

aminophenolsulphonic and aminocresolsulphonic acids. III. 4-Nitro-4-amino-m-cresol-6-sulphonic acids, 1907, A., i, 1030.

aminophenolsulphonic and aminocresolsulphonic acids. IV. Sulphonation of 3-nitro-p-cresol, 1907, A., i, 1030.

Schultz, Gustav, and Heinrich Beyschlag. action of sulphur on m-tolylenediamine. I. and II., 1909, A., i, 269.

Schultz, Gustav, and Josef Erber, derivatives of the aminoalizarins, 1906, A., i, 968.

Schultz, Gustav, Eugen Führer, Ernst Hartogh, Eugen Herzfeld, and Alfred Perl, constituents of coal tar. II.—V., 1909, A., i, 897.

Schultz, Gustav, and Leonhard Hauenstein, carbazole, 1907, A., i, 1074.

Schultz, Gustav, and Ernst Ichenhaeuser, bisazo-dyes from phenol and cresols, 1908, A., i, 229.

Schultz, Gustav, and Wilhelm Kohlhaus, constitution of Griess' benzidinedisulphonic acid, 1906, A., i, 818.

Schultz, Gustav, and Oskar Löw, behaviour of 3-nitro-p-cresol towards sulphuric acid, 1909, A., i, 222; 1910, A., i, 552.

Schultz, Gustav, and Armin Peteny, derivatives of p-xylidine, 1907, A., i,

1075.

Schultz, Gustav, Georg Rohde, and Eberhard Bosch, benzylethylaniline, 1904, A., i, 992.

Schultz, Gustav, Georg Rohde, and Gustav Herzog, transformations of hydrocyanocarbodiphenylimide, 1906, A., i, 890.

Schultz, Gustav, Georg Rohde, and Ferdinand Vicari, constitution of o-tolidine, 1904, A., i, 532; 1907, Δ., i, 244.

Schultz, Gustav, and Alexander Sander, constituents of coal tar; ethylbenzene,

1909, A., i, 639.

Schultz, Gustav, and Robert Stäble, quinonesulphonic acid, 1904, A., i, 597.

Schultz, Gustav, and Alexander Székely, constituents of coal tar. VI. iso-Propylbenzene (cumene), 1910, A., i, 724.

Schultz, J. H., the presence in blood and liver of a ferment capable of causing the hydrolysis of cholesteryl esters, 1912, A., ii, 852.

Schultz, Roland. See Robert Behrend. Schultz, W. H., effect of chloral hydrate

on heart muscle, 1906, A., ii, 686.
Schultze, Ernst Heinrich, rapid estimation of calcium, potassium, and phosphoric acid, 1905, A., ii, 482.

Schultze, F. See Bernhard Wagner. Schultze, Fritz. See Lassar-Cohn.

Schultze, Karl M. L. See Josef Houben. Schultze, Willi, resin oil, 1908, A., i, 356.

Schultze, Walter H., new method for detecting, reducing and oxidising properties of bacteria, 1911, A., ii, 61.

Schulz, Arthur, spectroscopic characters of hæmatoporphyrin, 1905, A., i, 252.
Schulz, E. See Ernst Beckmann.

Schulz, Ernst. See Adolf Riedel.

Schulz, Ferdinand, detection of nitronaphthalene in mineral oils, 1909, A., ii, 943.

a device for preventing over-titrating,

1909, A., ii, 1049.

Schulz, Friedrich Nicolaus, the reducing properties of normal urine, 1912, A., ii, 370.

Schulz, Friedrich Nicolaus, and Richard Zsigmondy, the "gold number" of proteins, 1903, A., i, 135.

Schulz, H. See Alexander Tschirch. Schulz, Hugo, estimation of total sulphur

in urine, 1908, A., ii, 129. the silicic acid in Whartonian jelly,

1910, A., ii, 225. the excretion of silicic acid in human

urine, 1912, A., ii, 370.

Schulz, J. A. Bruno, relation of some aromatic compounds to the production of benzoic and hippuric acids; new method for estimating salicylic acid in presence of benzoic or hippuric acid. I., 1907, A., ii, 798.

Schulz, Karl, mean specific heat of crystallised and fused silicates at

20-100°, 1911, A., ii, 1059. mean specific heat of quartz and of fused quartz, 1912, A., ii, 898.

Schulz, Paul. See Alexander Naumann. Schulz, Walter. See Carl Gustav Schwalbe.

Schulze, Alfred, dielectric constants of binary mixtures and their refractivity for long waves, 1912, A., ii, 225. specific heat of binary mixtures. I.,

II., and III., 1912, A., ii, 327, 428, 532.

theory of the specific heats of binary liquid mixtures, 1912, A., ii, 624.

Schulze, Arnold. See Max Conrad, and Emil Fischer.

Schulze, *Bernhard*, development of rye and wheat, 1904, A., ii, 765; 1905, A., ii, 754.

influence of liming on the activity of the phosphoric acid of manures, 1904, A., ii, 839.

migration in the leaves of Acer negundo, 1906, A., ii, 192.

manurial action of ammonium sulphate in conjunction with sodium chloride, 1911, A., ii, 65.

Schulze, Carl, effect of soil sterilisation on plant development, 1905, A., ii, 54; 1906, A., ii, 796.

Schulze, Ernst [August], methods for obtaining organic bases from vegetable juices and extracts, 1904, A., i, 446.

lupeol, 1904, A., i, 582.

Schulze, Ernst [August], hexone bases in the tubers of potatoes and dahlia, 1904, A., ii, 282.

plant constituents belonging to the group of non-nitrogenous extract

substances, 1904, A., ii, 433. estimation of lecithin in plants, 1904, A., ii, 794.

non-protein nitrogenous constituents of agricultural plants, 1905, A., ii,

specific rotation of glutamine, 1906,

A., i, 813.

nutritive value of the non-protein nitrogen compounds in foods, 1906, A., ii, 248.

composition and metabolism of seedlings, 1906, A., ii, 571.

glutamine, 1907, A., i, 114. the phosphorus of lecithin prepared from certain seeds, 1907, A., i, 672.

is the darkening of beet-juice produced on exposure to the air due to the presence of tyrosine or homogentisic acid in the juice? 1907, A., ii, 293.

mode of production of asparagine and glutamine in seedlings, 1907, A., ii,

572.

constituents of the seeds of Pinus cembra, 1907, A., ii, 806.

detection of sucrose in plant seeds,

1907, A., ii, 822.

methods for the preparation of lecithin and other phosphatides from plantseeds, 1908, A., i, 385.

nutritive value of plant amides, 1908,

A., ii, 960.

vegetable phosphatides, 1908, A., ii,

choline, betaine, and trigonelline from plants, and the methods for the preparation and estimation of these bases, 1909, A., ii, 605.

stachyose and lupeose, 1910, A., i,

610.

presence of betaine in the tubers of Helianthus tuberosus, 1910, A., ii,

vernin (a guanine pentoside occurring in certain plants), 1910, A., ii, 645.

composition of the seeds of cultivated

plants, 1910, A., ii, 740. protein formation in ripening seeds. II., 1911, A., ii, 322

Schulze, Ernst, and Nicola Castoro, hemicelluloses, 1903, A., i, 152, 793.

composition and metabolism of seedlings, 1903, A., ii, 566.

nitrogen compounds in non-germinated seeds, 1904, A., ii, 506.

Schulze, Ernst, and Nicola Castoro, inorganic phosphates in plant seeds and in seedlings, 1904, A., ii, 506.

metabolism of germinating plants,

1904, A., ii, 836.

is homogentisic acid formed in seedlings by the decomposition of tyrosine? 1906, A., ii, 793.

amount of tyrosine in seedlings of Lupinus albus, 1906, A., ii, 795.

Schulze, Ernst, and Ch. Godet, glutamine, 1907, A., i, 903.

the amounts of calcium and magnesium in plant seeds, 1909, A., ii, 83.

carbohydrates contained in plant

seeds, 1909, A., ii, 824.

Schulze, Ernst, and Urs Pfenninger, the occurrence of hemicellulose in the pods of Pisum sativum and Phaseolus vulgaris, 1910, A., ii, 889.

carbohydrates occurring in seeds, 1911,

A., i, 17.

betaines of plants. I., 1911, A., ii, 426. Schulze, Ernst, and Georg Trier, stachydrine, 1909, A., i, 323.

constitution of stachydrine, 1910, A.,

betaines which occur in plant tissues, 1910, A., ii, 743; 1912, A., ii, 287,

stachydrine and other bases present in Stachys tubers and in Citrus leaves, 1910, A., ii, 743.

vegetable betaines and stachydrine,

1911, A., i, 79.

identity of vernine and guanosine and notes on vicine and convicine, 1911, A., i, 155.

identity of the guanine pentoside from molasses with vernine, 1912,

A., i, 145.

specific rotatory power of glutamine; ammonium glutamate, 1912, A., i,

the general occurrence of choline, 1912, A., ii, 1203.

Schulze, Ernst, and Ernst Winterstein, a phosphorised constituent of plantseeds, 1904, A., i, 211.

lecithins prepared from plants. I., 1904, A., ii, 141.

action of light on cholesterol, 1905, A., i, 128; 1906, A., i, 843.

monoamino-acids obtained from seedlings of Vicia sativa and Lupinus albus, 1905, A., i, 686.

specific rotatory powers of tyrosine preparations of vegetable origin, 1905, A., i, 699.

occurrence of ricinine in young Ricinus plants, 1905, A., ii, 112.

Schulze, Ernst, and Ernst Winterstein, protein formation in ripening seeds, 1910, A., ii, 644.

1910, A., ii, 644.

Schulze, F., pulverisation of metals by ultra-violet light, 1912, A., ii, 407.

Schulze, Fr., comparative estimations of glycerol, 1905, A., ii, 769.

Schulze, Franz Arthur, behaviour of some alloys in regard to the law of Wiedemann and Franz, 1903, A., ii, 58

Schulze, Günther, electrolytic valve action exhibited by the metals magnesium, antimony and bismuth, 1907, A., ii, 842.

electrolytic valve action of columbium and a classification of the behaviour of electrolytic anodes, 1908, A., ii,

330

electrolytic valve action of zinc, cadmium, silver, and copper, 1908, A., ii, 560.

electrolytic rectification of alternating currents, 1908, A., ii, 658.

maximum voltage of electrolytic valve cells, 1909, A., ii, 371.

the influence of electrolytes on the maximum voltage of electrolytic valve action, 1911, A., ii, 365.

maximum tension of electrolytic valve action in fused salts, 1911, A., ii,

790.

capacities of the electrolytic valve effect in fused salts and in absolute sulphuric acid, 1912, A., ii, 126.

sulphuric acid, 1912, A., ii, 126. electrochemical behaviour of iron,

1912, A., ii, 529.

Schulze, Günther. See also Ferdinand Kurlbaum.

Schulze, Heinrich, aconitine. II., 1905,

A., i, 656. aconitine and aconine from Aconitum

napellus, 1906, A.; i, 599. action of magnesium phenyl bromide on caffeine, and some of its derivatives, 1907, A., i, 545.

oxidation products of aconine, 1908, A., i, 560.

Schulze, Heinrich. See also Carl Paal. Schulze, Paul. See Eduard Buchner.

Schulze, Rudolf. See Ludwig Claisen.
Schumacher, Adalbert. See Alfred
Thiel.

Schumacher, Franz Jos. See Walther Dilthey.

Schumacher, Hans, apparatus for the estimation of carbon in iron by Eggertz's method, 1905, A., ii, 203.

Schumacher, Th., [action of alkaline sugar solutions on potassium cyanide], 1903, A., ii, 188.

Schumacher, Th., and Erich Feder, some uses of iodic acid in volumetric analysis, 1905, A., ii, 856.

estimation of sulphurous acid in foods and sulphur in coal-gas, 1906, A.,

ii, 124.

Schumacher, Th., and W. L. Jung, clinical method for estimating mercury in urine, 1903, A., ii, 44.

Schumacher, Willy. See Ernst von Meyer.

Schumacher-Kopp, A., reactions of methyl-violet and tropeoline, 1904, A., ii, 101.

Schumann, August, electrolytic estimation of nickel, 1909, A., ii, 97.

Schumann, K. H. See Ernst Jänecke. Schumann, Theodor. See Rudolf Friedrich Weinland.

Schumm, Otto, human panereatic juice, 1903, A., ii, 32.

autolysis of leucæmic spleen, 1903, A., ii, 439.

albumoses in the blood, 1904, A., ii, 56. proteolytic ferment in the blood in myelogenic leucemia, 1904, A., ii, 64.

proteolytic ferment in leucæmic blood, 1904, A., ii, 747.

estimation of mercury in organs, 1905, A., ii, 286.

autolysis, 1905, A., ii, 840.

the contents of a chylous cyst, 1907, A., ii, 40.

the guaiacum test for blood and similar reactions, 1907, A., ii, 320.

benzidine as a reagent for blood, 1907,

A., ii, 827.
clinical methods for the detection of
the colouring matters of blood and
some related colouring matters, 1909,
A., ii, 195.

a new bunsen spectroscope for the investigation of absorption spectra of liquids, 1909, A., ii, 279.

the detection of blood-pigment by its absorption of the violet end of the spectrum, 1910, A., ii, 167.

quantitative spectroscopy and spectrophotography as methods for determining the presence of oxyhæmoglobin and its derivatives, 1912, A., ii, 820.

hæmatinæmia in toxic destruction of blood corpuscles, 1912, A., ii, 968.

Schumm, Otto, C. Hegler, and (Mme.) Meyer-Wedell, the so-called Cammidge pancreas reaction, 1910, A., ii, 468.

Schumm, Otto, and C. Westphal, Adler's benzidine test for blood-pigment, 1906, A., ii, 207. Schumoff-Deleano, V., and Emil Dittler, determination of the crystallisation power of minerals, 1912, A., ii, 170.

Schumoff-Simanowski, (Mme.) C., and (Mme.) Nadežda Sieber, the behaviour of lecithin to the lipolytic ferments, 1906, A., ii, 871.

Schupbach, Albert, influence of bile on intestinal movements, 1907, A., ii, 796.
Schupp, Gustav. See Alfred Einhorn.

and Franz Henle.

Schupp, L. See Hermann Finger.
Schupp, Wilhelm. See Gerhard Preuner.
Schur, Heinrich, hemolysis; the action of staphylolysin, 1903, A., ii, 92.
a new reaction of urine, 1910, A., ii,

467.

Schur, Heinrich. See also Richard Burian.

Schurakovsky, E., action of α-bromonaphthalene and magnesium on certain carbonyl compounds, 1910, A., i, 168.

Schuravleff, B., apparatus for extraction at high temperatures, 1911, A., ii, 1082.

Schurigin, Michael Feodorowitsch. See Wilhelm Strecker.

Schuster, Aloys. See Karl Elbs. Schuster, C. See Felix Cornu.

Schuster, Siegfried. See Richard Meyer. Schut, W., decomposition of piperonal on heating with dilute hydrochloric acid, 1910, A., i, 390.

Schutt, E. See Max Siegfried.

Schuyten, M. C., activity of the halogens; chlorine, bromine, and iodine in relation to mercury, 1908, A., ii, 31. activity of the halogens, chlorine, bromine, and iodine in relation to the metals in general, 1908, A., ii, 683.

activity of the halogens, chlorine, bromine, and iodine in relation to salts in general, 1909, A., ii, 476.

the phenomenon of agglomeration in finely powdered substances, 1911, A., ii, 98.

the velocity of absorption of water by the alkali chlorides, 1912, A., ii, 746.

Schwing, Paul. See Marcel Delépine. Schwab, Georg. See Georg Rohde. Schwab, Julius. See Fritz Fichter. Schwabacher, Max. See Franz Sachs. Schwabe. Emil. sedimentation tube for

microscopic analysis, 1911, A., ii, 651. Schwabe, Erwin. See Fritz Foerster. Schwabe, Franz. See Theodor Zincke.

Schwabe, Willmar, some alkyl derivatives of theophylline, 1908, A., i, 45. Schwabe, Willmar. See also Ernst Schmidt.

Schwadron, A. See Josef Herzig. Schwärtzlin, August. See Rudolph Fittig.

Schwahn, Heinrich F. D., preparation of metallic aluminium, 1905, A., ii, 712. Schwalb. Hermann, comparative investi-

Schwalb, Hermann, comparative investigations on the pharmacology of the terpene series, 1912, A., ii, 1196.

Schwalbe, Arthur. See Hans Theodor Bucherer.

Schwalbe, Carl Gustav, Liebermann's thiophen reaction, 1904, A., i, 337. preparation of benzene free from sulphur, 1905, A., i, 124.

velocity of decomposition of p-nitrobenzenediazonium chloride, 1905,

A., i, 618, 843.

Dimroth's thiophen dimercuric hydroxyacetate, 1905, A., i, 656.

stability of diazotised p-nitroaniline, 1905, A., i, 952.

colorimetric estimation of thiophen, 1905, A., ii, 779.

reduction of aromatic sulpho-acids to mercaptans by alkali hydrosulphides, 1906, A., i, 841.

reducing properties of various celluloses, 1907, A., i, 390.

hydrocelluloses, 1908, A., i, 9.

the chemistry of the bleaching of sulphite-cellulose, 1908, A., i, 138. cellulose and its derivatives, 1908, A.,

i, 321.

estimation of water of hydration in cellulose materials, 1908, A., ii, 627. formation of hydrocelluloses by means of sulphuric acid, 1909, A., i, 136,

decomposition of diazo-solutions, 1909, A., i, 193.

p-nitrobenzenediazonium chloride, 1909, A., i, 445.

acetylation of cotton cellulose, 1910, A., i, 224; 1911. A., i, 712.

hydrocellulose, 1910, A., i, 817; 1911, A., i, 115.

mercerised cellulose, 1911, A., i, 114. cellulose; hydrocellulose, 1911, A., i, 712.

Schwalbe, Carl Gustav, and Hermann Jochheim, halogen indigotins, 1908, A., i, 1019.

halogen indigotinsulphonic acids, 1908, A., i, 1019.

Schwalbe, Carl Gustav, and Michael Robinoff, action of water and of alkali on cotton wool cellulose, 1911, A., i, 180.

Schwalbe, Carl Gustav, and Walter Schulz, degradation of cotton cellulose, 1910, A., i, 301. Schwalbe, Carl Gustav, Walter Schulz, and Hermann Jochheim, w-chloroacetanilide and some halogenphenylglycines, 1908, A., i, 974.

Schwalbe, Carl Gustav, and Salomon Wolff, studies in the carbazole series, 1910, P., 339; 1911, T., 103.

Schwamborn.

Rudolf. Schroeter. Schwantes, Erhard, See Oscar Hins-

berg. Schwantke, Arthur, formation of tridymite in a roofing slate struck by lightning, 1904, A., ii, 269.

pseudomorphs of osteolite after calcite: crystallised staffelite, 1906, A., ii,

calcium in potash-felspar, and the formation of myrmekite, 1909, A., ii. 588.

crystallography of the salts of methylguanidine, 1910, A., i, 545.

Schwantke, Arthur. See also Ernst Schmidt.

Schwantke, Karl, crystallography of the ephedrine, damascenine, and aconitine groups, 1909, A., i, 177.

See also Ernst Schwantke, Karl.

Schmidt.

Schwartz, Alfred, the effect of ions transported by the current on the primary affinity for colours, and the conductivity of polarised nerves; influence of the cations Ca, Na, K, on the anodic region, 1911, A., ii, 306.

Schwartz, Frederick W. See

Livingston Rutgers Morgan.

Schwartz, Rudolf, estimation of free and combined alkali in sulphite liquors, 1903, A., ii, 104.

estimation of Prussian blue in spent gas-purifying material, 1903, A., ii,

111.

Schwartz, Rudolf. See also Emil Knoevenagel.

Schwarz. See Valentiner.

Schwarz, Adolf. See Arthur Kötz.

Schwarz, Anton. See Ludwig Christian Kelber.

Schwarz, Carl, general physiology of muscle. I. Influence of sodium salts on frog's muscle, 1907, A., ii, 372.

the imbibition and the loss of water by resting and stimulated frogs' muscles when immersed in isotonic saline solution, 1912, A., ii, 66.

Schwarz, Carl, and Richard Lederer, the occurrence of choline in thymus, spleen, and lymph glands, 1908, A., ii, 968.

Schwarz, Carl, and Frieda Lemberger, the action of minimal amounts of acid on the blood-vessels, 1911, A., ii, 809. Schwarz, Carl. See also Otto von Fürth.

and Efim Semen London.

Schwarz, Eugen, bleaching powder, 1907. A., ii, 167.

Schwarz, F. See David Holde.

Schwarz, Franz, influence of the duration of boiling on the saponification value of beeswax, 1905, A., ii, 361, 657. Schwarz, Franz, and O. Weber, estima-

tion of formic acid in fruit juices,

1909, A., ii, 355.

Schwarz, Georg L. M. See Hans Rupe. Schwarz, Heinrich, indolinone, 1903, A., i, 853.

Schwarz, Julius, 6:6'-dinitroindigotin, 1906, A., i, 90.

Schwarz, L. See Karl Lendrich. Schwarz, Leo, acid formation in the stomach, 1904, A., ii, 187.

Schwarz, Moses. See Jakob Meisenheimer.

Schwarz, Oswald, antipepsin, 1905, A., ii, 731.

metabolic disturbances after the extirpation of both suprarenal glands, 1910, A., ii, 978.

the degradation of nitrogenous substances by yeast, 1911, A., ii, 640. Schwarz, Oswald. See also Ernst Peter

Pick.

Schwarz, Robert, action of nitric acid on triphenylmethane, 1909, A., i, 561. the chemical behaviour of the different modifications of silica, 1912, A., ii, 756.

Schwarz, Rudolf. See Julius von Braun. Schwarze, Walther, determination of the thermal conductivity of argon and helium by Schleiermacher's method. 1903, A., ii, 465.

Schwarzenbach, Robert. See Friedrich Kehrmann.

Schwarzkopf, V. See Paul Pfeiffer.

Schwarzschild, Moritz, action of trypsin,

1903, A., i, 780.

Schwedes, Julius, intensity measurements in the spectra of streaming gases with direct current discharge and high current densities, 1912, A., ii, 709.

Schwedhelm, H. See A. Künkler.

Schwedoff, D. See Nicolai D. Zelinsky. Schweidler, Egon (Ritter) von, the experimental testing of the question of the nature of the γ -rays. I. and II., 1910, A., ii, 376, 766.

the decay constant of polonium, 1912,

A., ii, 620.

Schweidler, Egon (Ritter) von, and Viktor F. Hess, the heat developed by radium. 1908, A., ii, 919.

Schweidler, Egon (Ritter) von. See also

Stefan Meyer.

Schweinitz, Emil Alexander de, and Marion Dorset, composition of the tubercle bacilli derived from various animals, 1903, A., ii, 504.

Schweissinger, Julius. See Heinrich

Kiliani.

Schweissinger, O., formation of basic aluminium sulphate when zinc sulphate is boiled with alum, 1910, A., ii, 615.

Schweitzer, Alexander, electrochemical behaviour of nickel, 1909, A., ii,

Schweitzer, Alfred, radioactivity of the mineral springs of Switzerland; emanation content of the water, 1909, A., ii, 363; 1910, A., ii, 768.

Schweitzer, Alfred. See also Richard

Josef Meyer.

Schweitzer, Georg. See Robert Clauser. Schweitzer, Hugo. See Alfred Wohl.

Schweitzer, [Johann] Paul, fibre and carbohydrates in feeding-stuffs; tentative determination of the components of each, 1904, A., ii, 437.

Schweizer, A. See Jacob Böeseken.

Schweizer, Eugen. See Eduard Jordis. Schwenk, Erwin. See Paul Friedländer, Karl von der Heide, and Isidor Klimont.

Schwenk, Wilhelm. See Johann Howitz. Schwenkenbecher, Friedrich absorption through the skin, 1904, A., ii, 423.

Schwenkenbecher, Friedrich Alfred, and Ch. Inagaki, chloride metabolism in typhoid fever, 1909, A., ii, 332.

Schwenkenbecher, Friedrich Alfred, and W. Spitta, excretion of sodium chloride and nitrogen by the skin, 1907, A., ii, 375.

Schwerdt, W. See Adolf Beythien. Schwerdt, Walther. See Fritz Reitzen-

stein.

Frédéric, physico-chemical Schwers. properties of ethylene glycol and of its solutions in water, 1909, A., i, 80.

density of mixtures of water and ethyl alcohol, 1909, A., ii, 794.

solutions. I. Relations between density and refractive index in binary

mixtures, 1910, A., ii, 913. solutions. II. Variation of density of binary mixtures with temperature, 1910, A., ii, 1039.

Schwers, Frédéric, the density of liquid sucrose and of its solutions in water. 1911, T., 1478; P., 208.

solutions. III. and IV., 1911, A., ii,

the density and refraction of the furfuraldehyde + water, system 1911, A., ii, 949.

carbon disulphide as solvent for the determination of the "refraction constant," 1912, T., 1889; P., 239.

halogen derivatives and refraction constant, 1912, P., 246.

the magnetic rotation of binary mixtures, 1912, P., 294.

the refractive index of binary mixtures, 1912, A., ii, 1.

the "constant of refraction," 1912, A., ii, 309, 613.

refraction and magnetic rotation of mixtures, 1912, A., ii, 873.

Schwetz, Wilhelm, spectra of bismuth, 1910, A., ii, 670.

Schwezoff, Boris, benzene as indicator

for iodimetry, 1905, A., ii, 280. temperature-coefficient of the bleaching of colouring matters in the visible spectrum, 1910, A., ii, 916.

oxidation of hydrogen iodide under the influence of light, 1910, A., ii,

Schwinger, Emil. See Roland Scholl. Schwyzer, Alexander. See George S. Cruikshanks, and Robert Georgi.

Sciacca, Nunzio. See Luigi Francesconi, and Celso Ulpiani.

Scipiades, Elemér. See Géza Farkas. Sckerl, Paul. See Conrad Willgerodt.

Schworzoff, V., new apparatus for sublimation, 1907, A., ii, 160.

Sclavi, Mario, action of cyanoacetic ester on o- and p-hydroxybenzaldehydes in the presence of ammonia, 1911, A., i,

398. Scobai, Jon, decomposition of potassium chlorate, with some observations on the decomposition of sodium chlorate

and perchlorate, 1903, A., ii, 645. reproduction of the electromotive forces of some strong oxidising

agents, 1904, A., ii, 9.

Scordo, Francesco, comparative experiments on the properties of mercuric chloride and sublamin, 1907, A., ii, 713.

Scott, Alexander, the vapour density of hydrazine hydrate, 1904, T., 913;

the combining volumes of carbon monoxide and oxygen, 1904, P., Scott, Alexander, the decomposition of oxalates by heat, 1904, P., 156.

some alkyl derivatives of sulphur, selenium, and tellurium, 1904, P.,

note on the atomic weight of nitrogen. 1905, P., 309.

the molecular weight of tetraethylammonium bromide and the atomic weight of carbon, 1909, T., 1200; P., 173; discussion, P., 174.

the correction of weights of substances weighed in air to weights in a

vacuum, 1909, P., 286.

the combustion of naphthalene and other organic substances and the atomic weight of carbon, 1909, P., 310.

Scott, Daisy G. See Eric Drabble.

Scott, Ernest Lyman, the influence of intravenous injections of pancreatic extract on pancreatic diabetes, 1912, A., ii, 186.

Scott, Frederick Hughes, metabolism and action of nerve-cells, 1906, A.,

fatigue of nerves, 1906, A., ii, 240. microchemical detection of phorus, 1907, A., ii, 129.

regulation of respiration, 1908, A., ii, 865.

Scott. Frederick Hughes. See also Robert Henry Aders Plimmer.

Scott, George Henry, classification of blood-corpuscles, 1906, A., ii, 95.

Scott. I. D. See Edward Henry Kraus. Scott, (Miss) Janet Drummond. John Kerfoot Wood.

Scott, J. H. See David Spence.

Scott, Leonhard, iodospongin; preliminary note, 1906, A., i, 999.

Scott, Leonhard. See also Carl Neuberg.

Scott, (Miss) Margaret Emilie, essential oil of the leaves of Atherosperma moschatum ("Australian sassafras "), 1912, T., 1612; P., 217.

Scott, (Miss) Margaret Emilie. also (Miss) Stella Deakin.

Scott, Silas F. See William Maurice Dehn.

Scott, W. M., effects of ultra-violet rays on serum, 1911, A., ii, 997.

Scott-Macfie, John William, action of tissue extracts on protoplasm, 1904, A., ii, 66.

Scott-Smith, George Egerton. See Alfred Henry Allen.

Scott-Wilson, H., estimation of acctone in animal liquids, 1911, A., ii, 766.

Scriba, F., detection of traces of water, 1907, A., ii, 50.

low ignition temperature of carbon disulphide, 1908, A., ii, 376.

apparatus for producing flame colorations and other changes of a nonluminous flame, 1908, A., ii, 647.

Scudder, Heyward, liquid baths for melting point determinations, 1903, A., ii, 266.

the prevention of bumping, 1903, A., ii. 266.

trustworthiness of the dissociation constant as a means of determining the identity and purity of organic compounds, 1903, A., ii, 471.

detection of methyl alcohol [in ethyl

alcohol], 1905, A., ii, 615.

Scudder, Heyward, and Robert Baird Riggs, detection of methyl alcohol, 1906, A., ii, 808.

Scurti, Francesco, function of iodine in marine algæ, 1907, A., ii, 122.

phosphorus and the formation amino-acids in higher plants, 1909, A., ii, 173.

the nitrogen-free extract of Soola clover (Hedysarum coronarium), 1910, A., ii, 744.

Scurti, Francesco, and S. Caldieri, biological succession of mineral sub-

stances in marine algæ, 1908, A., ii, 57. Scurti, Francesco, and Alfredo Parrozzani, lipolytic power of croton seeds, 1907, A., ii, 802.

hydrolytic properties of croton seeds,

1907, A., ii, 802.

presence of a proteolytic enzyme in croton seeds and its action on proteins associated with it, 1907, A., ii,

chemical processes accompanying the germination of seeds, 1908, A., ii, 417.

Scurti, Francesco, and Filippo Perciabosco, oil of myrtle seeds, 1907, A., i. 821.

presence of allantoin in, and absence of solanine from, tobacco seeds,

1907, A., ii, 124.

Scurti, Francesco, and Giovanni de Plato, the chemical processes of ripening; the ripening of oranges; presence of asparagine and glutamine in the juice, 1909, A., ii, 174. Schmitt's process for the estimation

of the total esters in wine, 1909, A.,

ii, 623.

Scurti, Francesco. See also Gaspare Ampola, Angelo Angeli, and Ferdinando Rossi.

Sdzitowecky, W. See Wladimir N. Inatieff.

Seaman, William Henry, the ferrocyanide method for the [titration] of zinc, 1907, A., ii, 398.

Seaver, Fred Jay, and Ernest Dunbar Clark, biochemical studies on soils subjected to dry heat, 1912, A., ii, 864.

Sebauer, Robert. See Hans Aron.

Sebelien. John, manurial value of human excrement, 1905, A., ii, 114.

standardising of normal acids, 1905, A., ii, 551.

experiments with new nitrogenous manures, 1906, A., ii, 575.

manurial experiments with different kinds of nitrates, 1908, A., ii, 61.

Sebelien, John, A. Brynildsen, and O. Haavardsholm, some modifications of Kjeldahl's nitrogen estimation, 1909, A., ii, 757.

Sebelien, John, and Einar Sunde, sugar from colostrum, 1909, A., ii, 78. belien, John. See also Karl Krog,

Sebelien, John. Sand E. Michelet.

Sebor, Johann, electrolytic oxidation of toluene-p-sulphonic acid, 1903, A., i, 554.

velocity of diffusion of water through a semi-permeable membrane, 1904, A., ii, 540.

Ostwald's dilution law, 1911, A., ii,

Sebor, Johann. See also Julius Stok-

Securius, Rudolf. See August Michaelis. Seddig, M., the dependence of the Brown-Zsigmondy movement on temperature, 1912, A., ii, 142.

Sedelmayr, Theodor, chemistry of yeast,

1903, A., ii, 745.

Seebach, Max [Paul Wilhelm], studies of garnet, 1909, A., ii, 493.

a method for isolating native iron from basalt without destroying its form, 1910, A., ii, 963.

Seegen, Josef, sugar formation in the liver, 1904, A., ii, 272.

Seegers, Karl. See Erwin Rupp. Seegert, B. See Adolf Miethe.

Seeker, Albert F. See Irving Wetherbee Fay.

Seelhorst, Conrad von, manuring as based on ten years' experiments, 1905, A., ii, 195.

effect of straw manure on the crops,

1906, A., ii, 702.

persistence of the nitrogen of green manure in a light sandy soil, 1908, A., ii, 727.

Seelhorst, Conrad von, H. Behn, and Johann Wilms, is the analysis of plants able to establish the manurial requirements of plants? 1903, A., ii, 234.

Seelhorst, Conrad von, and W. Freckmann, influence of the amount of water in the soil on crops and on the development of various varieties of cereals, 1904, A., ii, 76.

influence of straw as manure at different

depths, 1904, A., ii, 439.

influence of straw manure on the yield in presence of lime or sulphuric acid. 1904, A., ii, 439.

Seelhorst, Conrad von, and Ludwig Fresenius, influence of soil moisture on the amounts of total and protein nitrogen in oat straw, 1905, A., ii, 194.

Seelhorst, Conrad von, and Aloys Müther, water in the soil and the consumption of water by plants, 1905, A., ii, 606.

calcium cyanamide, 1906, A., ii, 47. Seelig, Albert, ether-glycosuria, and the effect of intravenous oxygen infusion on it, 1905, A., ii, 469.

Seeliger, R., ionisation of gases by canal

rays, 1911, A., ii, 958

Seeliger, R. See also Ernst Gehrcke. Seemann. Ferdinand, estimation and

separation of silica and fluorine, 1905, A., ii, 555. Seemann, Fritz. See Ernst Hermann

Riesenfeld. Seemann, John, oxidation of gelatin and of egg-albumin with calcium per-

manganate, 1905, A., i, 619. action of nitrous acid on gelatin, 1907,

A., i, 739.

formation of creatinine, 1907, A., ii, 490. Seemann. John. See also Friedrich Kutscher.

Seemann, Lorenz. See Ludwig Vanino. Seer, Christian, preparation of alkylauthraquinones from alkylbenzovl chlorides and aluminium chloride. 1., 1911, A., i, 386.

Seer, Christian, and Egon Ehrenzweig, method of formation of alkylated anthraquinones from alkylated benzoyl chlorides and aluminium chloride. II., 1912, A., i, 276.

Seer, Christian, and E. Karl, abnormal behaviour of some anthraquinone derivatives towards alkaline reducing agents. I., 1912, A., i, 571.

Seer, Christian, and Richard Weitzenbock, acylated aminoanthraquinones and anthraquinone mercaptans and their behaviour on vegetable fibres. 1910, A., i, 570.

Seer, Christian, and Richard Weitzenböck, action of benzyl chloride and of monochloroacetic acid on aminoanthra-

quinones, 1910, A., i, 571. Seer, Christian. See also Roland Scholl. Segale, Mario, detection of arsenic in normal animal tissues by means of the biological method, 1904, A., ii, 680.

Segalle, Rachmiel, and Langer, preparation of ammonium dichromate, 1905.

A., ii, 707.

Segaller, David, the relative activities of certain organic iodo-compounds; preliminary note, 1911, P., 283.

Segelitz, Ludwig. See Oscar Doebner. Segerfelt, Bror. See Peter Klason. Segin, Adalbert, action of bacteria on

sugars, 1905, A., ii, 341.

the influence of the addition of acetic acid or alcohol to milk in the estimation of the total solids, 1906, A., ii, 314.

Segrè, E. See Giuseppe Bressanin.

Sehnal, J., solubility of lead sulphate, 1909, A., ii, 575.

Seib, Carl. See Otto Diels.

Seib, Otto, estimation of the citratesoluble phosphoric acid in superphosphates, 1905, A., ii, 554.

Seibert, H., estimation of ash [of coal] in electrically heated organic combustion furnaces, 1906, A., ii, 802.

Seibold, Ernst. See Richard Reinhardt.

Seidel. Theodor. See Paul Jannasch. Seidelin, Harald, estimation of indole. 1911, A., ii, 553.

Seidelin, Harald, and Frederick C. Lewis, the indole reaction and allied phenomena, 1912, A., ii, 191.

Seidel, Atherton, estimation of mercury and iodine in antiseptic soaps, 1906,

A., ii, 252.

solubility of acetanilide, phenacetin, caffeine, and salol in several solvents, 1907, A., ii, 745.

estimation of acetanilide in headache powders, 1907, A., ii, 914.

colorimetric estimation of iodine, 1907,

A., ii, 984.

solubilities of salicylates of the United States pharmacopœia in aqueous alcohol solution at 25°, 1909, A., i,

estimation of salicylates, 1909, A., ii, 1058.

the solubilities of the pharmacopæial organic acids and their salts, 1910, A., i, 808.

estimation of iodine in the thyroid, 1910, A., ii, 69; 1911, A., ii, 926.

Seidel. Atherton, convenient attachments for a melting-point apparatus, 1911, A., ii. 254.

solubility of magnesium ammonium

sulphate, 1912, A., ii, 161.

new bromine method for the estimation of thymol, salicylates, and similar compounds, 1912, A., ii, 696.

solubility and distribution coefficients of thymol, 1912, A., ii, 1153.

Seidell, Atherton, and Joseph George Smith, solubility of calcium sulphate in solutions of nitrates, 1904, A., ii, 731.

Seidell, Atherton. See also Frank Kenneth Cameron, and Worth Hale.

Seidler, testing lecithin, 1912, A., ii,

Seidler, Leopold, and Albert Stutzer, assimilation and elimination of nutrients by oats at different periods of vegetation, 1908, A., ii, 1065.

Seidler, Leopold. See Albert

Stutzer.

Seidler, Paul, diazotisation of difficultly diazotisable amines, 1903, A., i, 868.

Seifert, Mieczyslaw. See Stefan von Niementowski.

Seifert, W., fermentation of citric acid as a cause of disease in currant wine, 1904, A., ii, 138.

decrease of acid in wine and the pro cess of fermentation involved, 1904,

A., ii, 579.

sulphurous and acetaldehyde-sulphurous acids and their action in various organisms of wine, 1907, A., ii, 382.

Seifert, W., and Hermann Kaserer, presence of nitrates in wines, 1904, A., ii, 510.

Seil, Harvey Ambrose. See Marston Taylor Bogert.

Seiler. Emil. See Karl Andreas Hofmann.

Seiler, Frédéric, and Antonio Verda, phosphomolybdic acid, a characteristic reagent for the amino-group, 1904, A., ii. 99.

Seiler, Frédéric. See also Josef König. Seiller, Rudolf (Freiherr) von. See Robert Breuer.

Seillière, Gaston, diastatic hydrolysis of xylan, 1906, A., ii, 101.

Seisser, Philipp. See Alfred Schitten-

helm.

Seissl, Josef, ash constituents of potato leaves at different periods of growth and under different manurial conditions, 1903, A., ii, 748.

Seissl, Josef, migration and return of the nitrogen and the chief ash constituents in the leaf and stem of Polygonum sachalinense, 1904, A., ii,

relation of magnesium oxide to calcium oxide in the leaves of different native plants at one or several periods of growth, 1907, A., ii, 643.

phosphoric acid in plant leaves, 1909,

A., ii, 824.

phosphorus and nitrogen in the alcoholic extract of leaves, 1912, A., ii,

Seiter, Francis J., the permanganate test for cocaine, 1911, A., ii, 671.

Seiter, Francis J., and Frederic Enger, identification of cocaine and some cocaine substitutes, 1911, A., ii, 670. Seitz, Richard. See Carl Dietrich

Harries.

Seitz, Wilhelm (Bonn), the liver as a storehouse for proteins, 1906, A., ii,

Seitz, Wilhelm (Würzburg), determination of the intensity of B-rays and some measurements of their absorption, 1904, A., ii, 691.

secondary rays produced by very feeble Röntgen rays, 1907, A., ii,

absorption of soft Röntgen rays in gases, 1912, A., ii, 619.

Seixas Palma, José de. See Emil Fromm.

Sejourné, J. See Georges Darzens. Sekreteff, A. See G. Povarnin. Seldis, Eugen. See Otto Wallach.

Self, Percy Arthur William, estimation of chloral hydrate, 1907, A., ii, 657.

an unrecognised source of error in the Kjeldahl-Gunning method for the estimation of nitrogen, 1912, A., ii, 487.

Self, Percy Arthur William. See also Edward Frank Harrison.

Seliber, G., determination of volatile acids in fermentation products of certain microbes by Duclaux's method, 1910, A., ii, 642.

Selig, Arthur, chemical investigation of atheromatous aortæ, 1911, A., ii,

Seligman, Richard, action of sodium hydroxide on nitrobenzaldehyde, 1903, A., i, 425.

Seligman, Richard, and F. J. Willott, estimation of zinc in zinc-aluminium alloys, 1906, A., ii, 197.

Seligman, Richard. See also Eugen Bamberger.

Seligmann, Charles Gabriel, physiological action of ipoh and antiarin, 1903, A., ii, 314.

the inhibitory effect on bacterial growth of the viscid exudation obtained from tabetic joints, 1903, A., ii, 387.

cretinism in calves, 1903, A., ii, 443.

Seligmann, Erich, action of camphor on the circulation, 1905, A., ii, 409. reductases of cow's milk, 1906, A., ii, 467.

Sell, William James, soluble colloidal form of ferric and of other phos-

phates, 1904, A., ii, 487.

the chlorination of methyl derivatives of pyridine. Parts I. and II. 2-Methylpyridine, 1905, T., 799; P., 165; discussion, P., 166; 1908, T., 1993; P., 225.

the chlorine derivatives of pyridine. Part IX. Preparation and orientation of 3:5-dichloropyridine, 1908,

T., 1997; P., 225.

the chlorine derivatives of pyridine. Part X. Orientation of 2:3:5-trichloropyridine, 1908, T., 2001; P.,

the chlorine derivatives of pyridine. Part XI. Some interactions of 3:4: 5-trichloropicolinic acid and of its derivatives, 1911, T., 1679; P.,

the action of sodium methoxide on 2:3:4:5-tetrachloropyridine. Parts I. and II., 1912, T., 1193, 1945;

P., 135, 234.

William James, and Frederick Sell. William Dootson, the chlorine derivatives of pyridine. Part VIII. The interaction of 2:3:4:5-tetrachloropyridine with ethyl sodiomalonate, 1903, T., 396; P., 48.

Sella, Alfonso, relation between osmotic pressure and surface tension, 1907,

A., ii, 934.

Sella, M. See Enrico Pantanelli.

Sellards, Andrew W. See Edward Bartow.

Selle, Victor, weathering and formation of kaolinite in the Halle quartzporphyry, 1909, A., ii, 63.

Selle, Willy. See Robert Pschorr.

Sellier, Eugène, estimation of ammonia in sugar beets and the products thereof, 1903, A., ii, 329.

action of lime on certain nitrogenous substances contained in beet juice,

1903, A., ii, 749.

Sellier, Eugène, glutamine, 1904, A., i,

estimation of ammonia in vegetable products, beet, etc., 1905, A., ii, 60. detection of glutamine, 1907, A., ii,

Sellier, G., estimation of urea; a new ureometer, 1903, A., ii, 581.

detection of boric acid in foods, 1905, A., ii, 554.

Sellier, G. See also Xavier Rocques.

Seilier, J., anti-rennin in the serum of fishes and invertebrates, 1906, A., ii, 292.

proteolytic enzymes of invertebrates, 1911, A., ii, 1113.

Sellier, J., and Jean Abadie, variations in the acidity of the gastric juice in hysteria, 1903, A., ii, 308.

Selter, Hugo, production of indole by

bacteria, 1909, A., ii, 921.

Selvaggi, Giambattista. See Arnaldo Piutti, and Domenico Pugliese.

Selvatici, Ettore, new method of qualitative analysis of the metals of the second group without using hydrogen sulphide or ammonium sulphide, 1908, A., ii, 322.

estimation of total sulphur in animal

charcoal, 1909, A., ii, 756.

action of some salts of ammonium on the alkaline earth carbonates, 1910, A., ii, 209.

volumetric estimation of barium, 1910,

A., ii, 454.

potassium ferrocvanide as an indicator in the estimation of dextrose, 1910, A., ii, 757.

Sementsoff, A!, and P. Konjukoff-Dobrynia, action of a mixture of allyl bromide and furfuraldehyde on magnesium: synthesis of furylallylcarbinol, 1911, A., i, 1007.

Sementsoff, A. See also J. N. Reform-

atsky.

Semibratoff, bactericide and antiparasitic properties of carbonyl chloride, 1912, A., ii, 672.

Semichon, L., physiological significance of the urate cells in melliferous insects, 1905, A., ii, 600. Semiller, H. See Rudolf Schenck.

Semmler, Friedrich Wilhelm, oxides of the terpene series, 1903, A., i, 353. reduction in the terpene series, 1903, A., i, 505.

phellandrene, 1903, A., i, 641.

constitution of tanacetone [thujone], C₁₀H₁₆O, 1904, A., i, 176.

menthone, camphorphorone, and pinophorone, 1904, A., i, 260.

Semmler, Friedrich Wilhelm, anhydrohydroxylamine unsaturated ketones. 1904, A., i, 437.

a-anhydropulegonehydroxylamine, 1904, A., i, 602.

some liquid alkaloids, 1904, A., i, 685.

oximes of pulegone, 1905, A., i, 222. composition of the ethereal oil of the carline thistle (Carlina acaulis, L.),

1906, A., i, 297. action of sodamide on cyclic ketones;

derivatives of fenchone and of cam-

phenilone, and their constitution, 1906, A., i, 681. preparation of γ -, δ -, ϵ -, etc., glycols

and their derivatives from the corresponding lactones, 1906, A., i, 784. preparation of a base, C₁₀H₁₇ON, from

pulegone, 1906, A., i, 969.

constituents of essential oils. Resolution of the dicyclic triocean system in sabinene and tanacetone. II. A new series of terpenes (cyclo-

pentadienes), 1907, A., i, 145. constitution of terpinene, origanol, sabinene, dipentene, and their derivatives, 1907, A., i, 329.

constituents of essential oils, 1907, A., i, 433.

constituents of essential oils. Dihydroterpinene = carvomenthene. II. Oil from Pilea. III. Addition of hydrogen chloride, etc., to dicyclic singly unsaturated systems. IV. Derivatives of sabinene and constitution of terpinene, 1907, A., i, 714.

constituents of essential oils; the sesquiterpenes present in East Indian sandal-wood oil, 1907, A., i, 781.

constituents of essential oils. I. Separation of camphor from fenchone containing camphor. II. Santene, 1908, A., i, 37.

constituents of essential oils; constitution of umbellulone, 1908, A., i,

92; 1909, A., i, 38.

constituents of essential oils; composition of Ayapana oil, 1908, A., i,

constituents of essential oils; santalols, C₁₅H₂₄O, and their derivatives, 1908, A., i, 433.

constituents of essential oils; elemicin, a high-boiling constituent of elemi oil, and the displacement of alkyloxygroups in the benzene nucleus by hydrogen, 1908, A., i, 557.

constituents of essential oils; elemicin and isoelemicin, 1908, A., i, 558.

Semmler, Friedrich Wilhelm, constituents of essential oils; establishment of the constitutional formulæ of elemicin and isoelemicin, 1908, A., i. 664.

constituents of essential oils; elimination of methoxy-groups in the paraposition with respect to allyl or propenyl radicles, 1908, A., i, 734.

constituents of essential oils; carvenene, $C_{10}H_{16}$, and "pure" terpinene, 1909, A., i, 110.

constituents of essential oils; constitution of camphene; its oxidation with ozone, 1909, A., i, 170.

constituents of essential oils; inversion of carvenene, C₁₀H₁₈ (terpinene?), into isocarvenene, C₁₀H₁₈ (isoterpinene?), 1909, A., i, 171.

constituents of essential oils; further decomposition of eksantalal; enolisation of aldehydes by conversion into the corresponding unsaturated esters; enol-phenylacetaldehydemonoacetate, 1909, A., i, 239.

constituents of essential oils; enolcamphenilanaldehyde acetate and further derivatives of camphenilanaldehyde; production of terpinolene by the inversion of carvenene (terpinene?), 1909, A., i, 312.

constituents of essential oils; enol-n-heptanal acetate and enol-n-octanal acetate, 1909, A, i, 364.

constituents of essential oils; enol-isovaleraldehyde acetate and enolcitronellal acetate, and the conversion of the latter into isopulegol acetate, 1909, A., i, 594.

constituents of essential oils; carvenene, C₁₀H₁₆, and "terpinene," 1909, A., i, 942.

constituents of essential oils; tetrahydrosantalene, 1910, A., i, 181.

hydrosantalene, 1910, A., 1, 181. constituents of essential oils; eksantalic acid, $C_{12}H_{18}O_2$, eksantalal, $C_{12}H_{18}O$, and derivatives, 1910, A., i, 495.

constituents of essential oils; constitutions of the α-santalol and of the α-santalene series, and of sesquiterpene alcohols and of sesquiterpenes, 1910, A., i, 573.

Semmler, Friedrich Wilhelm, and Edmund Ascher, constituents of essential oils; carlina oxide, 1909,

A., i, 597.

Semmler, Friedrich Wilhelm, and

Konrad Bartelt, constitution of the

\$\beta\$-fencholenic acid series, 1907, A.,
i, 11.

Semmler, Friedrich Wilhelm, and Konrad Bartelt, constituents of essential oils, 1907, A., i, 226.

myrtenol, a primary alcohol, C₁₀H₁₈O, from the essential oil of *Myrtus* communis, 1907, A., i, 429.

constituents of essential oils; teresantalic acid, its derivatives, and constitution, 1907, A., i, 703.

constituents of essential oils; teresantalic acid, C₁₀H₁₄O₂; a new norcamphor and its derivatives, 1907, A. i. 1062.

constituents of essential oils; further derivatives of santalene and the formation of a new dicyclic saturated system—dicyclo-2:2:2-octane, 1908, A., i, 38.

constituents of essential oils; derivatives and constitution of santene, 1908, A., i, 194.

constituents of essential oils; elucidation of the constitution of santene, CoH₁₄, 1908, A., i, 195.

constituents of essential oils; derivatives of santene, santene glycol, and the unsaturated ketone, C₉H₁₂O, derived from the diketone, C₉H₁₄O₂, 1908, A., i, 355.

constituents of essential oils; homopiperonal and its derivatives, 1908, A., i, 901.

Semmler, Friedrich Wilhelm, and Kurt Bode, santalol, 1907, A., i, 431.

Semmler, Friedrich Wilhelm, and Alfred Hoffmann, constituents of essential oils; sesquiterpene cedrene, 1907, A.; i,

Semmler, Friedrich Wilhelm, and Colin Ernest McKenzie, buchu-camphor (diosphenol), C₁₀H₁₆O₂, 1906, A., i, 373.

Semmler, Friedrick Wilhelm, and Erwin W. Mayer, constituents of essential oils; regeneration of caryophyllene, 1911, A., i, 73.

constituents of essential oils. I.
Identity of the aliphatic terpene from oil of hops with myrcene. II.
Methyl esters of dicarboxylic acids.
III. Preparation of isobornyl formate, 1911, A., i, 733.
constituents of essential oils; the

constituents of essential oils; the constitution of the active caryophyllenes; transformation of the active caryophyllenes into monocyclic derivatives, 1912, A., i, 120.

constituents of essential oils; a new primary alcohol of the sesquiterpene series, cedrenol, C₁₅H₂₄O, 1912, A., i, 366.

Semmler, Friedrich Wilhelm, and Erwin W. Mayer, constituents of essential oils. I. ψ-Cedrol, a physical isomeride of cedrol. II. Certain sesquiterpene alcohols. III. Tetrahydrocaryophyllene, 1912, A., 479.

Semmler, Friedrich Wilhelm, and Chaim Rimpel, synthesis of $\Delta^{8(9)}$ -menthene and of active \$\Delta^{3:8(9)}\$-menthadiene, 1906,

A., i. 682.

Semmler, Friedrich Wilhelm, and Felix Risse, constituents of essential oils (derivatives of natural cedrene), 1912, A., i, 201.

Semmler, Friedrich Wilhelm, Felix Risse. and Fritz Schröter, constituents of essential oils (the composition of essential oil of vetiver), 1912, A., i, 882.

Semmler, Friedrich Wilhelm, and Endre Schossberger, constituents of essential oils. I. Terpinolene, II. Ter-

pinene, 1910, A., i, 53.

constituents of essential oils; enolisation of citral; preparation of isogeraniol, C₁₀H₁₈O, 1911, A., i, 475.

constituents of essential oils; composition of the essential oils of Xanthoxylum aubertia (Evodia aubertia) and Xanthoxylum alatum, 1911, A., i. 1002.

Semmler, Friedrich Wilhelm, and K. E. Spornitz, constituents of essential oils; chemical identity of synthetic and natural cedrene, 1912, A., i, 573.

Semmler, Friedrich Wilhelm, and Bruno Zaar, constituents of essential oils; further degradation of noreksantalic acid, 1910, A., i, 573.

constituents of essential oils; constitution of perillaldehyde, C₁₀H₁₄O,

1911, A., i, 218.

constituents of essential oils; identity of the alcohol, C10H16O, of gingergrass oil with perilla alcohol; tricyclenecarboxylic acid, 1911, A., i, 313.

constituents of essential oils; "false camphor wood oil" (faux camphrier); natural occurrence of myrtenal and d-perilla aldehyde, 1911, A., i, 388.

Semper, Aug., [physiological] action of kamala and its constituents, 1910, A., ii, 797.

Semper, Leopold, constitution of auramine, 1911, A., i, 577. Semper, Leopold. See also Heinrich

Wieland.

Sen, Jatindra Nath, decomposition of mercurammonium salts by heat, 1903, A., ii, 148.

Sen, Jatindra Nath. See also Prafulla Chandra Rây.

Sen. Rajendra Nath. See Arthur George Green.

Senderens, Jean Baptiste, catalytic dehydration of alcohols by amorphous phosphorus and phosphates, 1907, A., i, 577.

reducing and catalytic power amorphous carbon towards alcohols,

1907, A., ii, 248.

catalytic dehydration of organic com-

pounds, 1908, A., i, 494.

catalytic dehydration of alcohols by calcium sulphate and by aluminium silicate, 1908, A., i, 495.

catalytic power of silica and alumina,

1908, A., ii, 166.

new method for preparation of ethers, 1909, A., i, 127.

catalytic preparation of ketones, 1909,

A., i, 286. catalysis of saturated fatty acids, 1909,

A., i, 627. catalytic preparation of unsymmetrical aliphatic ketones, 1910, A., i, 11.

catalytic preparation of aromatic ketones, 1910, A., i, 179.

catalysis of aromatic acids, 1910, A., i,

318. ketonic derivatives of benzoic and phenylacetic acids, 1910, A., i, 489. catalytic reactions in the wet way, based on the use of aluminium

sulphate, 1910, A., i, 649. preparation of acraldehyde, 1910, A.,

i, 651.

ketones derived from o-, m-, and ptoluic acids, 1911, A., i, 134.

ketones derived from phenylpropionic

acid, 1911, A., i, 302.

catalytic dehydration of aliphatic alcohols in the wet way by sulphuric acid, 1912, A., i, 331.

catalytic dehydration of alcohols,

1912, A., i, 406. catalysis of cyclic alcohols by the wet way by means of sulphuric acid; preparation of cyclohexenes, 1912, A., i, 441.

use of carbonates in the catalytic preparation of ketones, 1912, A., i, 537.

Senderens, Jean Baptiste, and J. Aboulenc, catalytic preparation in the wet way of esters of saturated aliphatic acids, 1911, A., i, 600.

catalytic esterification of aromatic acids in the wet way, 1911, A., i,

catalytic esterification of dibasic acids in the wet way, 1911, A., ii, 1080.

Senderens, Jean Baptiste, and Aboulenc, catalytic preparation, by the wet method, of esters resulting from evelanols and organic acids, 1912, A., i, 694.

nickel as a catalyst, 1912, A., ii, 770. Senderens, Jean Baptiste. See also Paul

Sabatier.

Sendhoff, Bernhard. See Heinrich Salkowski.

Sénéchal, A. See H. Colin.

Senft, Emanuel, microchemical detection of sugars by means of phenylhydrazine acetate, 1904, A., ii, 595. microscopical detection of lichen acids, 1909, A., ii, 273.

so-called "Lichen quercinus viridis,"

1911, A., ii, 527

Sen-Gupta, Hemendra Kumar, and Biman Bihari Dey, detection of nitric acid in presence of an excess of nitrous acid, 1912, A., ii, 296.

Sen-Gupta, Hemendra Kumar. also Biman Bihari Dey, Prafulla Chandra Rây, and Priyada Ranyan

Rây.

Senier, Alfred, and Percy Corlett Austin, haloids of the acridine and naphthacridines, 1904, T., 1196; P., 176.

dinaphthacridines, 1906, T., 1387; P.,

the condensation of aldehydes with mixtures of a-naphthol and a-naphthylamine; synthesis of 7-aryl- $\alpha - N - \alpha$ -dinaphthacridines, 1907,

T., 1233; P., 185.

the synthesis of phenouaphthacridines; trimethylphenonaphthacridines, 1907, T., 1240; P., 185.

attempted synthesis of $\beta - N - \beta$ dinaphthacridines; condensation of methylene dichloride and 1-substituted-2-naphthylamines, 1907, P.,

300; 1908, T., 63. Senier, Alfred, Percy Corlett Austin, and (Miss) Rosalind Clarke, the interaction of acridines with magnesium alkyl haloids, 1905, T., 1469; P., 227.

Senier, Alfred, and (Miss) Rosalind Clarke, studies in phototropy and thermotropy. Part II. Naphthyl-ideneamines, 1911, T., 2081; P.,260.

Senier, Alfred, and Arthur Compton, the synthesis of acridines and pheno-naphthacridines; tetra- and hexamethylacridines; dimethylpheno-naphthacridines; dixylylmethylnaphthacridines; enediamines 1907, T., 1927; P., 247.

Senier, Alfred, and Arthur Compton, the synthesis of acridines; tetramethylacridines, dimethylnaphthacridines, naphthaquinacridines, diquinacridines, 1909, T., 1623; P., 220.

Senier, Alfred, and Frederick George Shepheard, salicylidene-m-toluidine, a new phototropic compound; salicylideneamines : salicylamides,

1909, T., 441; P., 61.

thiotetrahydroquinazolines, methylenecarbamides, dicarbanilomethylenediamines and their homologues, 1909, T., 494; P., 72.

studies in phototropy and thermotropy. Part I. Arylidene- and naphthylidene-amines, 1909, T., 1943;

P., 246.

Senier, Alfred, Frederick George Shepheard, and (Miss) Rosalind Clarke, studies in phototropy and thermotropy. Part III. Arylideneamines, 1912, T., 1950; P., 236.

Senkowsky, N. See Nikolai S. Kurnakoff. Senn, Hans, electrolytic refining of lead in hydrofluosilicic acid solutions, 1905,

A., ii, 389.

Sensel, G. von, attempted separation of uranium and uranium-X by electrolytic methods and by cathode distribution, 1910, A., ii, 252.

Senst, Richard. See Hermann Emde.

Senter, George, enzyme of the blood which causes the decomposition of hydrogen peroxide. I., 1903, A., ii, 661.

studies on enzyme action: effect of "poisons" on the rate of decomposition of hydrogen peroxide hæmase, 1905, A., i, 107.

reaction-velocities in heterogeneous systems: with particular reference to enzyme actions, 1905, A., ii,

rôle of diffusion in the catalysis of hydrogen peroxide by colloidal platinum, 1905, A., ii, 379.

catalysis by ferments, 1906, A., ii, 220.

displacement of halogens by hydroxyl. I. The hydrolytic decomposition of hydrogen and sodium monochloroacetates by water and by alkali. and the influence of neutral salts on the reaction velocities, 1907, T., 460; P., 60; discussion, P., 61.

electrolysis of dilute solutions of acids and alkalis at low potentials; dissolving of platinum at the anode by a direct current, 1907, A., ii, 68.

Senter, George, methods for determining degree of hydration, 1907, A., ii, 935.

rate of hydrolysis of chloroacetates, bromoacetates, and a-chlorohydrin by water and by alkali, and the influence of neutral salts on the reaction velocities; preliminary note, 1908, P., 89; discussion, P., 90.

guaiacum reaction of blood, 1908, A.,

ii, 305.

reactivity of the halogens in organic compounds. Part III. Interaction of bromoacetic, a-bromopropionic, and a-bromobutyric acids and their sodium salts with water and with alkali, 1909, T., 1827; P., 236.

viscosity and association in binary mixtures of liquids, 1909,

- reactivity of the halogens in organic compounds. Part IV. Interaction of bromoacetic, a-bromopropionic, and a-bromobutyric acids and their sodium salts with silver salts in aqueous solution; catalytic action of silver haloids, 1910, T., 346; P.,
- reactivity of the halogens in organic compounds. Part V. Interaction of esters of the bromo-substituted fatty acids with silver nitrate in alcoholic solution, 1910, P., 344; 1911, T., 95.

hydrolytic decomposition and neutral salt action, 1910, A., ii, 276.

enzymatic decomposition of hydrogen peroxide, 1911, A., ii, 995.

the Walden inversion, 1912, A., i,

Senter, George, and Fritz Bulle, the influence of sodium salts of organic acids on the rate of hydrolysis by alkali, 1912, T., 2528, P., 288.

Senter, George, and Alfred William Porter, reactivity of the halogens in organic compounds. Part VI. mechanism of negative catalysis, 1911,

T., 1049; P., 119.

Senter, George, and Thomas John Ward, reactivity of the halogens in organic compounds. Part VII. The formation of intermediate compounds in the hydrolysis of sodium bromoacetate, 1912, T., 2534; P., 293.

Senter, George. See also Morris William

Travers.

Sentschikovsky. See Michael I. Konowaloff.

Seo, Y., the compound of uric acid with nucleic acid, 1908, A., i, 70.

Seo, Y., the scission of hippuric acid by bacteria; the detection of benzoic acid and glycine in urine, 1908, A., ii, 518.

the influence of muscular work on the excretion of sugar in pancreas diabetes, 1908, A., ii, 1058.

Sera, Yoshita. See Yashiro Kotake. Serbin, E. See Leo A. Tschugaeff. Seregenkoff, Basile. See Eugen Khotin-

Serger, Hermann, quantity of iron contained in spinach, 1906, A., ii, 574. errors in the indirect method for the estimation of total solids alcohols, 1912, A., ii, 1112.

Serger, Hermann. See also Hermann

Matthes.

Sergiewskaja, S. See Paul Pfeiffer. Sericano, G. See Luigi Marino.

Serkoff, S. W., electrical conductivity of solutions of electrolytes in water, methyl or ethyl alcohol, acetone, or in binary mixtures of these solvents, 1909, A., ii, 372.

electrical conductivity and constitution of dissolved substances, 1910,

A., ii, 177.

Serkowski, S., and Mozdzenski, called oxaluria, 1911, A., ii, 311.

Sernagiotto, E. See Luigi Francesconi.

Serono, Cesare, method for the preparation of stable colloidal metals, 1910, A., ii, 776.

Serono, Cesare, and Antoinetto Palozzi, the lipoids of egg-volk, 1911, A., ii,

Serpek, J. O., nitrides and oxides from aluminium heated in air, 1910, A., ii, 615.

Serpek, Ottokar, preparation of pure aluminium oxide from bauxite and other aluminium-containing material, 1912, A., ii, 943.

Serra, Aurelio, pyrrhotites from Sardinia, 1907, A., ii, 361.

tourmaline from Asinara (Sardinia), 1908, A., ii, 116.

investigations on the eruptive basic rocks of Northern Sardinia, 1909, A., ii, 156.

Sardinian minerals: mimetite from the cupriferous strata of Bena (d)e Padru (Ozieri), 1909, A., ii, 492.

basalts from the plateau round Tiesi, northern Sardinia, 1909, A., ii, 494. Sardinian minerals: species from the

province of Sassari, 1910, A., ii, 48. Tschermak's silicic acids, 1910, A., ii, 407.

Serra, Aurelio, remarkable garnet from Fluminimaggiore [Sardinia], 1911, A., ii, 123.

mineralogy of the mine of Calabona (Alghero), 1911, A., ii, 294.

Serra, Federico. See Emilio Noelting. Sertz, H., changes in the so-called leadblackening sulphur in relation to the total sulphur in seedlings of Lupinus angustifolius, 1903, A., ii, 568.

Sesé, M., reaction of pyrophosphates with luteocobaltic chloride, 1911, A.,

ii, 537.

Sessa, Luigi. See Bernardo Oddo.

Sestini, Fausto [Alessandro], formation of nitrous acid in the air confined in arable land; nitrification by chemical processes in the soil, 1904, A., ii, 363.

Seton, Robert S., [composition of rainwater collected at Garforth], 1909, A.,

ii, 340.

Settimi, L., characteristic colour reaction of soja bean oil, 1912, A., ii,

Seubert, Karl [Friedrich Otto], report of the International Atomic Weight Committee of 1903; 1903, A., ii,

probable atomic weight of tellurium and atomic weight calculations in

general, 1903, A., ii, 539. Seubert, Karl, and Johann Carstens, chromic acid as an oxidising agent, 1906, A., ii, 617; 1908, A., ii, 196.

Seubert, Karl. See also Hans Landolt. Souffert, Rudolf. See Alfred Einhorn. Souffert, R. W. See Max Cremer.

Severin, E. See Carl Engler.

Severin, Emile [C.], derivatives of dichlorophthalic acid, 1903, A., i, 262.

3:6-dibromo-2'-dimethylaminobenzoylbenzoic acid, the corresponding diethyl compound, and their derivatives, 1906, A., i, 508.

condensation products of dibromo-

phthalic acid, 1907, A., i, 217. Severin, Émile, and Dragomir Hurmuzescu, radioactivity of the soil and mineral waters of Slanic (Roumania), 1906, A., ii, 593.

Severin, Joseph. See Emil Fischer. Joseph Forschbach, and Felix Rosen-

thal.

Sevestre, Henri. See Paul Freundler. Sewerin, S. A., decomposition of nitrates by bacteria, 1909, A., ii, 255; 1910, A., ii, 14.

mobilisation of the phosphoric acid of soils under the influence of bacteria, 1911, A., ii, 61; 1912, A., ii, 474.

Sexton, Blair. See James Bert Garner. Seybold, W. See Alfred Werner.

Seyde, Franz. See Hans Bucherer.

Seydel, Curt. See Robert Pschorr.

Seydel, Karl. See Heinrich Biltz, and Paul Horrmann.

Seydel, Siegfried, and Jonkheer Louis Wichers, the accuracy of nitrate estimations, 1911, A., ii, 1132.

Sevdel. Siegfried. See also Alfred

Koch, and Hans Stobbe.

Seyewetz, Alphonse, preparation and properties of an oxybromide of silver, 1912, A., ii, 348.

Sevewetz, Alphonse, and Jean Bardin, action of sodium sulphate on acetaldehyde, 1905, A., i, 683.

titration of acetaldehyde, 1905, A., ii,

Sevewetz, Alphonse, and Marcel Biot, a new method of chlorinating aromatic hydrocarbons, 1903, A., i, 157.

Seyewetz, Alphonse, and Jacques Bloch, preparation of aromatic sulphonamates by reduction of nitro-derivatives with sodium hyposulphite, 1906, A., i, 490.

estimation of hyposulphurous acid in hyposulphites and their compounds with formaldehyde, 1906, A., ii, 578.

Seyewetz, Alphonse, and Charles Gibello, synthesis of sugars from trioxymethylene and sodium sulphite, 1904, A., i, 224.

new polymerides of formaldehyde,

1904, A., i, 557.

estimation of formaldehyde and its polymerides, 1904, A., ii, 521.

Seyewetz, Alphonse, and Clair Noel, action of sodium hyposulphite on nitro-derivatives. II., 1908, A., i, 408.

Seyewetz, Alphonse, and Louis Poizat, continuous apparatus for preparing pure oxygen for use in organic analysis, 1907, A., ii, 162.

formation of hydrogen cyanide in the action of nitric acid on phenols and

quinones, 1909, A., i, 146.

oxidation of aromatic nitro- and nitroso-derivatives by ammonium persulphate, 1909, A., i, 376.

direct preparation of metallic and organic sulphonates from crude sulphonation products, 1911, A., i,

Seyewetz, Alphonse, and Paul Trawitz, chlorination of substituted aromatic hydrocarbons by means of ammoniacal lead tetrachloride, 1903, A., i, 330.

Seyewetz, Alphonse, and Paul Trawitz, a new method for the preparation of plumbic ammonium chloride, 1903, A., ii, 371.

action of ammonium persulphate on metallic oxides, 1903, A., ii, 591.

Seyewetz, Alphonse. See also Auguste

Lumière, and Louis Meunier.
Seyler, Clarence Arthur, estimation of
sulphur in pig-iron, 1903, A., ii, 450.
the solvent action of carbon dioxide
on the carbonates of the heavy

metals, 1909, A., ii, 42.

Seyler, Clarence Arthur, and Percy
Vivian Lloyd, studies of the carbona
ates. Part I. The equilibrium between calcium carbonate and carbonic

acid, 1909, T., 1347; P., 199. Seymour, William. See Frederick Levy

Dunlap.
Seymour-Jones, Richard Arnold. See
Henry Richardson Procter.

Shackell, L. F., an improved method of desiccation, 1909, A., ii, 600.

Shackell, L. F. See also Elias Potter

Shadinger, Guy Howard. See Solomon Farley Acree.

Shaer, Ed., reactions of alkaloids with hydrogen peroxide, 1910, A., ii, 910.

Shafer, George D., kidney secretion of indigo-carmin, methylene-blue, and sodium carminate, 1908, A., ii, 769.

Shaffer, Philip Anderson, estimation of ammonia in urine, 1903, A., ii, 180. catalase, 1905, A., i, 956.

metabolism experiments in a woman with a permanent biliary fistula, 1907, A., ii, 38.

protein metabolism in exophthalmic goitre, 1907, A., ii, 707.

muscular activity and protein metabolism, 1908, A., ii, 961.

excretion of creatine and creatinine in health and disease, 1908, A., ii, 971. estimation of β -hydroxybutyric acid

in urine, 1908, A., ii, 992. destruction of body-protein in fever,

1909, A., ii, 507.
a new salt of β-hydroxybutyric acid,

1912, A., i, 236.
Shaffer, Philip Anderson, and E. A.
Reinoso, do muscle and blood-serum

contain creatinine? 1910, A., ii, 731.

Shaffer, Philip Anderson. See also Silas

Palmer Beobe, Bertram Henry Buxton,
Charles Loring Jackson, and Charles

George Lewis Wolf.

Shaklee, Alfred O., and Samuel James Meltzer, mechanical destruction of pepsin, 1909, A., i, 277.

Shaklee, Alfred O., and Samuel James Meltzer, the destructive effects of shaking on proteolytic enzymes, 1909, A., i, 980.

Shand, S. James, minerals formed by the combustion of pyritous shales in Midlothian, 1910, A., ii, 781.

Shapovalenko, A. See Leo Pissarjewsky.

Sharp, Leslie T. See Charles B. Lipman.
Sharpe, N. C., the secretion of urine in birds, 1912, A., ii, 1194.

Sharwood, William J., double cyanides of zinc with potassium and with sodium, 1903, A., i, 684.

cupellation of platinum alloys containing silver or gold and silver, 1904, A., ii, 450.

Shattock, Samuel G., a prehistoric Egyptian calculus, 1905, A., ii, 843.

Shattock, Samuel G., and Leonard Stanley Dudgeon, fatty degeneration in the blood, 1908, A., ii, 953.

Shaw, George Wright, the polariscopic method for the estimation of gliadin, 1908, A., ii, 240.

Shaw, Herbert. See Alfred Fowler.

Shaw, Harold Batty, leucocytic changes following splenectomy combined with intravenous injections of sodium cinnamate, 1903, A., ii, 501.

Shaw, L. I. See Hermon C. Cooper. Shaw, Roscoe H., examination of bleached flour, 1906, A., ii, 712.

Shaw, T. W. A. See Frederick George Donnan,

Shaw, William Bayliss, salts of 3:5-dinitroquinol, 1911, T., 1609; P., 98, salts of the dinitrodihydroxybenzenes, 1911, P., 14.

Shaw, William Vernon, intravascular use of antiseptics, 1903, A., ii, 443.

Shaw, William Vernon. See also George Barger, and Frederick John Poynton.

Shaw-Mackenzie, John Alexander, paucreatic lipase. IV. The action of serum of mice inoculated with malignant mouse tumour, 1911, A., ii, 418.

certain reactions of the blood in carcinoma, 1912, A., ii, 582.

Shaw-Mackenzie, John Alexander. See also Otto Rosenheim.

Shdanovitsch, M. L., synthesis of methylethylmalic acid, 1908, A., i, 77.

action of zinc on a mixture of esters of a bromoisobutyric and carbonic acids, 1909, A., i, 9.

action of zine and magnesium organic compounds on ortho-formic ester, 1911, A., i, 10. Shearer, G. W. See Howard Turner Barnes.

Shedd, Oliver March, volumetric estimation of potassium by the cobaltinitrite method, 1911, A., ii, 333.

Shedd, Oliver March, and Joseph Hoeing Kastle, composition of the ash of the sap, leaves, and young stems of the wild grape vine (Vitis cordifolia), 1912, A., ii, 1086.

Shedden, Frank. See Frederic Herbert

Lees.

Sheen, William. See Swale Vincent. Sheets, Guinnevere, the fruit of the Cornus paniculatum, 1911, A., ii, 527.

Shelton, Henry Stanley, the correlation of rock and river-water analyses, 1910, P., 110; discussion, P., 110.

Shen, Bucchok. See Alexander Findlay, Shenstone, William Ashwell, obituary notice of, 1909, T., 2206.

Shenstone, William Ashwell. See also

J. William Gifford.

Shepard, Norman Arthur. See Treat Baldwin Johnson.

Shepheard, Frederick George. See Alfred Senier, and (Sir) William Augustus Tilden.

Shepherd, Earnest Stanley, alloys of lead, tin, and bismuth, 1903, A., ii, 77.

electromotive force of alloys of tin. lead, and bismuth, 1903, A., ii, 196. electrolytic preparation of sodium

amalgam, 1903, A., ii, 210. apparatus for the electrolytic determination of metals, using a rotating

cathode, 1904, A., ii, 80. thermometric analysis of solid phases,

1904, A., ii, 314.

aluminium-tin alloys, 1904, A., ii,

constitution of copper-zinc alloys, 1904, A., ii, 662.

aluminium-zinc alloys, 1905, A., ii,

Shepherd, Earnest Stanley, and Earl Blough, constitution of the copper-tin alloys, 1906, A., ii, 861.

Shepherd, Earnest Stanley, George Rankin, and Frederic Atwater Eugene Wright, binary systems of alumina with silica, lime, and magnesia, 1909, A., ii, 1015.

the ternary system: CaO-Al₂O₃-SiO₂; a study of the constitution of Portland cement clinker, 1911, A.,

ii, 725.

Shepherd, Earnest Stanley, and George Burr Upton, tensile strength of copper-tin alloys, 1905 A., ii, 587.

Shepherd, Earnest Stanley. See also Arthur Louis Day.

Shepherd, Lee. See Charles Frederic

Mabery.

Sheppard, Samuel Edward, the reversibility of photographic development and the retarding action of soluble bromides, 1905, T., 1311; P., 223.

the theory of alkaline development, with notes on the affinities of certain reducing agents, 1906, T., 530;

P., 64.

the optical and sensitising properties of the isocyanine dyes, 1908, P., 134; 1909, T., 15.

influence of their state in solution on the absorption spectra of dissolved

dyes, 1909, A., ii, 531.

de-accelerating action of bromides in the photographic developers, 1909, A., ii, 632.

Sheppard, Samuel Edward, and Charles Edward Kenneth Mees, the molecular condition in solution of ferrous oxalate, 1905, T., 189; P., 10.

theory of photographic processes; chemical dynamics of development,

1905, A., ii, 294.

theory of photographic processes. II. Chemical dynamics of development, including the microscopy of the image, 1905, A., ii, 784.

the molecular condition in solution of ferrous oxalate; a correction, 1906,

P., 105.

Sherman, Hope, and Harold Leonard Higgins, composition of some Bengali food materials, 1910, A., ii, 444.

Sherman, Henry Clapp, estimation of sulphur and phosphorus in organic

materials, 1903, A., ii, 325. composition of cow's milk, 1903, A.,

ii, 339.

influence of diet. muscular exertion. and loss of sleep on the formation of uric acid in man, 1904, A., ii. 62.

phosphorus metabolism in man, 1908,

A., ii, 405.

Sherman, Henry Clapp, William N. Berg, Louis J. Cohen, and W. G. Whitman, ammonia in milk, 1907, A., ii, 568.

Sherman, Henry Clapp, and Milton J. Falk, influence of atmospheric oxidation on the composition and analytical constants of oils, 1903, A., ii, 703; 1905, A., ii, 491.

estimation of nitrogen in organic com-

pounds, 1905, A., ii, 116.

Sherman, Henry Clapp, and A. O. Gettler, the balance of acid-forming and base-forming elements in food, and its relation to ammonia metabolism. 1912, A., ii, 576.

Sherman, Henry Clapp, and Abraham Gross, the detection of salicylic acid,

1912, A., ii, 395.

Sherman, Henry Clapp, Albert W. Hahn, and Arthur J. Mettler, comparative experiments on chemical preservatives

in milk, 1905, A., ii, 758.

Sherman, Henry Clapp, E. C. Kendall, and Ernest Dunbar Clark, amylases. I. Examination of methods for determination of diastatic power, 1910, A., ii, 1012.

Sherman, Henry Clapp, C. B. McLaughlin, and Emil sterberg, estimation of nitrogen in foods and physiological

products, 1904, A., ii, 514.

Sherman, Henry Clapp, and M. D. Schlesinger, amylases. III. Preparation and properties of pancreatic amylase, 1911,

amylases. IV. A further investigation of the properties of pancreatic amylase, 1912, A., i, 815.

Sherman, Henry Clapp, and J. Edwin Sinclair, the balance of acid-forming and base-forming elements in foods,

1907, A., ii, 793.

Sherman, Henry Clapp, and R. H. Williams, osazone test for dextrose and lavulose as influenced by dilution and by the presence of other sugars, 1906, A., ii, 498.

Sherman, Henry Clapp. See also William N. Berg, Rachel H. Colwell, F. C. Hinkel, E. C. Kendall, William G. Tice, W. G. Whitman, and R. H.

Williams.

Sherrill, Miles Standish, formation of complexes and some physico-chemical constants for mercury-halogen compounds, 1903, A., ii, 534.

complex haloid salts of mercury, 1903,

A., ii, 649. halogen compounds of mercury, 1904,

A., ii, 337.

ionisation of salts in mixtures with no common ion, 1910, A., ii, 570.

Sherrill, Miles Standish, F. Malcolm Eaton, Alden Merrill, and Donald E. Russ, equilibrium relations of chromates in solution, 1908, A., ii, 92.

Sherrill, Miles Standish, and Stanislaws Skowronski, mercury thiocyanate complexes, 1905, A., i, 265.

Sherrington, Charles Scott, and (Miss) S. C. M. Sowton, chloroform and reversal of reflex effects, 1911, A., ii,

Sherrington, Charles Scott. See also

A. G. W. Owen.

Sherry, Ralph H., optical rotatory power of liquid ammonia, methylamine, and sulphur dioxide solutions, 1907, A., ii, 920.

Sherry, Ralph H. See also Anson

Gardner Betts.

Sherwin, C. P., and Philip Bouvier Hawk, fasting studies. VII. The putrefaction processes in the intestine of a man during fasting and during subsequent periods of low and high protein ingestion, 1912, A., ii, 461.

Sherwood, Laurence T., and Gellert Alleman, use of tin as a cathode for the rapid electrolytic deposition of zinc, copper, silver, cadmium, and

nickel, 1907, A., ii, 816.

Shetterly, Fred. Floyd. See Arthur Wesley Browne, and Clarence Frederic Hale.

Shibata, Keisaku, amide-splitting ferments in fungi, 1904, A., ii, 432. chemotaxis of Isoetes spermatozoids,

1905, A., ii, 190.

Shibata, Keita. See Martin Freund.

Shibata, Nagamichi, the behaviour of fats of animal organs in antiseptic preservation, 1911, A., ii, 304.

fatty infiltration [into the liver] after phosphorus poisoning and the origin of fat in the animal body, 1912, A., ii, 68.

Shibata, Nagamichi, and Shigekiyo Endo, comparative histological and chemical investigations of the fat contents of organs, 1912, A., ii, 67.

Shibata, Yūji, the action of the Grignard reagent on phthalic esters, 1909, T.,

1449; P., 209.

the action of the Grignard reagent on camphoric and isocamphoric esters, 1910, T., 1239; P., 141.

synthesis of ethyl cyclobutanehexacarboxylate, 1910, A., i, 851.

Shibata, Yūji. See also Arthur

Hantzsch. Shiga, Kiyoshi, yeast ferments, 1904,

A., i, 1071. Shimamura, T. See Umetaro Suzuki.

Shimazono, J., the hæmolytic action of the fat of rice (Oryza sativa, L.); hæmolysis of fatty acids, 1911, A., i,

Shimer, Porter William, a new filter, 1905, A., ii, 349.

Yoshitaka, estimation of Shimidzu. lactose by ammoniacal copper salt solutions, 1908, A., ii, 991.

the Kumawaga-Suto method of estimating fats, 1910, A., ii, 1123.

Shimizu, Sumu. See Kõtarõ Honda. Shinjo. See C. Rohloff.

Shinn, Frederick Lafayette, optical rotatory power of salts in dilute solutions, 1907, A., ii, 417.

electrical conductivity of solutions in ethylamine, 1907, A., ii, 926.

Shinn, Frederick Lafayette, and Horace Lemuel Wells, double and triple thiocyanates of cæsium, cobalt, and silver, 1903, A., i, 467.

Shinn, Frederick Lafayette. See also

Robert Edward Lyons.

Shinn, Owen Louis, complex thiosulphates, 1904, A., ii, 653.

electrolytic estimation of nitric acid, 1908, A., ii, 893.

atomic weight of palladium, 1912, A., ii, 1178.

Shiomi, Tsutomu, solubility of disodium hydrogen phosphate in water, 1909, A., ii, 573.

Shipley, John W. See Theodore Wil-

liam Richards.

Shmamine, T. See Franz Röhmann. William Bush, propanetrisulphonic acid, 1904, A., i, 798.

See Walter Bradford Shohl, A. T. Cannon.

Shore, Lewis Erle. See Joseph Barcroft. Shores, Jeff Henry. See Richard Anschütz.

Shorey, Edmund C., isolation of creatinine from soils, 1912, A., ii, 293.

Shorey, Edmund C., and Elbert C. Lathrop, pentosans in soils, 1911, A., ii, 146.

methoxyl in soil organic matter, 1911, A., ii, 327.

Shorey, Edmund C. See also Oswald Schreiner.

See Alex-Short, Frederick Charles.

ander Findlay.

Shorter, Sydney Alfred, application of the theory of chemical potential to the thermodynamical theory of solutions. I. General theory of chemical potential in a binary system; osmotic pressure and vapour pressure of solutions, 1912, A., ii, 24.

application of the theory of chemical potential to the thermodynamical theory of solutions. II. Effect of pressure vapour pressure; on vapour pressure theory of osmotic pressure; the freezing of solutions,

1912, A., ii, 437.

Shreder, Ivan, changes of specific heat of ethyl alcohol dissolved in liquid hydrocarbons, 1908, A., ii, 460.

Shreve, Randolph Norris. See Latham

Clarke.

Shrewsbury, Herbert Sutcliffe, estimation of preservatives in milk, 1907, A., ii, 140.

estimation of calcium carbonate in soils, 1912, A., ii, 491.

poisonous gases from oilfields, 1912, A., ii, 1179.

Shrewsbury, Herbert Sutcliffe, and Arthur William Knapp, detection and estimation of formaldehyde in milk, 1909, A., ii, 192.

Shrimpton, Albert George, condensation products of a-naphthol and benzophenone chloride, 1906, A., i, 659.

Shukoff, Alexis A[lexandrovitsch] preparation of stearolactone, 1904, A., i, 646. the oxidation of organic compounds by means of the compounds of nitric acid with aldehydes or ketones, 1909, A., i, 238.

Shukoff, Alexis A., and F. S. Kasatkin. compounds of ketones and aldehydes

with acids, 1909, A., i, 397.

Shukoff, Alexis A., and Peter I. Schestakoff, structure of hydroxystearic acids, 1903, A., i, 397.

direct estimation of glycerol, 1905,

A., ii, 289.

formation of y-lactones, 1908, A., i,

Shukoff, Iwan I [wanovitsch] organo-metallic compounds, 1905, A., i, 759.

anodic solution of copper and mercury, 1907, A., ii, 329.

metallic nitrides and their magnetic properties. I., 1908, A., ii, 484.

magnetic oxides of chromium, 1908, A., ii, 699. thermal effect of the magnetic trans-

formation of nickel and cobalt. 1909, A., ii, 209.

of certain electrical conductivity metallic nitrides, 1910, A., ii, 254.

Shukoff, Iwan I., and Vladimir J. Kurbatoff, a new method of determining the melting point of metals, 1908, A., ii, 153.

Shukoff, Iwan I. See also Richard Abegg.

Shull, A. Franklin, the effect of the chemical composition of the medium on the life cycle of Hydatina senta, 1912, A., ii, 369.

Shumakoff, S., electrical conductivity in systems containing zinc sulphate, ammonia, and water, 1908, A., ii, 457.

Shutt, Frank Thomas, effect of rust on the straw and grain of wheat, 1904, A., ii, 476.

fertilising value of snow, 1908, A., ii,

444

nitrogen compounds in rain and snow, 1909, A., ii, 429.

influence of environment on the composition of wheat, 1909, A., ii, 514.

Shutt, Frank Thomas, and H. W. Charlton, a compound of cyanamide as a nitrogenous fertiliser, 1906, A., ii, 891.

Volhard method for the estimation of chlorine in potable waters, 1906,

A., ii, 894.

Shutt, Frank Thomas, and A. T. Charron, the Dyer method for the determination of plant food in soils, 1908, A., ii, 733.

Siau, Raymond Louis, new form of constant temperature drying oven, 1911,

A., ii, 199.

Siau, Raymond Louis. See also Frederick William Pavy.

Sibbern-Sibbers, Fr. See Richard Stoermer.

Sibley, R. L. See Martin Andre Rosanoff.

Siboni, Giuseppe, iron citrates, 1906, A., i. 65.

Sichel, Emil. See Franz Sachs.

Sicher, Dudley Frank. See Lafayette Benedict Mendel.

Sichler & Richter. See Molkereitechn. Inst. Sichler & Richter.

Sichling, Konrad, nature of the photochlorides of silver and their potential in light, 1911, A., ii, 680.

Sick, Konrad, lactic acid formation in cancer of the stomach, 1906, A., ii,

565.

Sicuriani, Ferruccio, estimation of uric acid in urine, 1909, A., ii, 627.

Sidersky, D., estimation of potassium, 1904, A., ii, 589.

new method for the estimation of reducing sugars, 1906, A., ii, 203.

physico-chemical constants of fats, 1907, A., ii, 314.

estimation of fat in milk, 1908, A., ii, 238.

process for the rapid estimation of alcohol, 1910, A., ii, 161.

estimation of organically-combined calcium in sugar refinery products, 1910, A., ii, 548.

refractive indices of water-alcohol mixtures, 1910, A., ii 756.

Sidgwick, Nevil Vincent, note on the interaction of metallic cyanides and organic haloids, 1905, P., 120.

the solubility of organic acids and bases in solutions of their salts; preliminary note, 1910, P., 60.

Sidgwick, Nevil Vincent, and Tom Sidney Moore, dynamics of tautomerism,

1907, A., ii, 246.

the rate of reaction of the triphenylmethane dyes with acid and alkali. Part II. Brilliant-green and malachite-green, 1909, T., 889; P., 123.

Sidgwick, Nevil Vincent, Percival Pickford, and Bernard Howell Wilsdon, the solubility of aniline in aqueous solutions of its hydrochloride, 1911,

T., 1122; P., 127.

Sidgwick, Nevil Vincent, and Albert Cherbury David Rivett, the rate of reaction of the triphenylmethane dyes with acid and alkali. Part III. Diaminotriphenylcarbinol, 1909, T., 899; P., 124.

Sidgwick, Nevil Vincent, and Henry Thomas Tizard, the colour of cupric salts in aqueous solution, 1907, P.,

305; 1908, T., 187.

the initial change of the radium emanation, 1908, P., 64.

the colour and ionisation of cupric salts, 1910, T., 957; P., 67.

Sidgwick, Nevil Vincent, and Bernard Howell Wilsdon, the conductivity and viscosity of aqueous solutions of aniline hydrochloride at 25°, 1911, T., 1118; P., 127.

Sidgwick, Nevil Vincent. See also Ernyst Graham Laws, Hans von Pechmann, and Albert Cherbury David Rivett.

Sidorenko, K. W., action of nitrogen peroxide on diallyl, 1904, A., i, 793.

action of nitrous acid on isobutylene, 1907, A., i, 270.

Sidorenko, K. W. See also Nicolaus J. Demianoff.

Demjanoff.
Siebeck, Adolf. See Leopold Rosenthaler.
Siebeck, Richard, the absorption of

nitrous oxide by the blood, 1909, A., ii, 679. the osmotic properties of the kidneys,

1912, A., ii, 1191. Siebel, Oskar. See Hans Rupe.

Siebeling, Waldemar. See Hermann Thoms.

Sieben, Julius. See Richard Anschütz. Siebenrock, E. von, drying of moist ether, 1910, A., i, 150.. Siebenthal, C. E. See Nelson Horatio Darton.

Sieber, (Mne.) Nadežda, [chlorophyll and hæmoglobin], 1903, A., i, 375. action of oxidising enzymes on carbo-

hydrates, 1904, A., i, 129.

glycolytic principle in blood-fibrin, 1905, A., ii, 541.

decomposition of fat by lung-tissue, 1908, A., ii, 406.

the lipoids of the lung, 1909, A., ii,

the influence of alcohol on the quantity of phosphatides in animal organs, 1910, A., ii, 147.

hydrogen peroxide as a hydrolysing

agent, 1912, A., i, 922.

Sieber, (Mme.) Nadežda, and W. S. Dzierzgowsky, the composition of the lung, 1909, A., ii, 909.

the purines of the lung, 1909, A., ii, 909. the enzymes of the lung, 1909, A., ii,

Sieber, (Mme.) Nadežda. See also.

W. S. Dzierzgowsky, and (Mme.)

C. Schumoff Simanowski.

C. Schumoff-Simanowski. Siebert, Carl. See Wilhelm Biltz, and

Daniel Vorländer.

Siebert, Conrad, the estimation of mercury in urine and fæces, 1910, A., ii, 656.

Siebert, Erwin. See Carl Bülow. Siebert, Karl. See Theodor Zincke. Siebert, Werner. See Alfred Stock.

Siebold, Alfred. See Alfred Chaston Chapman.

Sieburg, Ernst, the so-called terpentinphosphorous acid, 1912, A., i, 818.

Siecke, Karl. See Franz Kunckell. Sieden, Fritz. See Heinrich Biltz, and

Adolph Emmerling.

Siedentopf, H., ultramicroscopic examination of the colours of rock salt, 1906, A., ii, 443.

artificial dichroism of blue rock salt,

1908, A., ii, 4.

transformation of phosphorus in the cardioid ultramicroscope, 1910, A., ii, 289.

Siedler, Paul, yohimbine, 1903, A., i, 195.

Siedler, Ph. See Friedrich Wilhelm Küster, and H. Nissenson.

Siefert, Christian, and William John Gies, osseo-mucoid, 1904, A., ii, 61.

Siegel, Erich, the effect of oxygen and the salts of the blood on the action of adrenaline, 1911, A., ii, 312.

Siegel, Ernst, influence of pressure on the position of liquid metals in the thermo-electric series, 1912, A., ii, 733. Siegfeld, Moritz, daily variations in the amount of fat in milk, 1903, A., ii, 37.

estimation of fat in milk, 1903, A., ii, 458.

detection of heated milk, 1904, A., ii,

use of amyl alcohol in the estimation of fat in milk by Gerber's method, 1904, A., ii, 152.

estimation of fat in cheese, 1904, A.,

ii, 523, 688.

occurrence of cholesterol and lecithin in milk and its influence on the estimation of fat in milk by Gottlieb's method, 1906, A., ii, 204.

does butter-fat contain simple or compound glycerides ? 1910, A., ii, 327. composition of butter, 1912, A., ii,

1218.

Siegfried, Cyrus R. See Francis Jones Pond.

Siegfried, Max [August], hydrolysis of albumin, 1903, A., i, 586.

peptones, 1903, A., i, 782; 1905, A., i, 727.

meat extract, 1903, A., ii, 660.

protokyrines, 1904, A., i, 955.

a Kjeldahl apparatus, 1904, A., ii, 444.

derivatives of amino-acids, 1905, A., i, 59.

caseinokyrine, 1905, A., i, 104; 1907, A., i, 265.

glutokyrine, 1905, A., i, 105.

lysine, 1905, A., i, 297.

union of carbon dioxide with amphoteric amino-substances, 1905, A., ii, 332; 1906, A., i, 324.

isolation of amino-acids, 1903, A., i,

144.

kyrines, 1906, A., i, 777.

method for estimating the ratio $\overline{\text{CO}_2/N}$ in the carbamino-reaction, 1907, A., ii, 825.

isolation of glycine, albumoses, or peptones from dilute aqueous solutions, 1908, A., i, 234.

the action of mercuric chloride on glycine, 1911, A., i, 427.

conversion of glycine into iminodiacetic and triglycolamic acids, 1911, A., i, 774.

trypsin action; the tryptic digestion of casein, 1911, A., ii, 126.

lysine platinichloride, 1912, A., i, 127.

Siegfried, Max, and Simon Howwjanz, union of carbon dioxide with alcohols, sugars, and hydroxy-acids, 1909, A., i. 352. Siegfried, Max, and Hans Liebermann, union of carbon dioxide with amphoteric amino-compounds. IV., 1908, A., i, 379.

Siegfried, Max, and Hans Mark, jecorin,

1906, A., i, 325.

Siegfried, Max, and Carl Neumann, union of carbon dioxide with amphoteric amino-compounds. III., 1908, A., i. 379.

Siegfried, Max, and O. Pilz, hydrolysis of glutokyrin, 1909, A., i, 124.

Siegfried, Max, and H. Schmitz, pepsinglutinpeptone, 1910, A., i, 448.

Siegfried, Max, and E. Schutt, separation of amino-acids by means of the carbamino-reaction, 1912, A., i, 952.

Siegfried, Max, and O. Weidenhaupt, action of carbon disulphide on amino-acids, 1911, A., i, 116.

Kieldahl's method [of nitrogen estima-

tion], 1912, A., ii, 202.

Siegfried, Max, and R. Zimmermann, estimation of both phenol and pcresol in urine, 1911, A., ii, 72, 941.

the estimation of phenol and p-cresol in mixtures, 1912, A., ii, 302,

Siegl, K., experiment to show the fluorescent action of the secondary rays caused by radium, 1906, A., ii, 260.

Sieglerschmidt, H., modulus of elasticity and thermal expansion of metals, 1911, A., ii, 851.

Sieglin, Hermann. See August Morgen. Sieglitz, Karl. See Johannes Thiele.

Wilhelm, quinhydrones, 1909, A., i, 109; 1911, A., i, 654. action of p-benzoquinone on diamines and esters of amino-acids, 1910, A.,

Siegrist, Hans, constitution of certain iodine compounds; phenomena of adsorption, 1910, A., ii, 486.

Siegrist, Hans. See also Louis Pelet-Jolivet.

Sielisch, Johannes, picrotoxin. II., 1912, A., i, 790, 886.

Sielisch, Johannes. See also Otto Diels, and Arthur Kötz.

Siemens & Halske, Akt.-Ges., preparation of metallic thorium, 1903, A., ii, 432.

preparation of metallic thorium and yttrium and their alloys, 1904, A., ii, 40.

preparation of homogeneous products from tantalum and other difficultly fusible metals, 1904, A., ii, 741.

purification of tantalum, 1905, A., ii,

96.

Siemens & Halske, Akt.-Ges., filaments for incandescent electric lamps, 1906, A., ii, 213.

Siemens, Alexander, electrolytic separation from their salt solutions of metals which decompose water, 1904, A., ii, 698.

phosphorus and the sulphides of phosphorus, 1906, A., ii, 306.

red phosphorus, 1906, A., ii, 847. Siemens, Alexander. See also Otto Sackur.

Siemens, F. See Henri Moissan.

Siemiradzki, Boleslaw von. See Augustin Bistrzycki.

Siemonsen, Ludwig, constitution of Bmethylallantoin, 1904, A., i, 951.

Siemssen, J. A., a reaction for uranium salts, 1911, A., ii, 230, 773. the action of polyhydric phenols on

uranium salts, 1912, A., i, 350. apparatus for carrying out reactions

under exclusion of air, 1912, A., ii,

a reaction for mercury salts, 1912, A., ii, 388.

reactions of gold salts with m-phenylenediamine, 1912, A., ii, 1001.

Siepermann, Wilhelm, effect of gravity on the boiling point, 1910, A., ii, 267. Sieplein, Otto J. See Richard Anschütz. and Charles Frederic Mabery.

Siertsema, Lodewyk Hendrik, measurements on the magnetic rotation of the plane of polarisation in liquefied gases under atmospheric pressure. II. Measurements with methyl chloride, 1903, A., ii, 123.

Siertsema, Lodewyk Hendrik, and M. de Haas, determinations of refractive indices of gases under high pressures. I. The dispersion of hydrogen, 1912, A.,

Sieveking, Herm, induced activity on the high sea, 1909, A., ii, 635.

Sieveking, Herm. See also Carl Engler. Sievers, E., detection of colouring matters and turmeric in mustard, 1912, A., ii, 1111.

Sieverts, Adolf, occlusion and diffusion of gases in metals, 1907, A., ii, 741. formation of fulminating silver, 1909, A., ii, 142.

solubility of hydrogen in copper, iron, and nickel, 1911, A., ii, 895.

the influence of absorbed gases on the electrical resistance of metallic

wires, 1912, A., ii, 1036. Sieverts, Adolf, and E. Bergner, tantalum, tungsten, and hydrogen, 1911, A., ii, 990.

Sieverts, Adolf, and E. Bergner, stability of argon and helium in solid and liquid metals, 1912, A., ii, 1052.

Sieverts, Adolf, and Joh. Hagenacker, absorption of hydrogen by metallic

nickel, 1909, A., ii, 242.

solubility of hydrogen and oxygen in solid and fused silver, 1909, A., ii,

Sieverts, Adolf, and E. Jurisch, platinum, rhodium, and hydrogen, 1912,

A., ii, 263.

Sieverts, Adolf, and Wilhelm Krumbhaar, the solubility of gases in metals and alloys, 1910, A., ii,

behaviour of solid and fused copper towards gases, 1910, A., ii, 851.

Sieverts, Adolf, Wilhelm Krumbhaar, and Moriz Major, reductions with phosphorous and hypophosphorous acids, 1909, A., ii, 883.

Sieverts, Adolf, and Fritz Loessner, the catalytic oxidation of aqueous solutions of hypophosphites, 1912, A., ii,

Siewert, A. von, hæmin, 1908, A., i,

Sigmond, Alexius von, manurial value of various nitrogenous manures, especially green manure and farmyard manure, 1904, A., ii, 144.

chemical method for the determination of available phosphoric acid in soils,

1907, A., ii, 717.
Sigmund, Wilhelm, physiological action of ozone, 1905, A., ii, 472, 476.

enzymes which hydrolyse (1) salicin and (2) arbutin, 1909, A., i, 277. enzyme hydrolysing aesculin and a fat

splitting enzyme in Aesculus hippocastanum, 1910, A., ii, 885.

Signorelli, Ernesto, the oxidation processes of lipoids of the spinal column, 1910, A., ii, 1087. the excretion of amino-acids in the

urine under the influence of strenuous exercise at high altitudes, 1912, A., ii, 370.

Signorelli, Ernesto. See also Gino Galeotti.

Sigwart, August. See Julius Schmidt.

Sikes, Alfred Walter, the globulin of albuminous urine, 1905, A., ii, 843. phosphorus and calcium of human milk, 1906, A., ii, 874.

estimation of protein in human milk,

1906, A., ii, 912. Sikes, Alfred Walter. See also William Dobinson Halliburton.

Sikorsky, S. See D. A. Chardin.

Silber, J. M., the Warther-Pfeiffer method of estimating the hardness of natural waters, 1911, A., ii, 228.

Silber, Paul G. See Giacomo Luigi Ciamician.

Silberbach, Max. See Robert Pschorr. Silberberg, Max. See Julius Mai, and Hans Rupe.

Silberberger, Richard, new method for the estimation of sulphuric acid, 1903, A., ii, 751.

estimation of sulphur in pyrites, 1904, A., ii, 147.

estimation of sulphuric acid, 1904, A.,

ii, 342, 366.

Silbergleit, Hermann, and Max Mosse, the power of human blood to decompose hydrogen peroxide, 1905, A., ii, 178.

Silbermann, Martin. See Carl Neu-

Silbermann, Theophil, and Adriano Ostrogovich, preparation of magenta and ortho- and meta-halogen magentas by means of iodine, 1907, A., i, 648.

Silbermann, Theophil, and N. Ozorovitz. complex salts of gallic acid; ferrigallic inks, 1909, A., i, 32.

identification of dihydric phenols; a delicate reaction for resorcinol, 1909.

A., ii, 98.

Silbermann, Theophil. See also Adriano

Ostrogovich.

Silberrad, Oswald, the action of ethyl B-iodopropionate on ethyl disodioethanetetracarboxylate, 1904, T., 611; P., 61.

the constitution of nitrogen iodide, 1904, P., 192; discussion, P., 193;

1905, T., 55.

the metallic derivatives of nitrogen iodide and their bearing on its constitution, 1904, P., 241; 1905, T.,

constitution of the phthaleins of pyromellitic acids, mellitic and 1908, P., 209.

an improved Soxhlet condenser, 1911, A., ii, 877.

Silberrad, Oswald, and Thomas Hill Easterfield, the synthesis of aadiglutarie acid, 1903, P., 38.

studies on ethyl carboxyglutarate, 1904, T., 862; P., 114, 141.

Silberrad, Oswald, and Robert Crosbie Farmer, the decomposition of nitro-

cellulose, 1906, T., 1182; P., 171. the hydrolysis of "nitrocellulose" and "nitroglycerine," 1906, T., 1759;

P., 270.

Silberrad, Oswald, Walter Hamis Glover, and Charles Smart Roy, the relationship of colour and fluorescence to constitution. Part I. The condensation products of mellitic and pyromellitic acids with resorcinol, 1906, T., 1787; P., 251.

Silberrad, Oswald, and Henry Ablett Phillips, the metallic picrates, 1908,

T., 474; P., 22.

Silberrad, Oswald, Henry Ablett Phillips, and Henry John Merriman, direct estimation of nitroglycerol in cordite, etc., 1906, A., ii, 633.

Silberrad, Oswald, and Godfrey Rotter, the action of ammonia and amines on diazobenzene picrate, 1906, T., 167;

P., 13; discussion, P., 13.

Silberrad, Oswald, and Charles Smart Roy, gradual decomposition of ethyl diazoacetate, 1906, T., 179; P., 15.

the relationship of colour and fluorescence to constitution. Part II. Rhodamines of mellitic acid, 1908. P., 204; discussion, P., 205.

Silberrad, Oswald, and William Slessor Simpson, note on gunpowder and bullets, made about 1641, recently discovered in Durham Castle, 1906, P.,

Silberrad, Oswald, and Bertram James Smart, the preparation of p-bistriazobenzene, 1906, T., 170; P., 14; discussion, P., 14.

studies on nitrogen iodide. III. The action of methyl and benzyl iodides,

1906, T., 172; P., 15.

removal of nitrous acid from concentrated nitric and sulphuric acids, 1906, A., ii, 226.

Silberstein, Arthur, condensation of iso-butyrylformaldol with malonic acid, 1904, A., i, 288.

Silberstein, Ernst, [new bases from acetylated aromatic amines], 1903, A., i, 474.

Silberstein, Ernst. See also August Michaelis.

Silberstein, Siegmund, See Bruno Bar-

Silberstein, Wilhelm, See Wilhelm Wislicenus.

Silberzweig, C. See André Wahl.

Silk, Harry. See John Theodore Hewitt. Sill, Herbert Fowler, equilibrium between a nitrogen base and organic acids in

various solvents, 1905, A., ii, 377. Sillar, William Cameron. See Robert Henry Elliot.

Siller, Rud., chemistry of hops, 1909, A., i, 728.

Silvatici, S. See Nazareno Tarugi. Silverman, Max. See Andrew Lincoln Winton.

Silvester, Harry, the phenolsulphonic acid method of estimating nitrates in sewage effluents, 1912, A., ii, 386.

Silvestri, Gulfiero. See Camillo Manuelli. Silvestri, Silvestro. See Guido Bargellini. See Friedrich Kehr-Silzer. Robert. mann.

Simáčeck, Eugen. See Julius Stoklasa. See Nicolai Alex-Simanowsky, L. androvitsch Menschutkin.

Simion. Fritz. See Hermann Leuchs. Simmer, August, behaviour of alkaloid salts and of other organic substances with regard to solvents: reducing

action of alkaloids, 1907, A., i, 149. Simmermacher, W., action of calcium carbonate in manuring oats with mono- and di-calcium phosphate,

1912. A., ii. 803. Simmermacher, W. See also Paul

Wagner.

Simmich, P., estimation of total fatty

acids, 1911, A., ii, 233.

Simmich, P. See also Adolf Beythien. Simmonds, Charles, the constitution of certain silicates, 1903, T., 1449; P., 218; discussion, P., 219. reduced silicates, 1904, T., 681; P.,

estimation of small quantities of methyl alcohol [in presence of ethyl alcohol], 1912, A., ii, 208.

Simmonds, Charles. See also (Sir) Ed-

ward Thorpe.

Simmons, John P. See Arthur E. Hill. Simmons, William Herbert. See Frederick Hudson-Cox.

Simnitzki, S., influence of carbohydrates on protein putrefaction, 1903, A., i, 781.

Simon, Alfred Leo. See Emil Hatschek. Simon, Charles Edmund, feeding on monoaminoacids in cystinuria, 1905, A., ii, 741.

Simon, Charles Edmund, and D. G. Campbell, feeding with cholic acid in cystinuria, 1904, A., ii, 575.

Simon, Friedrich, a new reaction for free hydrochloric acid in stomach contents, 1907, A., ii, 298.

adsorption compounds of certain proteins with inorganic haloid salts soluble in alcohol, 1910, A., i, 527.

differentiation of the tryptic and proteolytic (autolytic) actions of the liver, 1911, A., ii, 54.

autolysis of the brain, 1911, A., ii,

745.

Simon, Friedrich, the behaviour of yeastgum in the animal organism, 1912, A., ii, 470.

Simon, Heinrich. See August Michaelis. Simon, Italo. See Giuseppe Buglia.

Simon, J., action of different amounts of copper in the soil on the growth of plants, 1910, A., ii, 64.

Simon, Johann. See Rudolph Fittig.

Simon, Karl, coloration of minerals, 1908, A., ii, 954.

Simon, Louis Jacques, pyruvylpyruvic ester derivatives. II. Stereoisomeric hydrazones, 1903, A., i, 55.

action of carbamide on pyruvic acid. II. Dipyruvyl triureide, 1903, A.,

i, 314.

method of estimating volumetric hydroxylamine, 1903, A., ii, 239; 1905, A., ii, 352.

oxalacetic acid, 1904, A., i, 11.

the diureides; ethyl homoallantoate, 1904, A., i, 300.

ureides of glyoxylic acid; allantoin and allantoic acid, 1904, A., i, 301.

product of the spontaneous change of ethyl oxalacetate, 1904, A., i, 648. new reaction of hydroxylamine, 1904,

A., ii, 84.

action of potassium permanganate on the salts of hydroxylamine (nitrate, phosphate, arsenate), 1905, A., ii, 242.

a new type of balanced reactions, 1906,

A., i, 404.

influence of the juxtaposition of ketonic and acid groups in the same molecule, 1906, A., i, 404.

ureides. I. Action of urethane on pyruvic acid and its derivatives, 1906, A., i, 733.

mechanism of the synthesis of quinoline derivatives, 1907, A., i, 241.

the mechanism of the synthesis of cyclic nitrogen compounds [quinoline derivatives], 1908, A., i, 687.

mechanism of the synthesis of cyclic nitrogen compounds; action ethyl pyruvate on p-toluidine, 1908, A., i, 738.

acidic character of ethyl oxalacetate,

1910, A., i, 542.

Simon, Louis Jacques, and Georges Chavanne, characteristic reaction of ethyl glyoxylate; action of ammonia on the ester and its derivatives, 1906, A., i, 396.

action of urethane and of carbamide on ethyl glyoxylate; new synthesis of allantoin, 1906, A., i, 636.

Simon, Louis Jacques, and Georges Chavanne, action of reagents for the aldehydic function on ethyl glyoxylate, 1907, A., i, 110.

Simon, Louis Jacques, and A. Conduché, a new general reaction of aldehydes,

1904, A., i, 521.

action of ethyl oxalacetate on benzaldehyde in presence of primary amines, 1904, A., i, 812,

action of ethyl oxalacetate on aromatic aldehydes in the presence of \$3naphthylamine, 1904, A., i, 812.

action of ethyl oxalacetate on aldehydes in presence of ammonia and primary amines; a new general reaction of aldehydes, 1907, A., i, 963.

Louis Jacques, and Charles Mauguin, syntheses in the quinoline group; phenylnaphthaquinolinedicarboxylic acid and its derivatives, 1906, A., i, 887.

syntheses in the quinoline group; ethyldihydrophenylnaphthaquinolinedicarboxylate and its derivatives,

1906, A., i, 888.

mechanism of the synthesis of quinoline derivatives (Doebner's reaction),

1907, A., i, 725.

action of ethyl oxalacetate on benzylidene-\$-naphthylamine; syntheses in the naphthaquinoline 1908, A., i, 296.

Simon, M., selenocyanopropionic acid,

1905, A., i, 866.

balanophorin. I., 1911, A., i, 391. Simon, Max. See Richard Stoermer.

Simon, Oscar, cetraric acid, 1903, A., i, 98; 1906, A., i, 961.

methylene compounds and two new homologues of orcinol, 1904, A., i, 405.

albumoses in tubercular sputum, 1904, A., ii, 64.

Simon, Oscar, and Hans Lohrisch, estimation of cellulose in foods and in fæces, 1904, A., ii, 787. Simon, Theodor. See Bernhard Flür-

scheim.

Simontet, Adolphe, compounds of hexahydric alcohols with mononitrobenzaldehydes, 1903, A., i, 633. Simonet, Adolphe. See also Léo Vignon.

Simonis, Hugo, and Karl Arand, action of organic magnesium compounds on dicarboxylic acids and a method of converting a 'CO₂H group into 'CO'R, 1909, A., i, 932.

Simonis, Hugo, Alfred Boehme, and J. Benenson, aromatic aldehydo-acids

1912, A., i, 564.

Simonis, Hugo, and Curt Kirschten, dihalogenoindones, 1912, A., i, 270.

Simonis, Hugo, Emil Marben, and Eric Mermod, action of Grignard's reagent on o- or y-aldehydo-acids, 1906, A., i. 32.

Simonis, Hugo, and F. H. Thies, the estimation of carbon in the wet way, 1912, A., ii, 1001.

Simonis, Hugo. See also Eric Mermod, Fritz Nelken, Fritz Peters, M. Rindl,

and Alfred Salmony.

See Conrad Willgerodt. Simonis, Max. Simonot, E., rapid gravimetric estimation of urinary albumin, 1911, A., ii,

Simons, Frank Darius. See Charles

Albert Crampton.

Simons, L. See Charles Glover Barkla. Simonsen, John Lionel, a synthesis of terebic, terpenylic, and homoter-penylic acids, 1906, P., 307; 1907, T., 184.

6-methyl-2-pyrone-3:5-dicarbethvl oxylate and its derivatives, 1908,

T., 1022; P., 136.

syntheses with the aid of monochloromethyl ether. Part I. The action of monochloromethyl ether on the sodium derivatives of ethyl malonate and ethyl isopropylmalonate, 1908, T., 1777; P., 212.

ethyl 6-methyl-2-pyrone-3:5-dicarboxylate and its conversion into methyltrimesic acid, 1910, T., 1910,

P., 200.

some reactions of gum kino, 1911, T.,

1530; P., 194.

Simonsen, John Lionel, and Robert Storey, syntheses with the aid of monochloromethyl ether. Part II. The action of monochloromethyl ether on the sodium derivative of ethyl acetoacetate, 1909, T., 2106; P., 290.

Simonsen, John Lionel. See also (Miss) Hannah Bamford, John Cannell Cain, William Henry Perkin, jun., and

Robert Robinson.

Simpson, Edward Sydney, [Western Australian minerals], 1903, A., ii,

[chrysocolla from Western Australia], 1905, A., ii, 176.

analysis of tantalum ores, 1909, A., ii, 622.

further occurrences of tantalum and columbium in Western Australia, 1910, A., ii, 1077.

Simpson, George C., atmospheric electricity [radioactivity] in high latitudes, 1905, A., ii, 662.

Simpson, George Charles Edward, influence of the pancreas on the glycolytic power of muscle, 1910, A., ii, 225.

estimation of urobilin in the excreta and its value as a measure of hæmoglobin metabolism, 1911, A., ii, 309.

Simpson, George Charles Edward. See

also Edward S. Edie.

Sutherland, and Simpson, Andrew Hunter, the possible vicarious relationship between the pituitary and thyroid glands, 1910, A, ii, 428; 1911, A., ii, 1112.

Simpson, William Slessor. See Oswald

Silberrad.

Simrock, Karl, estimation of sugar in urine by a modification of Trommer's

method, 1906, A., ii, 810.

Sims, William Edgar, volumetric estimation of free acid in presence of copper or other metallic salts, 1907, A., ii, 574.

Sinclair, J. Edwin. See Marston Taylor Bogert, and Henry Clapp Sherman.

Singer, Felix, theory of silicates, 1911, A., ii, 979.

Singer, Fritz. See Julius Sand.

Singer, Ludwig. See Arthur Rosenheim. Singer, Sidney Kent. See Theodore William Richards.

Singh, Puran, extraction and estimation of cantharidin, 1907, A., ii, 994.

use of nickel hydroxide in tannin estimation, 1911, A., ii, 946.

Sington, James. See Emil Abderhalden. Siniscalchi, A. See Luigi Bernadini.

Sinkinson, Eric, an apparatus for automatically decanting and washing precipitates, 1912, A., ii, 984.

Sinnatt, Frank Sturdy, the estimation of pieric acid additive compounds, 1905, P., 297.

determination of nitrates, 1906, P.,

255.

methylene-blue as indicator in iodometric titrations, 1910, A., ii, 747; 1912, A., ii, 681.

apparatus for obtaining an average sample of gas and for regulating the flow of a gas into an evacuated vessel, 1912, A., ii, 679.

Sinner, Karl. See Karl Elbs.

Sinnige, Laurens Renoldus. See Ernst Cohen.

Sircar, Anakul Chandra, and Jatindra Mohan Dutta, the reaction between potassium permanganate and manganese sulphate in acid solution, 1909, P., 249.

Sirear, Anakul Chandra, and Edwin Roy Watson, azo-salicylic acid and azo-hydroxynaphthoic acid dyes, 1912, A., i, 1037.

Sircar, Anakul Chandra. See also

Edwin Roy Watson.

Sirk, Heinrich, acceleration of the evolution of chlorine from potassium chlorate and hydrochloric acid by the presence of platinum, 1905, A., ii, 381.

slow combination of chlorine and hydrogen under the influence of

heat, 1908, A., ii, 172.

the question whether an active element exists between uranium and uranium-X, 1912, A., ii, 519.

Heinrich. See also Cornelio Doelter, and Zdenko Hanns Skraup.

Sirkar, Annada Prasad. See Ernest George Hill.

Sirker, J. N., lime factor for oats, 1909,

A., ii, 926.

application of carbon disulphide in mulberry culture, 1909, A., ii, 927.

Sirks, Hendrik Adrianus, the six dinitrobenzoic acids, 1908, A., i, 532.

Sirks, Hendrik Adrianus. See also

Arnold Frederik Holleman Sirovich, G., marcasite from Castelnovo

di Porto, 1912, A., ii, 1061.

Sirovich, G. See also Nicola Parravano. Sisley, Paul, artificial preparation and constitution of ellagic acid, 1909, A., i, 587.

Sisley, Paul, and Charles Porcher, elimination of colouring matters by the animal organism, 1911, A., ii,

Sisley, Paul. See also Philippe Barbier. Sissoeff, (Frl.) C. See (Frl.) Irma Gold-

berg.

Sisson, Henry Arnott, See Henry John Horstman Fenton, and Leonard Angelo Levy.

Sittig, Otto, carbohydrates in pathological fluids and the question of residual nitrogen, 1909, A., ii, 914.

Sivén, Walter Oswald, endogenous purine metabolism In man, 1907, A., ii, 376.

purine metabolism of man. I. Are the purine substances intermediary or final products of metabolism? 1912, A., ii, 575.

purine metabolism in man. II. Are the endogenous purine substances the products of the activity of the digestive glands ! 1912, A., ii, 780.

Sivré, A. See Efim Semen London.

Sjögren, [Sten Anders] Hjalmar, A. E. Nordenskiöld's investigations on the radioactivity of certain Swedish and Norwegian minerals, 1906, A., ii.

crystalline pyrochroite from Långban,

1906, A., ii, 553.

Sjögren, Hjalmar, and (Miss) Naima Sahlbom, radioactivity of Swedish spring waters, 1908, A., ii, 749.

Sjöstedt, Ph. See Fritz Fichter.

Sjöström, Lennart. See Juho Hämäläinen.

Sjöström, W. See Ossian Aschan.

Sjollema, Bouwe, simplified estimation of potassium, 1903, A., ii, 104.

valuation of basic slag, 1903, A., ii,

separation of quartz and amorphous

silica, 1903, A., ii, 241. examination of linseed oil, 1903, A., ii, 703.

reduction of perchlorate by the wet method, 1905, A., ii, 21.

employment of dyes in soil investigation, 1905, A., ii, 195.

isolation of the colloid substances of soils, 1905, A., ii, 195.

microchemical detection of traces of arsenic, antimony, and phosphorus, 1908, A., ii, 224.

signification of colloidal solutions of manganese oxide in biochemical oxidations, 1909, A., ii, 484; 1911, A., i, 411.

Sjollema, Bouwe, and Cornelis Koert van Daalen, experiments with different varieties and on the storage of man-

golds, 1908, A., ii, 618.

Sjollema, Bouwe, and Marinus Johannes van't Kruys, estimation of potassium soluble in mineral acids in sulphated Stassfurt salts and the influence of free hydrochloric acid in the estimation of sulphates or barium, 1907, A., ii, 814.

estimation of small quantities of arsenic in foods, etc., 1907, A., ii,

Sjollema, Bouwe, and Inne Jan Rinkes. hydrolysis of the protein of potato, 1912, A., ii, 381.

Sjollema, Bouwe, and J. E. Tulleken, Halphen's test for cotton seed oil,

1903, A., ii, 47.

Sjollema, Bouwe, and Johannes Catharinus de Ruyter de Wildt, action of 'kalkstickstoff," "stickstoffkalk," and calcium nitrate, 1908, A., ii, 623.

Skaer, William F. See Charles Wilson

Greene.

Skaupy, Franz, conduction of electricity in dilute amalgams, 1907, A., ii, 327.

Skavronskaja, (Mlle.) N. A. See Sergius V. Lebedeff.

Skeats, Ernest Willington, [minerals in dacite from Victoria, 1910, A., ii, 1078.

Skinder, Vladimir A., physico-chemical investigation of old bronzes from the excavations in Lalajants, on the S. W. shore of Lake Gontscher, in the summer of 1906, 1908, A., ii,

synthesis of atacamite, 1908, A., ii, 381.

ancient copper objects from Transcaucasia, 1909, A., ii, 238.

automatic pressure pipette, 1912, A., ii, 245.

a new potash apparatus, 1912, A., ii,

Skinner, Clarence Aurelius, Faraday's law in reference to the glow discharge in gases, 1905, A., ii, 797.

comparative observations on the evolution of gas from the cathode in helium and argon, 1906, A., ii, 824. Skinner, J. J. See Oswald Schreiner.

Skinner, Sidney, action of radium rays on mercurous salts, 1904, A., ii, 173.

Skinner, W. W., method for determining "black alkali" in irrigating waters and soil extracts, 1906, A., ii, 251.

copper salts in irrigating waters, 1906,

A., ii, 302.

Skirrow, Frederick William, oxidation by electrolytically separated fluorine, 1903, A., ii, 69.

analysis of ferrocyanides, 1910, A., ii,

Skita, Aladar, esters of hydroaromatic

amino-carboxylic acids, 1907, A., i, 1040. reduction of aB-unsaturated ketones and aldehydes, 1909, A., i, 479.

Skita, Aladar, Alexander Ardan, and M. Krauss, reduction of aB-unsaturated ketones, 1908, A., i, 855.

Skita, Aladar, and H. H. Franck, reduction catalysts. V. Hydrogenation of alkaloids, 1911, A., i, 1017.

Skita, Aladar, and Richard Levi, hydrocyclic a-amino-acids, 1908, A., i, 884. Skita, Aladar, and Carl Paal, the

reduction of unsaturated compounds, 1911, A., i, 449.

Skita, Aladar, and H. Ritter, catalytic reduction. III., 1911, A., i, 71. Sabatier's reduction and its reversibility, 1911, A., i, 272.

Skita, Aladar. See also Georg Merling. Sklepinski, A. M., a modification of Ostwald's hydrogen sulphide appara-

tus, 1912, A., ii, 932, 1051. Skopnik, A. von. See Adolf Grün. Skosarewsky, M., sodium derivatives of

acetylene, 1904, A., i, 793.

action of potassium hydroxide on a mixture of phenylacetylene and acetone: synthesis of phenylacetylenyldimethylcarbinol, 1905, A., i. 774.

Skowronski. Stanislaws.

Standish Sherrill.

Skrabal, Anton, preparation of pure iron, 1903, A., ii, 22. critical studies on the volumetric

estimation of iron by permanganate, 1903, A., ii, 684.

standardisation of permanganate, 1904, A., ii, 213.

sodium ferric sulphates, 1904, A., ii,

preparation of pure iron for standardising permanganate, 1904, A., ii,

electrolytic iron, 1904, A., ii, 820.

kinetics of the reaction between potassium permanganate and oxalic acid, 1905, A., ii, 17.
"primary oxide" theory of oxidation,

1905, A., ii, 18.

action of oxidising agents on hydriodic acid; reactions of hypoiodous acid, 1905, A., ii, 449.

kinetics of processes of oxidation, 1905,

A., ii, 804.

hypohalogenous acids and hypohalogenites. I. Kinetics of the hypoiodites and hypobromites in strongly alkaline solution, 1907, A., ii, 448.

hypohalogenous acids and hypohalogenites. II. Kinetics of the hypobromites in weak alkaline solution, 1909, A., ii, 224.

crystals which are absolutely stable only under high pressures, 1910, A., ii, 592.

the spontaneous decomposition of permanganates and permanganic

acid, 1910, A., ii, 855. the hypohalogenous acids and the hypohalogenites. III. Influence of electrolytes on the velocity of the hypoiodite reaction, 1911, A., ii, 382.

the hypohalogenous acids and the hypohalogenites. IV. The influence of electrolytes on the velocity of the hypobromite reaction, 1911, A., ii, 382.

Skrabal, Anton, the hypohalogenous acids and the hypohalogenites. V. Kinetics of the formation of jodate from iodine and hydroxyl ion, 1912, A., ii, 33.

the hypohalogenous acids and the VI. The hypohalogenites. temperature-coefficients of the reactions between iodine and alkali, 1912,

A., ii, 340.

Skrabal, Anton, and Paul Artmann. precipitation of barium as sulphate, and its separation from calcium, 1906, A., ii, 804.

the newly discovered element of the tin group, 1909, A., ii, 243.

Skrabal, Anton, and F. Buchta, aqueous solutions of hypoiodous acid, 1909, A., ii, 992.

Skrabal, Anton, and Leo Neustadtl, separation of barium from strontium and calcium by precipitation as chrom-

ate, 1906, A., ii, 126.

- Skrabal, Anton, and J. Preiss, mechanism of the reduction of potassium permanganate; kinetics of the reaction between potassium permanganate and formic acid, 1906, A., ii, 658.
- volumetric estimation of hydrogen Skrabal, peroxide in the presence of persulphuric acid, 1910, A., ii, 447.

Skrabal, Anton. See also Paul Artmann.

Skramlik, Emil von, urinary acidity. 1911, A., ii, 511. Skraup, Zdenko Hanns, Pasteur's re-

action, 1903, A., i, 649. spacial retardation, 1903, A., i, 715. influence of bridge-linking on asym-

metry, 1903, A., ii, 67. the number of stereoisomerides, 1903,

A., ii, 202.

hydrolysis of casein, 1904, A., i, 538,

hydrolysis of proteins. II. Gelatin, 1905, A., i, 398.

diamino-acids in casein and gelatin; a correction, 1905, A., i, 619.

amount of glycine and alanine from casein, 1906, A., i, 123.

deaminoglutin, 1906, A., i, 913; 1907, A., i, 739.

deaminoproteins, 1908, A., i, 584. products of hydrolysis of casein, 1908, A., i, 930.

capillary phenomena, 1909, A., ii, 868.

behaviour of aqueous solutions in capillary actions, 1910, A., ii, 191.

Skraup, Zdenko Hanns, and A. von Biehler, constitution of gelatin, 1909, A., i, 749.

Skraup, Zdenko Hanns, A. von Biehler. R. Lang, Ernst Philippi, and J. Priglinger, the capillary rise of salts, 1911, A., ii, 21.

Skraup, Zdenko Hanns, and Bruno Böttcher, methylation of gelatin,

1911, A., i, 247.

Skraup, Zdenko Hanns, and W. Egerer, a new isomeric change of cinchonicine.

1904, A., i, 86.

Skraup, Zdenko Hanns, Ernst Geinsperger, Erich von Knaffl-Lenz, Franz Menter, and Heinrich Sirk, starch. glycogen, and cellulose, 1906, A., i.

Skraup, Zdenko Hanns, and Emil (Ritter) von Hardt-Stremayr, the so-called amidic nitrogen of the proteins, 1908, A., i, 584.

raup, Zdenko Hanns, and Fritz Heckel, gelatin. II., 1906, A., i, and Fritz Skraup,

124.

Skraup, Zdenko Hanns, and Philipp Hoernes, deaminocasein, 1906, A., i,

Skraup, Zdenko Hanns, and F. Hummelberger, gelatoses, 1908, A., i, 711. hydrolysis of egg-albumin by sodium hydroxide, 1909, A., i, 340.

Skraup, Zdenko Hanns, and Karl Kaas, action of nitrous acid on egg-albumin,

1907, A., i, 367.

Skraup, Zdenko Hanns, and E. Krause, action of methyl iodide on casein, 1909, A., i, 748.

partial hydrolysis of proteins by sulphuric acid, 1910, A., i, 447. partial hydrolysis of casein, 1910,

A., i, 528. Skraup, Zdenko Hanns, E. Krause, and A. von Biehler, the capillary rise of

acids, 1910, A., ii, 934.

raup, Zdenko Hanns, and Ernst Philippi, capillary rise of amines, phenols, and aromatic hydroxy-acids, 1911, A., ii, 587.

Skraup, Zdenko Hanns, and J. Priglinger, method of preparing dimethyl-

pyrone, 1910, A., i, 578.

Skraup, Zdenko Hanns, and Wilhelm Türk, hydrolysis of casein with hydrochloric and with sulphuric acid, 1909, A., i, 447.

Skraup, Zdenko Hanns, and Reinhold Witt, peptones from casein, 1906, A., i, 916.

action of sodium hypobromite on casein, 1907, A., i, 806.

Skraup, Zdenko Hanns, and A. Wöber, partial hydrolysis of edestin, 1909, A., i, 446.

Skraup, Zdenko Hanns, and Rudolf Zwerger, isocinchonine bases, 1904, A., i, 915.

kyrines, 1906, A., i, 123.

Skraup, Zdenko Hanns. See also H. Lampel.

Skrjischevsky. See Wojciech Sventoslavsky.

Skworzoff, I., aggregation and crystallisation of water in connexion with the physical condition of substances, 1911, A., ii, 970.

Skworzoff, Victor, hydrogenation of hydroaromatic compounds, 1911,

A., i, 876.

Skworzoff, Wladislaw, extractives of muscles. XI. Nitrogenous extractive substances of veal and beef, 1910, A., ii, 879.

Skworzoff, Wladislaw. See also Iwan

L. Kondakoff.

Slaboszewicz, Jozef, oxidation of alcohol and aldehyde, 1903, A., i, 150.

Slade, Henry B., hydrogen cyanide in Sorghum, 1903, A., ii, 233. preparation of nucleic acid, 1905,

A., i, 620.

Slade, John Godfrey, physiological action of muscle extract, 1907, A., ii, 379.

Slade, Roland Edgar, the reducibility of magnesium oxide by carbon, 1907, P., 152; 1908, T., 327; P., 29.

the constitution of sodium aluminate

solutions, 1910, P., 236.

studies of ammonium solutions. Part I. An ammonium electrode, 1911, T., 1974; P., 242.

solubility of aluminium hydroxide in sodium hydroxide, 1912, A., ii,

163.

Slade, Roland Edgar, and Frederick Denny Farrow, melting point of cupric oxide, 1912, A., ii, 1057.

Slade, W. Clifton. See John Emery Bucher.

Slagle, Edgar Apple, a method of treating and preserving large quantities of urine for inorganic analysis, 1910, A., ii, 805.

Slagle, Edgar Apple. See also Solomon Farley Acree.

Slansky, P. See Reginald Oliver Herzog.

Slater, (Miss) Jessie Mabel W., excited activity of thorium, 1905, A., ii, 368.

slator, Arthur, the chemical dynamics of the reactions between chlorine and benzene under the influence of different catalytic agents and of light, 1903, T., 729; P., 135. the chemical dynamics of the reactions

between sodium thiosulphate and organic halogen compounds. Part I. Alkyl haloids, 1904, T., 1286; P.,

18

the decomposition of ethylene iodide under the influence of the iodide ion, 1904, T., 1697; P., 221.

the chemical dynamics of the reactions between sodium thiosulphate and organic halogen compounds. Part II. Halogen-substituted acetates, 1905, T., 481; P., 121.

studies in fermentation. I. The chemical dynamics of alcoholic fermentation by yeast, 1905, P.,

304; 1906, T., 128.

intermediate products of alcoholic fermentation, 1907, A., ii, 191.

studies in fermentation. Part II.

The mechanism of alcoholic fermentation, 1908, T., 217; P., 11.
gas regulator for thermostats, 1911,

A., ii, 199.

dihydroxyacetone as an intermediate product of alcoholic fermentation,

1912, A., i, 162.

Slator, Arthur, and Henry Julius Salomon Sand, studies in fermentation. Part III. The rôle of diffusion in fermentation by yeast cells, 1910, T., 922; P., 85; discussion, P., 85.

Slator, Arthur, and Douglas Frank Twiss, the chemical dynamics of the reactions between sodium thiosulphate and organic halogen compounds. Part III., 1908, P., 286; 1909, T., 93.

Slator, Arthur. See also Percy Faraday

Frankland.

Slatowratsky, N., and Gustav Tammann, do crystals soften in the neighbourhood of their melting point? 1905, A., ii, 807.

Slavík, František, red zoisite from Moravia, 1903, A., ii, 557.

whewellite from Schlan, Bohemia,

1909, A., ii, 154. Slavîk, František, and J. Fišer, datolite

from Listic, Bohemia, 1904, A., ii, 50. Slavík, František. See also Adolf Hofmann.

Slavjanoff, A. N., synthesis and decomposition of βδ-dihydroxy-βγγδ-tetramethylpentane, 1907, A., i, 578.

Slavu, Gr., effect of amyl nitrite on red blood corpuscles, 1908, A., ii, 767.

Slavu, Gr. See also Emil Abderhalden. Slawik, Paul, rapid method for the detection and colorimetric estimation of small quantities of vanadium in steel, 1910, A., ii, 754.

rapid method for the estimation of manganese in ferrotungsten, 1912,

A., ii, 299.

dimethylglyoxime as a sensitive reagent for ferrous salts, 1912, A., ii, 299. a simple method of estimating vanadium in ferrovanadium, 1912, A., ii,

300.

Slawinski, Kazimir Stanislavovitsch, action of hypochlorous acid on camphene, 1906, A., i, 28.

Sleeswyk, C., iodometric estimation of antipyrine in migrainine, 1911, A., ii,

80.

Sleeswyk, J. G. See Emil Abderhalden. Slemons, J. Morris. See Arthur Heinrich Koelker.

Slepaka, I. See L. Baidakowsky.

Slimmer, Max Darwin, action of emulsin and other ferments on acids and salts, 1903, A., i, 218.

phenoxyethylene, phenoxyacetylene, and their derivatives, 1903, A.,i,249.

Slimmer, Max Darwin, and Julius Stieglitz, constitution of purpuric acid and of murexide, 1904, A., i, 634.

Slimmer, Max Darwin. See also Emil

Fischer.

Sloan, W. H., conductivity of some concentrated aqueous solutions at zero, 1910, A., ii, 820.

preparation of a cuprous nitrate, CuNO2, 2NH3, 1910, A., ii, 852. Sloan, W. H. See also Stewart Wood-

ford Young. Slomnesco, N., action of xanthine leucomaines [ptomaines] on copper, 1906, A., i, 449.

Slosson, Edwin Emery, acylhalogen-amine derivatives and the Beckmann

rearrangement, 1903, A., i, 475. Slowtzoff, Boris Ivanovitsch, metabolism in inanition. I. In insects, 1903,

A., ii, 495.

comparative physiology of inanition. II. Inanition in the snail, 1904, A., ii, 59.

inanition studies. III. In libella. IV. In bees, 1905, A., ii, 45.

absorption of lecithin in the intestine, 1906, A., ii, 101.

the action of lecithin on animal metabolism, 1906, A., ii, 779.

the gaseous exchange in insects, and its relations to the temperature of the air, 1909, A., ii, 902.

Slowtzoff, Boris Ivanovitsch, the comparative physiology of hunger meta-V., 1909, A., ii, 907.

the nutritive value of fish in comparison with beef and its effect on the

urine, 1910, A., ii, 626.

chemical changes in the liver after phosphorus poisoning, 1911, A., ii,

Slowtzoff, Boris Ivanovitsch, and L. W. Soboleff, chemical changes in the liver in certain pathological processes, 1911, A., ii, 310.

Slubek, Zoltan. See Paul Friedländer. Sluiter, Carel Herman, decomposition of the sodium derivative of isonitrosoacetophenone, 1905, A., i, 791.

Wislicenus's supposed isomeride of dibenzoylmethane, 1905, A., i, 796. mechanism of the Beckmann intramolecular transformation, 1905, A.,

ii, 692.

nitrosophenol or quinoneoxime, 1906, A., i, 255.

action of sulphuric acid on copper, 1906, A., ii, 357.

nitrosonaphthols or naphthaquinone-

oximes, 1911, A., i, 439. sodium phenyl carbonate as inter-

mediate product of Kolbe's synthesis for salicylic acid, 1912, A., i, 189, 975.

conductivity of pseudo-acids and of the true acids in mixtures of acetone and water, 1912, A., ii, 889. Sluiter, Carel Herman. See also Cor-

nelis Adriaan Lobry de Bruyn, Arthur Hantzsch, and Arnold Frederik Holleman.

Sluyterman, Albertus, pharmacology of substances behaving like digitalis, 1911, A., ii, 911.

Slyke, Donald D. van, method for estimating amino-nitrogen, and its applications, 1910, A., ii, 751.

method for the estimation of the aliphatic amino-group; application to the chemistry of the proteins, urine, and enzymes, 1911, A., ii, 164.

estimation of aliphatic amino-groups; applications to the study of proteolysis and proteolytic products, 1911, A., ii, 779.

estimation of proline obtained by the ester method in protein hydrolysis; proline content of casein, 1911, A., ii, 780.

estimation of amino-groups in aminocompounds and in urine and a method for the analysis of proteins, 1911, A., ii, 944.

Slyke, Donald D. van, the conditions for the complete hydrolysis of proteins, 1912, A., i, 735.

quantitative estimation of aliphatic amino-groups, 1912, A., ii, 1008.

- Slyke, Donald D. van, and Gustave M. Meyer, the amino-acid nitrogen of the blood; preliminary experiments on protein assimilation, 1912, A., ii, 1184.
- Slyke, Donald D. van, and George Frederic White, relation between the digestibility and the retention of ingested proteins, 1911, A., ii, 623.

digestion of protein in the stomach and intestine of the dog-fish, 1911, A., ii, 624.

Slyke, Donald D. van. See also Emil Abderhalden, Emil Fischer, Moses Gomberg, Phoebus A. Levene, and Lucius Lincoln van Slyke.

Slyke, Lucius Lincoln van, Harry A. Harding, and Edwin Bret Hart, rennet enzyme as a cause of chemical changes in the proteins of milk and

cheese, 1904, A., ii, 285.

Slyke, Lucius Lincoln van, and Edwin Bret Hart, some of the salts formed by casein and paracasein with acids; their relations to American Cheddar cheese, 1903, A., i, 215.

some of the compounds present in American Cheddar cheese, 1903, A., ii, 388.

estimation of proteolytic compounds in cheese and milk, 1903, A., ii,

relation of carbon dioxide to proteolysis in the ripening of Cheddar cheese, 1903, A., ii, 609.

chemical changes in cheese-ripening as affected by different conditions,

1904, A., ii, 143.

artificial digestion of some compounds of casein and paracasein contained in cottage and Cheddar cheese, 1904, A., ii, 749.

chemical changes in the souring of

milk, 1904, A., ii, 759.

casein and paracasein in some of their relations to bases and acids, 1905, A., i, 498.

Slyke, Lucius Lincoln van, and Donald D. van Slyke, action of dilute acids on casein when soluble compounds are not formed, 1907, A., i, 991.

hydrolysis of the sodium salts of casein, 1907, A., i, 1096. Slyke, Lucius Lincoln van, and Donald D. van Slyke, adsorption of acids by casein, 1908, A., i, 375.

Slyper, Hessel Johannes. See Arnold Frederik Holleman.

Small, Fritz H., collaborative work on tannin analysis, 1906, A., ii, 404.

Smalley, William Miles. See Henry Julius Salomon Sand.

Smallman, Arthur Briton. See William Boog Leishman.

Smart, Bertram James. See Oswald Silberrad.

Smedley, (Miss) Ida, studies on the origin of colour: derivatives of fluorene, 1905, T., 1249; P., 221.

action of sodium on aa-dichloropropylene, 1906, P., 158.

synthesis of hexatriene derivatives; preliminary note, 1907, P., 162.

the refractive power of diphenylhexatriene and allied hydrocarbons, 1907, P., 295; 1908, T., 372.

the relation between the chemical constitution and optical properties of the aromatic α- and γ-diketones, 1909, T., 218; P., 17.

note on the constitution of the carboxyl group, 1909, T., 231; P.,

16.

the stereoisomeric modifications of asdibromobenzylacetophenone, 1909, P., 259.

the relative influence of the ketonic and ethenoid linkings on refractive power, 1910, T., 1475; P., 148.

the constitution of the \$\beta\$-diketones, 1910, T., 1484; P., 148.

the condensation of crotonaldehyde, 1911, T., 1627; P., 208.

the action of the liver on the simpler sugars, 1912, A., ii, 579.

the fatty acids of butter, 1912, A., ii, 1194.

Smeeth, William Frederick, a variety of riebeckite (bababudanite) and cummingtonite from Mysore, 1911, A., ii, 737.

Smeliansky, Chana, influence of added substances on the rennin coagulation of cows' milk, 1906, A., ii, 874.

Smelkus, Hugo. See Wilhelm Lossen. Smet, Willem de. See Georges de Voldere.

Smetánka, Franz, the origin of uric acid in map, 1911, A., ii, 218.

Smieciuszewski, Bronislav. See Leo Alberti.

Smiles, Samuel, an asymmetric synthesis of quadrivalent sulphur, 1905, T., 450; P., 92. Smiles, Samuel, theaction of a-halogen ketones on alkyl sulphides, 1905, P., 93.

the nitrates of dimethyl- and methylethyl-thetine menthyl esters, 1907. P., 291.

dinitrodiphenylamine-o-sulphonic acids; preliminary note, 1908, P., 147.

new synthesis of thioxanthone and its derivatives; preliminary note, 1910,

Smiles, Samuel, and Alexander William Bain, phenol p-sulphoxide, 1907,

T., 1118; P., 161.

Smiles, Samuel, and Thomas Percy Hilditch, camphor- B-sulphinic acid and camphorylsulphonium bases, 1907, T., 519; P., 35.

aromatic selenonium bases, 1907, P., 12. p-cresol sulphoxide and sulphide,

1907, P., 161.

derivatives of S-phenylphenazothionium. Parts I. and II., 1907, P., 306; 1908; T., 145, 1687; P., 199.

Smiles, Samuel, and Robert Le Rossignol, aromatic sulphonium bases, 1906,

T., 696; P., 24, 87.

the action of sulphur dioxide and aluminium chloride on aromatic compounds, 1906, P., 158.

the sulphination of phenolic ethers and the influence of substituents,

1908, T., 745; P., 61.

Smiles, Samuel. See also Edward de Barry Barnett, Oscar Lisle Brady, Harold Christopher, Hans Thacher Clarke, Cecil Reginald Crymble, Eric Gordon Davis, (Miss) Maud Gazdar, Thomas Percy Hilditch, Archibald Moritz Hutchison, (Miss) Effic Gwendoline Marsden, Percy May, Thomas Joseph Nolan, Harold James Page, William George Prescott, and Kenneth

Smillie, Ralph. See Isaac King Phelps. Smirnoff, A. J., physiology of the pancreatic secretion, 1912, A., ii, 959.

Smirnoff, Fedor Vasilevitsch, addition of hypochlorous acid to allene hydrocarbons, 1904, A., i, 214; 1905, A., i, 172.

Smirnoff, J. See Oswald Miller.

Smirnoff, Sergei Antoniewitsch, action of isoamyl nitrite on amines and amides, 1911, A., i, 427.

Smirnoff, Vasili Alexandrovitsch, hydration of d-pinene, 1908, A., i, 278.

l-pinene and its isomeric change into dipentene, 1909, A., i, 942.

synthesis of hexahydrocymene [pmethylpropylcyclohexane], 1910, A., i, 104.

Smirnoff, Vasili Alexandrovitsch, See also Wladimir W. Markownikoff.

Smirnoff, Wladimir I., the separation of liquids into layers, 1906, A., ii, 839. distribution of stannic chloride between water and xylene, 1907, A.,

ii, 240.

separation of liquids into layers under the influence of various salts, 1907, A., ii, 334.

thermal expansion of alloys of aluminium and zinc, 1912, A., ii, 896.

Smirnoff, Wladimir I., and Nicolai S. Kurnakoff, hardness of magnesiumsilver alloys, 1909, A., ii, 402.

definite compounds with variable composition of the solid phase. Electrical conductivity and hardness of the system: magnesiumsilver, 1911, A., ii, 888.

Smirnoff, Wladimir I. See also Nicolaus

S. Konstaninoff.

Smirnoff, W. P., chemical nature of cimolite, 1904, A., ii, 669.

glauconite from near Grodno, Russia, 1907, A., ii, 365.

a crystallised product of the weather-

ing of augite, 1907, A., ii, 630. Smissen, Heinrich van der. See Hugo Erdmann.

Smith, Alexander, amorphous sulphur and its relation to the freezing point of liquid sulphur, 1903, A., ii, 139.

causes which determine the formation of amorphous sulphur, 1903, A., ii,

two liquid states of sulphur, S_{λ} and S_{μ} , and their transition point, 1905, A., ii. 382.

nature of amorphous sulphur, and influence of foreign substances on the phenomena of supercooling observed when melted sulphur is suddenly chilled, 1905, A., ii, 382.

does calomel furnish another contradiction of the theory of heterogeneous dissociation equilibrium? 1910,

A., ii, 272.

an early physical chemist: M. W. Lomonossoff, 1912, A., ii, 246.

Smith, Alexander, and Charles Macdonald Carson, the two forms of liquid sulphur as dynamic isomerides, 1907, A., ii, 20.

amorphous sulphur. V. The system:

sulphur-iodine, 1908, A., ii, 32. amorphous sulphur. VII. Freezingpoint curves of liquid sulphur on separation of "nacreous sulphur" and rhombic sulphur respectively, 1911, A., ii, 977.

Smith, Alexander, and Willis Boit Holmes, amorphous sulphur. I. Influence of amorphous sulphur on the freezing point of liquid sulphur, 1903, A., ii, 284.

amorphous sulphur. III. Nature of amorphous sulphur and the influence of foreign substances on the behaviour of supercooled fused sul-

phur, 1906, A., ii, 157.

Smith, Alexander, Willis Boit Holmes, and Elliot Snell Hall, amorphous sulphur. II. Two liquid states of aggregation of sulphur, Sa and Su, and their transition point, 1905, A., ii, 580.

Smith, Alexander, and Alan Wilfrid Cranbrook Menzies, solubilities of orthophosphoric acid and its hydrates; a new hydrate, 1909, A., ii, 998.

electrical conductivity and viscosity of concentrated solutions of orthophosphoric acid, 1909, A., ii, 999.

method for determining boiling points under constant conditions, 1910, A., ii, 687.

a common thermometric error in the determination of boiling points under reduced pressure, 1910, A., ii. 688.

simple dynamic method for determining vapour pressures, 1910, A., ii,

688.

studies in vapour pressures. III. A static method for determining the vapour pressures of solids and liquids, 1910, A., ii, 1036.

studies in vapour pressure. IV. A redetermination of the vapour pressures of mercury from 250° to 435°,

1910, A., ii, 1037.

studies in vapour pressure. dynamic method for measuring vapour pressures, with its application to benzene and ammonium chloride, 1910, A., ii, 1037.

studies in vapour pressure. VI. Quantitative study of the constitution of calomel vapour, 1911, A., ii,

investigations of vapour pressure. VII. The vapour pressure of dried calomel,

1911, A., ii, 492.

Smith, (Miss) Alice Emily, and Kennedy Joseph Previté Orton, transformations of highly substituted nitroaminobenzenes. II. s-Tribromo-1nitroaminobenzene, 1907, T., 146; P., 14.

the bromination of p-hydroxydiphenylamine, 1908, T., 314; P., 27.

Smith, (Miss) Alice Emily, and Kennedy Joseph Previté Orton, acids as accelerators in acetylation, 1908, T., 1242; P., 132; 1909, T., 1060; P., 166.

Smith, (Miss) Alice Emily. See also Kennedy Joseph Previté Orton, and

William Henry Perkin, jun. Smith, Albert Mains. See Frederick

Frost Blackman.

Smith, Arthur Richard, and Jocelyn Field Thorpe, ethyl α-cyano-γ-phenylaceto-acetate, 1907, T., 1899; P., 249. Smith, Albert W. See Wilbur Olin

Atwater.

Smith, Bernard H., estimation of formaldehyde, 1904, A., ii, 98.

estimation of formaldehyde in milk, 1904, A., ii, 98.

formic acid as a preservative, 1907, A., ii, 805.

Smith, Bernard H. See also John Kerfood Haywood.

Smith, Clarence, studies in the tetrahydronaphthalene series, Part II. Halogen derivatives of ar-tetrahydro-B-naphthylamine, 1904, T., 728; P., 110.

studies in the tetrahydronaphthalene series. Part III. Reaction between ar-tetrahydro-β-naphthylamine and formaldehyde, 1904, T., 732; P.,

steric hindrance in the naphthalene series, 1906, T., 1505; P., 236. optical properties of substances at the critical point, 1912, A., ii, 1013.

Smith, Clarence, and William Lewcock, pyrogenic decompositions. Part I. Benzene, 1912, T., 1453; P., 152. bromination of aliphatic acids, 1912, A., i, 826.

Smith, Clarence, and Alec Duncan Mitchell, constitution of hydroxyazocompounds; action of diazomethane and of mercuric acetate, 1908, T., 842; P., 70; discussion, P., 71.

Smith, Clarence, and (Miss) Constance Hamilton Watts, absorption spectra and melting-point curves of aromatic diazoamines, 1910, T., 562; P., 45.

Smith, Clarence. See also Alec Duncan Mitchell.

Smith, Carl E., volumetric estimation of mercury, 1911, A., ii, 824.

Smith, Carl E., and Henry C. Frey, volumetric estimation of phenol-psulphonic acid, 1912, A., ii, 1007. See Warring-

Smith, Charles Harold. ton Yorke.

Smith, Claude Robert. See Joseph Hoeing Kastle.

Smith, Donald Pritchard, action of titanium dioxide on sodium carbonate, 1904, A., ii, 130.

alloys of potassium with aluminium, magnesium, zinc, cadmium, bismuth, tin, and lead, 1907, A., ii, 949.

Smith, (Miss) Elizabeth. See Andrew Jamieson Walker.

Smith, Ewing. See George Gerald

Henderson.

Smith, Edgar Fahs, electrolytic precipitation of zinc and copper, 1903, A., ii, 334.

the mercury cathode in electrochemical analysis, 1903, A., ii, 755.

electrolytic separations of metals, 1903, A., ii, 756. minerals from Berks County, Penn-

sylvania, 1911, A., ii, 501. Smith, Edgar Fahs, and Franz F. Exner,

atomic weight of tungsten, 1904, A., ii, 822.

Smith, Edgar Fahs, Roy Dykes Hall, (Miss) Mary Engle Pennington, and Clarence William Balke, columbium and tantalum, 1905, A., ii, 828.

Smith, Edgar Fahs, George H. West, and (Miss) Lily Gavit Kollock, use of the rotating anode in electro-analysis,

1905, A., ii, 198.

Smith, Edgar Fahs. See also Clarence William Balke, Irving H. Buckminster. William H. Chapin, Jacob S. Goldbaum, Walter K. van Haagen, Roy Dykes Hall, (Miss) Lily Gavit Kollock, Julia Langness, Hiram S. Lukens, Dunlap Jamison McAdam, Thomas P. McCutcheon, jun., Allen Rogers, and Edgar T. Wherry.
Smith, Edwin Kinmouth. See Harry

Ward Foote.

Smith, E. W. Hamilton. See Alexander Charles Cumming.

Smith, F. See Johannes Christian Brün-

Smith, F. J., estimation of strychnine, 1903, A., ii, 619.

Smith, George. See Philip Henry Mitchell. Smith, George Frederick Herbert, crystalline form of nitrogen sulphide, 1911, A., ii, 1086.

Smith, George Frederick Herbert, and George Thurland Prior, paratacamite, a new copper hydroxychloride, 1906, A., ii, 455.

red silver minerals from the Binnenthal, Switzerland, 1907, A., ii, 699. schwartzembergite, 1911, A., ii, 1100.

fermorite and tilasite from the manganese-ore deposits of India, 1911, A., ii, 1103.

Smith, George Frederick Herbert. See also George Stanfield Blake.

Smith, George McPhail, action of sodium amalgam on solutions of potassium salts and of potassium amalgams on solutions of sodium salts, 1904, A., ii, 400.

action of barium amalgam on solutions of sodium and potassium salts, 1905, A., ii, 164.

reciprocal replacement of metals in aqueous solutions, 1905, A., ii, 450.

constitution of amalgams, 1906, A., ii.

reversible metallic displacements in aqueous solutions, 1907, A., ii, 463. ammonium amalgam, 1907, A., ii, 615, 951; 1908, A., ii, 38.

amalgams: the hydrargyrides of the alkali and alkaline earth metals,

1908, A., ii, 38. [diffusion of metals in mercury], 1908, A., ii, 159.

phenomenon observed in the action of hydrochloric acid on very dilute alkali amalgams, 1909, A., ii, 235.

heterogeneous equilibria between aqueous and metallic solutions; interaction of mixed salt solutions and liquid amalgams. I. Study of the reaction $KHg_m + Na := K \cdot +$ $NaHg_n + (m-n)Hg$, 1910, A., ii, 401.

the lithium amalgam richest in mercury, 1912, A., ii, 348.

Smith, George McPhail, and H. C. Bennett, electrolytic preparation of amalgams of the alkali and alkaliearth metals, 1909, A., ii, 663.

alkali and alkali-earth amalgams,

1910, A., ii, 500.

Smith, George McPhail, and James Renwick Withrow, electrolytic preparation of amalgams, 1907, A., ii, 462.

Smith, George McPhail. See also Conrad Willgerodt.

Smith, Howard D. See Arthur Michael. Smith, Henry Edgar. See Edward Percy Frankland.

Smith, Henry George, chemical constituents from the Eucalypts, 1903, A., i, 842.

occurrence of calcium oxalate in the barks of the Eucalyptus, 1908, A., ii,

aluminium, the chief inorganic element in a proteaceous tree, and the occurrence of aluminium succinate in trees of this species, 1908, A., ii,

Smith, Henry George, absence of gum and presence of a new diglucoside in the kinos of the Eucalyptus, 1908, A., ii, 886.

Smith, Henry George. See also Richard Thomas Baker.

Smith, Herbert J. See Herbert Newby McCov.

Smith, Henry Llewellyn. See William Arthur Bone, and William Henry Perkin, jun.

Smith, Harry Monmouth, and W. H. McClelland, molecular depression constant of p-azoxyanisole, 1905, A., ii, 11.

Smith, Herbert Procter, a modified form of the persulphate method of estimating manganese in iron and steel, 1905, A., ii, 66.

Smith, James F., selenium in coke, 1903,

A., ii, 327.

Smith, Joseph George. See Atherton Seidell.

Smith, John Henderson, absorption of anti-substances from the subcutaneous tissues and peritoneal cavity, 1907, A., ii, 491.

Smith, Joseph Kent, vanadium as a steelmaking element, 1906, A., ii, 398.

Smith, James Lorrain, staining of fat by basic aniline dyes, 1907, A., ii, 112. the staining of fat by Nile-blue sulphate, 1911, A., ii, 57.

Smith, James Lorrain, and William Mair, a method of isolating cholesterol and cerebrosides from brain by means of saponification with barium hydroxide in methyl alcohol, 1911, A., i, 44.

the effect of glycerol on the clearing point of cholesterol and cerebrosides,

1911, A., i, 44.

the dichromate hæmatoxylin method of staining tissues, 1911, A., ii, 215. qualitative analysis of tissue lipoids, 1911, A., ii, 1006.

Smith, James Lorrain, William Mair, and Jocelyn Field Thorpe, Weigert's method of staining medullated nerve

fibres, 1908, A., ii, 966.

Smith, Lennart, resolution of mandelic acid into its active components by means of phenylethylamine, 1912, A., i, 113.

atrolactic [a-hydroxy-a-phenylpropionic], acid, 1912, A., i, 113. a-phenyl-a-ethylglycollic acid, 1912,

A., i, 114.

Smith, Letchworth, and Charles George Lewis Wolf, physiological action of azoimide, 1905, A., ii, 106. Smith, L. H. See Cyril George Hopkins.
Smith, Norman, the slow combustion of carbon disulphide, 1905, P., 311;
1906, T., 142.

slow oxidations in the presence of moisture, 1906, T., 473; P., 39.

Smith, Paul Short. See Charles Loring Jackson.

Smith, R. Greig, bacterial origin of the gums of the arabin group, 1904, A., ii, 362.

fixation of nitrogen by the noduleformer, 1907, A., ii, 498.

Smith, Roy H. See John Zeleny.

Smith, Ralph Ogden, rapid electrolytic estimation of lead, 1905, A., ii, 860.

electrolytic estimation of mercury [in cinnabar] with the use of a rotating

anode, 1905, A., ii, 860.

Smith, Stanley, the action of potassium chlorate on concentrated sulphuric acid; preliminary note, 1910, P., 124; discussion, P., 125.

the interaction of gaseous molecules,

1912, A., ii, 1158.

Smith, Sydney. See Arthur William Crossley.

Smith, Sydney Herbert. See James

Charles Philip.

Smith, Samuel Walter Johnson, thermomagnetic analysis of meteoric and artificial nickel-iron alloys, 1907, A., ii, 431.

action between metals and acids and the conditions under which mercury causes evolution of hydrogen, 1909,

A., ii, 579.

Smith, Samuel Walter Johnson, and William Frederick Higgins, surface effects between mercury and certain solutions and an electrochemical method of estimating dissolved oxygen, 1912, A., ii, 121.
Smith, Samuel Walter Johnson, and

Smith, Samuel Walter Johnson, and Herbert Moss, contact potential differences determined by means of null

solutions, 1908, A., ii, 343.

Smith, Thomas Alfred, and Frederic Stanley Kipping, a study of some organic derivatives of tin as regards their relation to the corresponding silicon compounds, 1912, T., 2553; P., 313.

Smith, Todd O., an automatic pipette,

1912, A., ii, 678.

Smith, Todd O., and Charles James, new method for the separation of thorium, 1912, A., ii, 390.

Smith, Todd O. See also Bert Edwin

Curry, and Charles James.

Smith, Watson, action of certain solutions on aluminium and zinc, 1904, A., ii, 486.

ammonium sulphate and its instability; the hydrolytic dissociation of ammonium salts, 1911, A., ii, 393.

Smith, Watson, jun., estimation of the carbonyl group in aldehydes, ketones, etc.; modification of the Strache

method, 1906, A., ii, 312. Smith, Watson, jun. See also Ernst Berl. Smith, William B. See Lucius Moody

Tolman.

Smith, Warren Rufus, sodium alum, 1909, A., ii, 239.

estimation of a dissolved substance in presence of suspended material, 1909, A., ii, 755.

Smith, Warren Rufus, and Joseph E. Hora, non-existence of arsenic penta-

chloride, 1904, A., ii, 560.

Smith, Warren Rufus, and E. D. Leman, analysis of nitrous oxide, 1911, A., ii, 766.

Smith, Warren Rufus, and Frank Bertram Wade, constants and composition of myrtle wax, 1903, A., ii, 608.

Smits, Andreas, racemic nature of iusnic acid, 1903, A., i, 263.

osmotic pressure, 1903, A., ii, 530. course of the solubility curve in the region of critical temperatures of binary mixtures, 1904, A., ii, 15.

course of the decrease of vapour tension for aqueous solutions, 1904, A., ii,

383.

phenomena observed when the plait curve meets the solubility curve,

1905, A., ii, 234, 684.

hidden equilibria in the p-x-diagram of a binary system in consequence of the appearance of solid substances,

1905, A., ii, 683.

contribution to the knowledge of the px- and pT-lines for the case that two substances enter into a combination which is dissociated in the liquid and the gas phase, 1905, A., ii, 683.

relative vapour tensions of the three modifications of carbon, 1906, A., ii,

introduction of the conception of the solubility of metal ions with electromotive equilibrium, 1906, A.,

ii, 518.

the p-t-x space figure for a system of two components which are miscible in all proportions in the solid or liquid crystalline phase 1909, A., ii, 802.

Smits, Andreas, phenomena occurring when the plait-point curve meets the three-phase line of a dissociating binary compound, 1909, A., ii, 802.

retrogressive melting-point lines, 1909, A., ii, 971; 1911, A., ii, 855.

p-t-x-spacial representation of the system: ether-anthraquinone, 1909. A., ii, 987.

photo- and electro-chemical equilibria,

1910, A., ii, 24.

allotropy and internal equilibrium, 1910, A., ii, 195, 400.

theory of the phenomenon of allotropy,

1910, A., ii, 400. critical end-points in ternary systems, 1910, A., ii, 1050; 1912, A., ii,

separation on the appearance of a solid

phase, 1911, A., ii, 379. retrogressive vapour lines. I., 1911,

A., ii, 855.

application of the new theory of allotropy to the system: sulphur, 1911, A., ii, 1077; 1912, A., ii, 1164.

the system: iron-carbon, 1912, A., ii,

165, 769, 1058.

three-phase lines. I., 1912, A., ii, 242. the law of transformation in stages in the light of the theory of allotropy, 1912, A., ii, 339.

extension of the theory of allotropy, monotropy, and enantiotropy for liquids, 1912, A., ii, 1147.

inverse occurrence of solid phases in the system: iron-carbon, 1912, A., ii, 1176.

Smits, Andreas, and H. L. de Leeuw, the unary termolecular pseudoternary system: acetaldehyde, paracetaldehyde, and metacetaldehyde, 1910, A., i, 815.

the system: acetaldehyde-alcohol,

1910, A., i, 816.

confirmations of the new theory of the phenomenon of allotropy, 1911, A., ii, 263.

homogeneous allotropy in a pseudoternary system; the termolecular pseudoternary system : acetaldehyde -paracetaldehyde-metacetaldehyde, 1911, A., ii, 871.

the system: sulphur, 1912, A., ii, 40. Smits, Andreas, and J. Maarse, the system: water-phenol, 1911, A., ii,

870.

Smits, Andreas, and W. J. de Mooy, the system : chlorine-sulphur dioxide 1910, A., ii, 1049.

Smits. Andreas, and S. Postma, compounds of ammonia and water, 1909, A., ii, 997.

Smits, Andreas, and Frans Eppo Cornelis Scheffer, influence of dissociation on the vapour pressure of solids, 1909, A., ii, 21.

Smits, Andreas, and J. P. Treub, retrogressive melting-point lines. III.,

1911, A., ii, 855. the course of the P.T.-lines for con-

stant concentration in the system: · ether-anthraquinone, 1911, A., ii, 871.

Andreas, and Johan Pieter Smits. Wibaut, the dynamic theory of a reversible chemical reaction, 1908. A., ii, 824, 934.

Smits, Andreas, and Ludwig Wolff, the velocity of transformation of carbon monoxide, 1903, A., ii, 276,

638.

Andreas, and Jacob Pieters Wuite, the system : water-sodium sulphate, 1909, A., ii, 985.

Smolenski, Kazimir, vegetable phosphatides. V., 1909, A., ii, 338.

the parent substance which is the cause of the Cammidge reaction in urine, 1909, A., ii, 598.

non-protein nitrogenous substances in the sugar-beet, 1911, A., ii, 145;

1912, A., ii, 803.

a combination of glycuronic acid from the sugar-beet, 1911, A., ii, 428.

Smolenski, Kazimir. See also Ernst Winterstein.

Smolensky, S., fusion experiments with metasilicates and titanates, 1912, A., ii, 160.

Smolnikoff, Constantin. See Carl Adam Bischoff.

Smoluchowski, Marie, the mean path traversed by gaseous molecules and its relation to the theory of diffusion, 1906, A., ii, 652.

the theory of transpiration, diffusion, and thermal conduction in rarefied

gases, 1910, A., ii, 1042.

Van der Waals' theory of the liquid state from the standpoint of viscosity phenomena, 1911, A., ii, 258.

Smorodinzeff, J., nitrogenous extractives of the liver, 1912, A., ii, 958.

Smyth, Charles Henry, jun., abstraction of oxygen from the atmosphere by iron, 1906, A., ii, 35.

Smyth, Louis B., the supply of radium emanation from the soil to the atmosphere, 1912, A., ii, 1031.

Smyth, Louis B. See also John Joly.

Smythe, John Armstrong, benzyl sulphoxide; a possible example dynamic isomerism, 1908, P., 285; 1909, T., 349.

benzyl orthothioformate, 1911, A., i, 966. the oxidation of some benzyl compounds of sulphur. Part I., 1912, T., 2076; P., 242.

Smythe, John Armstrong, and Aquila Forster, some reactions of benzyl mercaptan; benzyl tri- and tetrasulphides, 1910, T., 1195; P., 135.

Smythe, John Armstrong. See also Frederic Charles Garrett, and Mary

Kingdon Heslop.

Wilhelmina Rebecca. Smythe, (Miss)

See Holland Crompton.

Snapper, J., comparative investigations on old and young blood corpuscles; resistance and regeneration, 1912, A., ii, 955.

the influence of washing on the resistance of red blood corpuscles, 1912,

A., ii, 955.

Snell, John Ferguson, non-existence of B-cadmium iodide, 1907, A., ii, 869.

Snell, John Ferguson. See also Wilbur Olin Atwater, and Stanley Rossiter Benedict. Snelling, Walter Otheman, Munroe cru-

cible, 1909, A., ii, 431.

sulphide of tellurium, 1912, A., i, 638. Snethlage, H. C. H., catalytic action of undissociated acids, 1912, A., ii, 749.

Snow, Ernest Charles, variations in the distribution of a-particles, 1911, A., ii, 682.

Snowdon, Ralph Cuthbert, electrolytic deposition of silver, 1905, A., ii, 452. electrolytic precipitation of nickel on nickel, 1905, A., ii, 459.

electrolytic precipitation of lead from acetate solutions, 1906, A., ii, 755. electrolytic precipitation of zinc, 1907,

A., ii, 617.

electrolytic reduction of nitrobenzene, 1912, A., i, 100.

Snyder, Charles David, influence of temperature on rate of heart in the light of the law of chemical reaction velocity, 1907, A., ii, 40.

temperature-coefficient of the velocity of nerve conduction, 1908, A., ii, 608.

temperature-coefficients of velocities of various physiological actions, 1908, A., ii, 768.

the meaning of variation in the magnitude of temperature-coefficients of physiological processes, 1911, A.,

ii, 618. Snyder, Charles David, and Martillus H. Todd, viscosity of body fluids, 1911, A., ii, 617.

Snyder, Harry, polariscopic estimation of gliadin in wheat-flour, 1904, A., ii, 524.

influence of manures on the composition of wheat, 1908, A., ii, 528.

Soave, Marco, cyanogen-producing glucosides in plants and the using up of reserve substances, 1907, A., ii, 193. inositol in plants, 1907, A., ii, 193.

organic phosphorus in wine, 1907, A., ii, 193.

Sobbe, O. von, bornyl palmitate, 1908, A., i, 555.

a new reaction for the detection of hydrogen peroxide, 1911, A., ii, 926.

Sobecki, Władislaus, synthesis of tertiary pyridylalkines [pyridyldialkylcarbinols] and their derivatives, 1909, A., i, 51.

Δ³-cyclohexene derivatives, 1910, A.,

i, 366.

Sobecki, Wladislaus. See also Julius von Braun, and Albert Ladenburg.

Soboleff, L. W. See Boris Ivanovitsch Slowtzoff.

Soboleff, Valentine, extrapolation of the melting point of a chemically homogeneous substance from measurements of the volume in the neighbourhood of

the melting point, 1903, A., ii, 58.

Sobolewa, W., and J. Zalewski, estimation of acetaldehyde by means of pyrrole and application of this method to the estimation of lactic acid, 1911, A., ii, 76.

Société Anonyme des Plaques et Papiers Photographiques A. Lumière et ses Fils, preparation of compounds of paminophenol, p-methylaminophenol, and p-phenylenediamine with sulphurous acid, 1908, A., i, 977.

Société Anonyme des Produits chimiques de Fontaines in Lyon Monplaisir, preparation of methyl sulphate, 1908,

A., i, 597.

Société Chimique de L'Avanchet, preparation of 4-dimethylamino-1-phenyl-2:3-dimethyl-5-pyrazolone, 1909, A.,

i, 266.

Société Chimique des usines du Rhône anct. Gilliad, P. Monnet, & Cartier, preparation of o-nitrophenyllactoketone [? o-nitrohydroxybenzylacetone], 1904, A., i, 325.

preparation of phenols and their substitution products, 1906, A., i, 657. preparation of o-nitrobenzaldehyde,

1911, A., i, 987.

the preparation of ω-2-dinitrotoluene,
its homologues and derivatives, 1912,
A., i, 176, 756.

Soddy, Frederick, calcium as an absorbent of gases for the production of high vacua and spectroscopic research, 1907, A., ii, 251.

employment of calcium and allied metals in the production of high

vacua, 1907, A., ii, 348.

the evolution of the elements, 1907, A., ii, 944.

Wehnelt cathode in high vacua, 1908, A., ii, 81.

the relation between uranium and radium, 1908, A., ii, 919; 1910, A., ii, 10, 921.

attempts to detect the production of helium from the primary radio-ele-

ments, 1908, A., ii, 921.

formation of helium from uranium, 1909, A., ii, 207.

the rays and products of uranium-X, 1909, A., ii, 459; 1910, A., ii, 10,921. rays of uranium-X, 1909, A., ii, 460.

multiple atomic disintegration; a suggestion in radioactive theory, 1909, A., ii, 952.

the chemistry of mesothorium, 1910, P., 336; 1911, T., 72.

attempts to evaluate the period of ionium, 1911, A., ii, 6.

Soddy, Frederick, and Arthur John Berry, conduction of heat through rarefied gases, 1910, A., ii, 180; 1911, A., ii, 253.

Soddy, Frederick, and Thomas Dingwall Mackenzie, relation between uranium and radium, 1907, A., ii, 730.

electric discharge in monatomic gases, 1908, A., ii, 151.

Soddy, Frederick, and (Miss) Ruth Pirret, the ratio between uranium and radium in minerals, 1910, A., ii, 922.

Soddy, Frederick, and Alexander Smith Russell, γ-rays of uranium, 1909, A., ii, 460.

γ-rays of uranium and radium, 1909, A., ii, 851.

the constant of uranium-X, 1910, A., ii, 568.

Soddy, Frederick, (Mrs.) Winifred Moller Soddy, and Alexander Smith Russell, the question of the homogeneity of γ-rays, 1910, A., ii, 474.

Soddy, Frederick. See also Rudolf (Freiherr) von Hirsch, (Miss) Ruth Pirret, (Sir) William Ramsay, Alexander Smith Russell, and Ernest Rutherford.

Soddy, (Mrs.) Winifred Moller. See Frederick Soddy.

Sodeau, William Horace, improved apparatus for accurate gas analysis, 1903, A., ii, 389.

Soden, Eberhardt Hildebrand Wilhelm Ludwig] Hugo von, essential oils obtained by extracting fresh flowers with volatile solvents (essential flower-extract oils), 1904, A., i, 515.

composition of the oil of an African

balsam, 1909, A., i, 401.

Soden, Hugo von, and Fritz Elze, ethereal oil of birch buds, 1905, A., i, 451. new terpene alcohol in myrtle oil, 1905, A., i, 800.

Soden, Hugo von, and Wilhelm Rojahn. occurrence of naphthalene ethereal oils, 1903, A., i, 187. composition of patchouli oil, 1904, A.,

i, 904.

Soden, Hugo von, and Walter Treff, new constituents of oil of roses, 1904, A., i, 439.

pure nerol, 1906, A., i, 295.

identity of natural and artificial

nerols, 1906, A., i, 522.

Soden, Hugo von, and Franz Zeitschel, the occurrence of nerol; a new aliphatic terpene alcohol in ethereal oils, 1903, A., i, 267.

Söderbaum, Henrik Gustaf, manurial experiments with precipitated calcium phosphate, 1904, A., ii, 78. manurial value of bone meal phos-

phoric acid, 1904, A., ii, 79.

estimation of assimilable plant food by extracting the soil with very dilute acids, 1904, A., ii, 143.

composition of some Papilionaceæ at different stages of growth, 1904, A.,

ii, 508.

experiments with molasses manure,

1904, A., ii, 510.

factors which affect the manurial value of the phosphoric acid of bone meal, 1906, A., ii, 121.

manurial trials with precipitated calcium phosphate, 1908, A., ii, 423.

factors which influence the manurial action of sparingly soluble phosphates, 1908, A., ii, 728.

manurial experiments with nitrogen in 1907, 1908, A., ii, 980.

vegetation experiments with precipitated calcium phosphate, 1909, A., ii, 930.

Söderbaum, Henrik Gustaf. See also Stefan Stefansen.

Söderlund, Ella. See Karl Andreas Hofmann.

Söderman, K. A. See Thor Ekecrantz. Söhngen, Nicolaas Louis, methane as carbon-food and source of energy for bacteria, 1906, A., ii, 42.

Söhngen, Nicolaas Louis, the rôle of methane in organic life, 1910, A., ii, 798.

heat resistant lipase, 1911, A., i, 825. fat-splitting by bacteria, 1911, A., ii,

lipase produced by bacteria, 1911, A., ii, 639.

Friedrich, Söldner, and William Camerer, the ash of new-born children and of human milk, 1903, A., ii, 164. Söldner, Friedrich. See also William

Camerer. Söll, Julius, and Albert Stutzer, compounds from guanylcarbamide and diguanide, 1910, A., i, 14.

Söll, Julius. See also Julius Schmidt, and Albert Stutzer.

Soell, O. A. See Richard Fischer. Sölling, Julius. See Gustav Heller.

Soellner, Julius, cossyrite from Pantelleria, 1909, A., ii, 814.

rhönite, a new aenigmatite-like mineral in basaltic rocks, 1907, A., ii, 972.

fayalite from the Island of Pantelleria, 1911, A., ii, 502.

Sörensen, Sören Peter Lauritz, aminoacids, 1903, A., i, 833.

the testing and employment of normal sodium oxalate in volumetranalysis, 1903, A., ii, 684, 750. volumetric

synthesis of a-amino-acids by means of ethyl phthaliminomalonate, 1905,

A., i, 600.

synthesis of amino-acids. V. a-Aminoδ-hydroxyvaleric acid, 1905, A., i, 749.

the question of uniform standardising substances for volumetric solutions, 1905, A., ii, 414.

studies on enzymes. I. Quantitative measurement of protein hydrolysis by "formaldehyde titration," 1908, A., i, 115.

allylhippuric acid; a convenient material for the preparation of γδ-disubstituted, a-amino-n-valeric acids, 1908, A., i, 981.

studies on enzymes. II. Measurement and meaning of the concentration of the hydrogen ions in enzymatic processes, 1909, A., i, 861; 1910, A., i, 147.

synthesis of dl-arginine (α -amino- δ guanino-n-valeric acid) and of the isomerica-guanino-δ-amino-n-valeric

acid, 1910, A., i, 227.

the employment of sodium hydroxide and barium hydroxide in formaldehyde titrations, 1910, A., ii, 556. Sörensen, Sören Peter Lauritz, and A. C. Andersen, use of sodium carbonate and sodium oxalate as the standard substances in acidimetry, A., ii, 415; 1906, A., ii, 389.

nitrogen estimations in lysine and analogous substances by Kieldahl's method, 1905, A., ii, 553.

VIII. Disynthesis of amino-acids. amino-dicarboxylic acids and hydroxyamino-acids, 1908, A., i, 649.

synthesis of amino-acids. VII. Proline (pyrrolidine-2-carboxylic acid),

1908, A., i, 675.

volumetric estimation of alkali hydroxides containing carbonates by Winkler's method, 1908, A., ii, 534.

Sörensen, Sören Peter Lauritz, Margrethe Höyrup, and A. C. Andersen, synthesis of amino-acids. IX. Racemic arginine (a-amino-δ-guanidino-n-valeric acid), and the isomeric δ-amino-a-guanidinon-valeric acid, 1912, A., i, 13.

Sörensen, Sören Peter Lauritz, and H. Jessen-Hansen, measurement of protein hydrolysis by "formaldehyde titration" in highly coloured solu-

tions, 1908, A., ii, 234. Sörensen, Sören Peter Lauritz, and E. Jürgensen, the heat coagulation of proteins. I. Is the hydrogen ion concentration altered on coagulation? 1911, A., i, 405.

Sörensen, Sören Peter Lauritz, and Sven Palitzsch, the measurement of the hydrogen ion concentration in sea-

water, 1910, A., ii, 404.

a new indicator, a-naphtholphthalein, which changes in the neighbourhood of the neutral point, 1910, A., ii, 446.

Sörensen, Sören Peter Lauritz, and Carl Pedersen, estimation of nitrogen by Kjeldahl's method, 1904, A., ii, 83.

Sörensen, Sören Peter Lauritz. See also Valdemar Henriques, and Sofus Mads Jörgensen.

Soetbeer, Franz, influence of diet on uric acid excretion in uric acid arthritis, 1904, A., ii, 192.

metabolism in gout, 1904, A., ii, 192. Soetbeer, Franz. See also Otto Cohnheim.

Sofianopoulos, Ath. J., new process for preparation of aluminium nitride, 1909, A., ii, 580.

direct estimation of two co-existent substances without separation, 1909, A., ii, 618.

two new compounds of stannous with ammonia, chloride

A., ii, 403.

Sokoloff, Nicolai Wasilewitsch, heat of combustion of beeswax and the application of calorimetric methods to the solution of certain analytical problems, 1906, A., ii, 206.

composition of a radioactive Caucasian

mineral, 1911, A., ii, 498. composition of the mud and water of Lake Tinaksk, Astrakhan, 1911, A., ii, 502.

Sokoloff, W. See Leo A. Tschugaeff.

Sokolowsky, S., action of zinc on a mixture of ethyl orthoformate and ethyl bromopropionate; synthesis of s-trimethylisobutanetricarboxylicacid, 1906, A., i, 138.

Sokolzoff, D. M., disruptive discharge in air at normal pressures and the action of radium on it, 1904, A., ii,

Sokownin, Nicolas [Nikolaiewitsch]. See Alexei E. Faworsky.

Solberg, A. See Paul Askenasy. Solberg, Erik, manurial experiments on pasture land, 1908, A., ii, 422.

Soldaini, Arturo, constitution of dlupanine from Lupinus albus, 1903, A., i, 850.

products formed under various conditions by the action of halogens on d-lupanine, 1905, A., i, 371.

solanine and other constituents of the berries of Solanum sodomaeum from Sicily, 1906, A., i, 527.

Soldi, Angelo. See Guido Pellizzari. Solimene, Mauro. See Gino Abati. Soller, Max. See Erich Müller.

Sollmann. H. See Felix Benjamin

Ahrens.

Sollmann, Torald, the mechanism of the retention of chlorides; a contribution to the theory of urine secretion, 1903, A., ii, 91.

diuretic action of hypertonic salt solutions, 1903, A., ii, 562.

effect of saline injections on urinary chlorides, 1903, A., ii, 562.

comparative diuretic effects of saline solutions, 1903, A., ii, 670.

effects of diuretics, nephritic poisons, and other agencies on the urinary chlorides, 1903, A., ii, 670.

action of pilocarpine and atropine on embryos, 1904, A., ii, 182.

structural changes of ova in anisotonic solutions and saponin, 1904, A., ii,

effect of blood on the kidney, 1905, A., ii, 180.

effects of isotonic solutions on the kidney, 1905, A., ii, 181.

1089

Sollmann, Torald, perfusion experiments on excised kidneys, 1905, A., ii, 337. revival of the excised mammalian

heart by perfusion with oil, 1906,

A., ii, 103.

action of poisons on adult and embryonie funduli, 1906, A., ii, 475.

human chyle, 1907, A., ii, 110.

perfusion experiments on excised kidneys. VII. Solutions of electro-

lytes, 1907, A., ii, 637. response of gums and similar substances to Moore's reaction, 1911,

A., ii, 547. Sollmann, Torald, and E. D. Brown, pharmacological action of thorium,

1907, A., ii, 495.

Sollmann, Torald, and Robert Anthony Hatcher, the physical factors in urine formation, 1904, A., ii, 191.

perfusion of excised kidneys. Effects of poisons, 1908, A., ii, 210.

Sollmann, Torald, and J. A. Hofmann, excretion of water in typhoid fever, 1905, A., ii, 272.

Torald. See also Paul Sollmann, Hanzlik, and Robert Anthony Hatcher. Solodowinkoff. P. See Alexander E.

Porai-Koschitz.

Solomonoff, A. See Iwan A. Kablukoff. Solonina, Andrei Andreiwitsch, action of ethyl sodioacetoacetate on dibromohydrocarbons, 1905, A., i, 112.

mercury fulminate, 1910, A., i, 464. Solonina, Boris [Andriewitsch], structure of nitroso-thymol dyes; derivatives of thymol benzyl ether, 1907, A., i, 838.

Solonina, Boris. See also Herman Decker.

Solowéeff, S. K. Efim Semen See

Soloweitschik, Boris. See Carl Adam Bischoff.

Soloweitschik, Max. See Eugen Khotinsky.

Soltsien, Paul, detection of rancidity in butter, 1905, A., ii, 774.

the sesame oil reaction, 1906, A., ii, 502.

detection of nitric acid, 1906, A., ii, 898.

Somermeier, E. E., forms in which sulphur occurs in coal; their calorific values and their effects on the accuracy of the heating powers, calculated by Dulong's formula, 1904, A., ii, 514, 773. estimation of volatile

combustible matters in coals and lignites, 1906,

A., ii, 802.

moisture in coal, 1907, A., ii, 51.

Somervell, Donald Bradley. See Tom Sidney Moore.

Somló, Karl J., and Aladár von Lászlóffy, action of formaldehyde on the diastatic power of malt, 1904, A., i, 541.

Somma, Ulderigo. See Carlo Mensio. Sommelet, Marcel, nitriles of alkylglycollie acids [cyanoalkyloxymethanes],

1907, A., i, 21.

complex ether-oxides, 1907, A., i, 107. γ-ethoxy-a-alkylacetoacetic 1911, A., i, 109.

ethyl-y-ethoxyacetoacetate, 1912, A., i, 334.

Sommelet, Marcel. See also Auguste Béhal.

Sommer, Ad., action of amines on derivatives of trinitro-p-toluidine, 1903, A.,

Sommer, F., the employment of the formolite reaction in the analysis of paraffins, 1912, A., ii, 694.

Sommer, Fritz. See Georg Bredig, and

August Klages.

Sommer, Rudolf, preparation of aromatic dihydroxyaldehydes, 1905, A., i, 141.

preparation of the anhydrides of organic acids, 1906, A., i, 791.

Sommer, Rudolf. See also Ferdinand Ulzer.

Sommerfeld, Paul, chemical composition of gastric juice in children, 1908, A., ii, 403.

Sommerfeldt, Ernst, isomorphism of calcium sulphate with barytes and celestite, 1907, A., ii, 703.

examination of liquid crystals in convergent polarised light, 1908, A., ii,

338.

rotatory polarisation in crystals which are not enantiomorphous; methyl mesityloxidoxalate, 1908, A., ii, 339. the isomorphism of potassium and

sodium compounds, 1911, A., ii, 38. Sommerhoff, Erich O., behaviour of tri-

nitrobenzene derivatives with cyclic amines, 1906, A., i, 658.

Sommerhoff, Erich O. See also Emilio Noelting.

Sommerville, David, hydrolysis of vegetable oils by emulsion of Ricinus communis, 1912, A., ii, 291.

Somogyi, Michael. See Charles George Lewis Wolf.

Somogyi, Sigmund von, the partition of the urinary nitrogen after enteral and parenteral feeding on protein, 1911, A., ii, 416.

Soncini, Emilio. See Ettore Molinari,

and Giuseppe A. Plancher.

Sondag, Walther. See Arthur Binz, and Georg Schroeter.

Sone, Masuo. See Fritz Ullmann.

Sonn, Adolf, a-amino-a-benzylacetone. 1908, A., i, 55.

cyanamide. I. Cyanamide and ethyl acetoacetate, 1912, A., i, 610.

Sonn, Adolf. See also Siegmund Gabriel. Sonneborn. Hermann. See Otto Wallach.

Sonnenberg, E. See A. Goldsobel.

Sonnenburg, Ernst Friedrich, See Hans Theodor Bucherer.

Sonnenstuhl, Konrad. See Karl Auwers. Sonntag, G. See Friedrich Franz.

Sonstadt, Edward, the attractive force of crystals for like molecules in saturated solutions, 1904, P., 244; 1906, T., 339.

obituary notice of, 1909, T., 2209. Sorbini, F. See Nazareno Tarugi.

Soret, Charles, refraction of tourmaline,

1904, A., ii, 572.

Sorge, R., estimation of citrate-soluble phosphoric acid in basic slags, 1904, A., ii, 367.

Sorger, Carl, preparation of glyceryl salicylate, 1907, A., i, 1041.

preparation of iron salts of arsenitartaric and arsenicitric acids, 1909, A., i, 464.

preparation of magnesium phosphotartrate, 1909, A., i, 695.

preparation of iron hydrogen phosphotartrates and phosphocitrates, 1909, A., i, 879.

Sorkau, Walther, the viscosity of certain organic liquids in the condition of turbulent flow, 1911, A., ii, 793.

influence of temperature, specific gravity, and chemical nature of liquids on the turbulence viscosity, 1912, A., ii, 900.

Sormani, Cesare, detection of saponin in beverages and foods by hæmolysis,

1912, A., ii, 819.

Sornay, P. de, estimation of potassium in soils, 1909, A., ii, 618.

estimation of potassium in soils as phosphomolybdate, 1909, A., ii, 618. influence of manganese on the estimation of magnesium in soils, 1910, A., ii, 243.

estimation of sulphuric acid in soils,

1911, A., ii, 1027.

solubility of the manganese of soils, 1912, A., ii, 1089.

Sornet, René. See Marcel Delépine. Sosman, Robert B., platinum-rhodium thermo-element from 0° to 1755°, 1910, A., ii, 681.

Sosman, Robert B., minerals and rocks of the composition MgSiOg-CaSiOg-FeSiO₃, 1911, A., ii, 992.

Sosman, Robert B. See also Arthur Louis Day, and Arthur Amos Noves.

Sostegni, Livio, colouring matter of the red grape. II., 1903, A., i, 48.

Souder, C. G. See Arthur Solomon Loevenhart.

Souheur, Lorenz, preparation of vitreous arsenious oxide, 1905, A., ii, 633.

Soukup, Arn. See Josef Hanus.

Sourlis, Apostolos. See Gustav Heller. Soury, J., dissociation of sodium hydrogen carbonate, 1909, A., ii, 140.

Southcombe, James Edward, composition of shea butter; analysis of the oil from the seeds of Symphonia globulifera, 1909, A., ii, 604.

Southerden, Frank, the conversion of isopropyl alcohol into isopropyl ether by sulphuric acid, 1904, P.,

117.

separation of iron and chromium by means of fused potassium nitrate, 1904, A., ii, 449.

a cheap Kipp's apparatus, 1905, A., ii,

Southerns, Leonard, a determination of the ratio of mass to weight for a radioactive substance, 1910, A., ii, 1026.

Herbert Southgate, William. Ser Thomas Martin Lowry.

Souza, David Henriques De. See De Sonza.

Souza, M. de. See Julius Bredt.

Sowton, (Miss) S. C. M. See Rudolf Magnus, Benjamin Moore, Charles Scott Sherrington, and Augustus Désiré Waller.

Soxhlet, Franz (Ritter) von, the coagulation which occurs on boiling faintly acid milk, 1906, A., ii, 467.

Spack, Wladimir. See Emil Abderhalden.

Spacu, G. See N. Costachescu.

Spady, Johann, action of acid esters on quinoline bases, 1908, A., i, 915. Spät, Wilhelm, inhibition of precipita-

tion by precipitoids, 1910, A., ii,

the decomposing power of water bacteria, 1911, A., ii, 1121.

Spät, Wilhelm. See also Edmund Weil.

Spaeth, Eduard, detection of sugar in mace and cinnamon, 1906, A., ii,

detection of lead in colouring matters. 1912, A., ii, 808.

Spath, Ernst, influence of ortho-substituents on the formation of aldehyde diacetates, 1910, A., i, 488.

action of acetic anhydride on nitrates,

1912, A., i, 408.

an a-hydroxy-lactone from phenylacetaldehyde, 1912, A., i, 978.

a compound of uranyl nitrate with nitrogen dioxide, 1912, A., ii, 948.

Spath, Ernst. See also Rudolf Wegscheider.

Spahr, Albert, aryl thiocyanates and their action on thioacetic acid and ethyl mercaptan, 1903, A., i, 477.

Spallino, Rosario, condensation products of phthalonic acid with anthranilic

acid, 1907, A., i, 872.

Spallino, Rosario, and A. Cucchiaroni, condensation products of 2:4-dimethylquinoline with aldehydes, 1912, A., i, 581.

Spallino, Rosario, and Giulio Provenzal, preparation of o-thymotic acid and of certain of its derivatives, 1910, A., i, 38.

Spallino, Rosario, and G. Salimei, synthesis of 4-phenyl-2-methylquinoline and 2:4-diphenylquinoline, 1912, A., i. 723.

Spallino, Rosario. See also Emanuele Paternò, and Alberto Peratoner.

Spangenberg, Albert. See Gustav Kep-

Spangenberg, Otto. See Robert Psehorr.

Spannagel, Max. See Walther Borsche. Spear, Ellwood Barker, catalytic decomposition of hydrogen peroxide under high pressures of oxygen, 1908, A.,

ii, 370. causes of the high results in the

electrolytic estimation of zinc, 1910, A., ii, 455.

Spear, Ellwood Barker, Edward E. Wells, and Brainerd Dver, electrolytic estimation of zinc, 1910, A., ii, 455.

Spear, Ellwood Barker. See also Arthur

Amos Noyes.

Specketer, Heinrich, methods for the production of alkali metals by means of calcium carbide and aluminium, 1912, A., ii, 1167.

Speh, Carl Frank. See Treat Baldwin

Johnson.

Speiser, Felix. See Hans Rupe.

Spelta, Egidio, action of sulphuryl chloride on metallic oxides, 1904, A., ii, 479.

Speita, Egidio. See also Mario Giacomo

Levi, and Giovanni Pellini.

Spence, David, albans from Ficus vogelii, 1907, A., i, 434.

Spence, David, oxydases in india-rubber, 1908, A., ii, 616.

oxydase in the latex of Hevea brasiliensis, 1908, A., ii, 774.

chemistry of caoutchouc. IV., 1912, A., i, 638.

Spence, David, and John Clark Galletly, action of chromyl chloride on indiarubber, 1911, A., i, 314.

Spence, David, John Clark Galletly, and J. H. Scott, estimation of caoutchouc as tetrabromide; the decomposition of the bromide by nitric acid, 1911, A., ii, 1035.

Spence, David, and J. H. Scott, chemistry of caoutchouc; theory of vulcanisation, 1911, A., i, 657; 1912, A., i, 123.

chemistry of caoutchoue. II. Physicochemical investigation of the extraction of resin, 1911, A., i, 801.

Spence, David, and J. Young, chemistry of caoutchoue. V. Theory of vulcanisation. III., 1912, A., i, 706. pence, David. See also Edward S.

Spence, David. Edie, and Paul Rabe.

Spence & Sons, Ltd., Peter, [titanous sodium sulphate], 1904, A., ii, 412.

preparation of solid titanous chloride, 1904, A., ii, 823.

preparation of a basic aluminium sulphate, 1906, A., ii, 614.

Spence & Sons, Ltd., Peter, and Edmund Knecht, preparation of hyposulphites, 1903, A., ii, 474.

See James Wallace Spencer, Arthur. Walker.

Spencer, E. D. See H. Morris-Airey. Spencer, (Miss) F. Grace C. See Richard Sidney Curtiss.

Spencer, James Frederick, the action of nitrogen tetroxide on pyridine, 1903,

electromotive behaviour of dilute amalgams, 1905, A., ii, 795.

lecture experiments on the preparation of hydrocarbons, 1908, A., i,

modification of the Hempel gas burette, 1909, A., i, 609.

employment of an electrode of the third type to measure the potential of the thallium ion, 1911, A., ii,

electrodes of the third kind, (cor-

rection), 1912, A., ii, 731. determination of the solubility of slightly soluble salts by means of electrodes of the third kind, 1912, A., ii, 1129.

Spencer, James Frederick, and Richard electroaffinity differences Abegg, between valency stages and their oxidation equilibria; II. Mutual relationships of the valency stages of thallium and the oxidation power of oxygen, 1905, A., ii, 369.

Spencer, James Frederick, and (Miss) Mary Sumner Crewdson, the direct interaction of magnesium and alkyl haloids, 1908, T., 1821; P., 194.

Spencer, James Frederick, and (Miss) Muriel Kate Harrison, the interaction of alkyl haloids and metals of the iron group, 1910, P., 118.

Spencer, James Frederick, and (Miss) Margaret Le Pla, quantitative separation of thallium from silver.

1908, T., 858; P., 75.

electrode for determining the concentration of the CO3" ion and the condition of silver carbonate in solution, 1910, A., ii, 97.

Spencer, James Frederick, and (Miss) Gwynnedd Mary Price, the action of calcium and lithium on organic haloids,

1910, T., 385; P., 26.

Spencer, James Frederick, and (Miss) Eleanor Marguerite Stokes, the direct interaction of aryl haloids and magnesium, 1907, P., 302; discussion, P., 303; 1908, T., 302.

Spencer, James Frederick, and (Miss) Marion Love Wallace, the interaction of metals of the aluminium group and organic halogen derivatives, 1908, T.,

1827; P., 194.

Spencer, James Frederick. Richard Abegg, (Sir) William Ramsay, and Arthur Walsh Titherley.

Spencer, Leonard James, crystalline forms of carbides and silicides of iron and manganese, 1903, A., ii, 373.

Western Australian tellurides: the non-existence of "kalgoorlite" and "coolgardite" as mineral species, 1903, A., ii, 378.

hopeite and other zinc phosphates from Rhodesia, 1908, A., ii, 397. alstouite and ullmannite from Durham,

1910, A., ii, 307.

Spencer, Leonard James, and George Thurland Prior, Bolivian minerals (jamesonite, andorite, valentinite, miargyrite, etc.), 1907, A., ii, 700.

Spencer, Leonard James. See also Henry

James Johnston-Lavis.

Spengel, A. See Lothar Wöhler.

Spengler, Oskar. See Richard Meyer. Spengler, Theodor. See Amé Pictet.

Spens, Will, relation between the osmotic pressure and the vapour pressure in a concentrated solution, 1906, A., ii, 273.

Speransky, Alexandr Wasilievitsch, vapour pressure of solid solutions, 1904, A., ii, 237; 1905, A., ii, 230.

vapour pressure of saturated solutions. 1909, A., ii, 378.

vapour pressure and integral heat of solution for saturated solutions, 1911, A., ii, 1065.

Speransky, Alexandr W., and A. Pavlinova, solidification of aqueous solutions of metallic chlorides, 1911, A., ii, 1087.

Speransky, Nicolas A., action of phosphorus trisulphide on menthone, 1907,

A., i, 627.

Sperling, Felix. See Rudolf Höber. Sperling, Friedrich, lactucon, 1904, A., i, 607.

isonitroso-reaction of antipyrine (phenyldimethylpyrazolone) and its most important derivatives, 1906, A., ii, 406.

Sperling, Friedrich. See also Cæsar Pomeranz.

Speroni, Cesare, compounds of aniline sulphite with aldehydes, 1903, A., i,

Speroni, Cesare. See also Roberto Salvadori.

Speter, Max, Berzelius' error as to the discoverer of the law of neutralisation, 1910, A., ii, 947.

Speter, Max. See also Richard Josef

Meyer.

Speyer, Edmund. See Martin Freund.

and Emil Knoevenagel.

Speyers, Clarence Livingston, solubilities of some carbon compounds and densities of their solutions, 1903, A., ii, 64.

molecular weights of liquids, 1904, A., ii, 540.

Speyers, Clarence Livingston. See also Theodore William Richards.

Spezia, Giorgio, inclusions of liquid carbon dioxide in calcite from Traversella, 1907, A., ii, 561.

action of potassium chlorate on pyrites and on hauerite, 1908, A., ii, 861.

the growth of quartz crystals, 1909, A., ii, 311.

metallic sodium as the supposed cause of the natural blue colour of rock-

salt, 1909, A., ii, 675. some presumed chemical and physical effects of pressure uniform in all directions, 1910, A., i, 773.

Spezia, Giorgio, pressure acting alone has no effect in the transformation of opal into quartz, 1911, A., ii, 497.

some presumed chemical effects of pressure in mineral metamorphism,

1911, A., ii, 903.

Spica, Matteo, detection of salicylic acid in wines by a new reaction; behaviour of wines in the Etna district with this test. II., 1904, A., ii, 299.

reduction during alcoholic fermentation of nitrates occurring naturally in certain musts, 1907, A., ii, 803.

estimation of citric acid in lemon juice and commercial citrates, 1910, A., ii, 1120.

Spieckermann, Alb., decomposition of fats by the higher fungi. I. Degradation of glycerol and the absorption of fat by the fungus cell, 1912, A., ii, 590.

Spieckermann, Alb. See also Josef

König.

Spiegel, Leopold [Julius], decomposition of vohimbine by means of alkali hydroxides, 1903, A., i, 274.

biochemical theories, 1903, A., ii, 307. p-nitrophenol as indicator, 1904, A., ii, 512.

borax of abnormal composition, 1904, A., ii, 730.

yohimbine. II. Methylation of yohimboaic acid, 1905, A., i, 816.

formation of complex proteins from peptones, 1905, A., i, 954.

relation of phenols to sulphuric acid excretion, 1907, A., ii, 899.

fluorene perhydride, 1908, A., i, 331. action of hydrazine hydrate on dinitrophenylpiperidine, 1908, A., i, 363. hydrogenation of fluorene, 1909, A., i,

Spiegel, Leopold, and Ernst Berthold Auerbach, composition of yohimbine and its relationship to yohimboaic

acid, 1904, A., i, 521.

Spiegel, Leopold, and Hans Kaufmann, action of tert.-alkyl chlorides on pnitrophenol salts, 1906, A., i, 833. reduction of dinitrophenylpiperidine. II., 1908, A., i, 293.

Spiegel, Leopold, and Theodor A. Maass, a delicate test for molybdenum com-

pounds, 1903, A., ii, 246. Spiegel, Leopold, N. Munblit, and Hans Kaufmann, ethers of aminocresols and their derivatives, 1906, A., i, 837.

Spiegel, Leopold, and Percy Spiegel, nitrogen derivatives of trichloroacetic acid, 1907, A., i, 507.

Spiegel, Leopold, and Alfred Utermann. reduction of o-p-dinitrophenylpiperidine, 1906, A., i, 882. Spiegel, Percy. See Leopold Spiegel.

Spiegler, Eduard, the pigment of hair,

1903, A., i, 589. hair pigment, choroid pigment, and

other melanins, 1907, A., i, 992. Spielmann, Percy Edwin, analysis of graphitic silicon and siloxicon, 1905, A., ii, 610.

origin of jet, 1908, A., ii, 505.

Spielmann, Percy Edwin. Richard Lorenz. See also

Spielrein, (Mlle.) Cécile, equilibrium of lithium sulphate and the alkali sulphates in their mixed solutions, 1912, A., ii, 917.

Spiess, Camille, presence of bile pigments in leeches, 1905, A., ii, 737. Spiess, Paul. See Arthur Kötz.

Spiethoff, Bodo, differentiation of iodine. indican, and scatole in Jaffé's indican reaction, 1910, A., ii, 808.

Spilker, Adolf, and Alfred Dombrowsky, indene in coal tar, 1909, A., i,

Spindler, Franz, the catalase of milk,

1911, A., ii, 133.

Spindler, O. von, estimation of citric acid by the lime method, 1904, A.,

detection of tartaric acid in citric acid,

1904, A., ii, 152.

detection of boric acid [in foods], 1905, A., ii, 480.

apparatus for testing burettes and pipettes: also mercury measuring tubes, 1908, A., ii, 625.

titration of ammonia in urine by the formaldehyde method; titration of the acidity, 1910, A., ii, 449.

"double ureometer," Strzyzowski's 1910, A., ii, 762.

analysis of urine, 1912, A., ii, 703. Spinner, Hans. See Martin Onslow

Forster. Spiro, H. S. See Miles R. Moffatt.

Spiro, Karl, precipitation of colloids, 1904, A., i, 124.

solution and swelling ("quellung") of colloids, 1904, A., ii, 325.

nature and effects of rennet coagulation. III., 1906, A., i, 919.

estimation of ammonia and urea in

urine, 1907, A., ii, 516. metabolism of carbohydrates, 1907, A., ii, 975.

the relationship of dysoxidisable carbon and nitrogen on different diets, 1908, A., ii, 118.

Spiro, Karl, action of intestinal astringents on metabolism, 1908, A., ii,

the theory of swelling, 1911, A., ii,

379.

Spire, Karl, and Lawrence Joseph Henderson, migration of ions in heterogeneous systems, 1908, A., ii, 804.

ionic equilibrium in the The influence of organism. II. carbon dioxide on the division of electrolytes between the bloodcorpuscles and plasma, 1909, A., ii, 157

Spiro, Karl, and Hans Vogt, phloridzin and experimental glycosuria, 1903,

A., ii, 228.

Spiro, Karl. See also Ernst Fuld, Lawrence Joseph Henderson. Porges, and H. Reichel.

Spiro, Luser. See Paul Pfeiffer, and

Leo. A. Tschugaeff.

Spitalsky, Eugen, catalysis by chromic acid and its salts, 1907, A., ii, 338, 942.

condition of chromates and of chromic acid in aqueous solution, 1907, A., ii, 695.

catalytic decomposition of hydrogen peroxide in a homogeneous medium,

1911, A., ii, 36.

catalysis of hydrogen peroxide, 1911,

A., ii, 37.

a simple flask and an arrangement for carrying out chemical reactions, 1911, A., ii, 225.

Spitta, Albert. See Max Busch.

Spitta, Oscar, estimation of quantities of carbon monoxide in air, 1903, A., ii, 452.

Spitta, Oscar, and Karl Imhoff, apparatus for sampling waters, 1906, A.,

Spitta, W., morphine diabetes, 1908, A., ii, 972.

Spitta, W. See also Friedrich Alfred Schwenkenbecher.

Spitz, Carl. See Hermann Finger. Spitzauer, Karl. See Guido Goldschmiedt.

Spitzer, Fritz, electromotive behaviour of copper and zinc in their solutions in alkali cyanides, 1905, A., ii, 501, 611.

Spitzer, Fritz. See also Erik Liebreich, and Erich Müller.

Splawa Neymann, Hans von. See Carl Dietrich Harries.

Splettstösser, Oskar. See Hermann Leuchs.

Splittgerber, Arthur, the total solids of milk, 1912, A., ii, 1218.

Splittgerber, Arthur. See also Josef Tillmans.

Splittgerber, Immanuel. See Hans Rupe.

Spoehr, H. A., behaviour of the ordinary hexoses towards hydrogen peroxide in presence of alkali hydroxides as well as of various iron salts, 1910, A., i,

Sponagel, Paul. See Fritz Ullmann. Sponnagel, Fritz. See Daniel Vorländer.

Spornitz, K. E. See Friedrich Wilhelm Semmler.

Spoun, Otto. See Julius Schmidt.

Sprague, C. B. See W. Clarence Ebaugh.

Sprankling, Charles Henry Graham. See William Arthur Bone, and Herbert

Spreng, A. See Wilhelm Meigen.

Sprengel, Hermann Johann Philipp, obituary notice of, 1907, T., 661.

Sprenger, Gustav. See Theodor Curtius. Sprengler, Oskar. See Richard Meyer.

Spriggs, Edmund Ivens, creatinine ex-cretion in a case of pseudo-hypertrophic muscular dystrophy, 1907, A., ii, 377.

Spriggs, Edmund Ivens. See also Arthur Philip Beddard, and Marcus Seymour

Pembrey.

Spring, La Verne W., separation of nickel and zinc in German silver and

other alloys, 1912, A., ii, 95.

Spring, Walthère [Victor], diminution of the density of certain substances induced by compression and the cause of this phenomenon, 1904, A., ii, 313.

decomposition of some acid sulphates as the result of mechanical deform-

ation, 1904, A., ii, 472.

limits of visibility of fluorescence and the higher limit of the absolute weight of atoms, 1905, A., ii, 494.

limits of visibility of fluorescence and the maximum value of the absolute weight of the atom of hydrogen. 1905, A., ii, 565.

cause of the green tint of natural

waters, 1905, A., ii, 695.

a hydrate of sulphur, 1906, A., ii,

changes undergone by certain acid phosphates in consequence of compression or mechanical deformation, 1907, A., ii, 348.

Spring, Walthère [Victor], specific gravity and allotropic states of certain varieties of sulphur; observations on the determination of the specific gravity of powders, 1907, A., ii,

colour of ethylene glycol and of glycerol, 1908, A., i, 118.

origin of the green colours of natural waters, 1908, A., ii, 369.

the detergent action of soap solutions, 1909, A., i, 628; 1910, A., i, 6, 153. [formation of alloys by pressure], 1910,

A., ii, 126. a slow change in the nature of solutions of certain salts, 1910, A., ii,

electrophoresis of lamp-black, 1911, A., ii, 15.

the saturation capacity of colloidal compounds, 1911, A., ii, 102. obituary notice of, 1912, T., 692.

Springer, Alfred, sen., selective antiseptic action of copper salts, 1910, A., ii, 739.

Springer, Alfred, sen., and Alfred Springer, jun., anti-putrescent effects of copper salts, 1909, A., ii, 509.

Springer, Alfred, jun., and Harry Clary Jones, conductivity and dissociation of certain organic acids in aqueous solution at different temperatures, 1912, A., ii, 1125.

Springer, Alfred, jun. See also Alfred Springer, sen.

Springer, Ludwig. See Paul Cohn.

Sprinkmeyer, H., and A. Diedrichs, the bromine absorption of certain vegetable oils and fats, 1912, A., ii, 815.

Sprinkmeyer, H., and Hans Wagner, sesame oil, 1905, A., ii, 775.

Spröngerts, Eduard. See Alfred Einhorn.

Sproesser, Theodor. See Carl Bülow. Sproxton, Foster, the esters of triacetic lactone and triacetic acid, 1906, T., 1186; P., 202.

Spurge, Edward Charles, estimation of eugenol in oil of cloves, 1903, A., ii, 578.

preparation of aldehydes from aromatic compounds containing the group, C₂H₅, by oxidation with ezone, 1908, A., i, 423.

Spurrier, H., prevention of bumping, 1911, A., ii, 965.

rapid filtering funnel, 1911, A., ii, 976.

Squinabol, Senofonte, and Giuseppe Ongaro, pelagosite, 1903, A., ii, 27. Squintani, V. See Luigi Marino.

Srebnitsky, W., speed of propagation of chemical reactions, 1911, A., ii, 872. surface tension of solutions containing two solutes, 1912, A., ii, 627.

Staal, J. Ph., the chromogen of the so-called scatole-red contained in normal human urine, 1905, A., ii, 843; 1906, A., i, 124.

the effect of hydrochloric acid on the composition of the subcutaneous connective tissue of rabbits, 1909, A., ii, 76.

Staal, J. Ph. See also W. A. Boekelman. Stacy, Charles E. See Edward Alexander Mann.

Stackelberg, Eduard von, tabular grouping of the elements on the basis of the periodic system, 1911, A., ii, 708.

Staddon, Donald R., new method for the detection of traces of arsenic and antimony, 1912, A., ii, 1210.

Stade, Waldemar. See Franz Volhard. Stadeler, A., manganese and its alloys with carbon, 1908, A., ii, 592. uniform method for the estimation of

carbon in all iron alloys, 1911, A., ii, 538.

Stadeler, A. See also Paul Goerens. Stadler, Ed., and H. Kleeman, hæmolysis by ammonia, 1911, A., ii, 996. hæmolysis by acetic acid, 1911, A., ii, 996.

Stadler, Ed. See also Carl Hirsch. Stadler, Hermann, the tonic effect of certain organic substances in solution and as vapours, 1911, A., ii, 233.

Stadler, Wilhelm, naphthaquinonedi-ketohydrindene, 1903, A., i, 102.

Stadler, Wilhelm. See also Arthur Rosenheim.

Stadlin, Werner. See Emil Erlenmeyer, jun.

Stadlinger, Hermann. See Paul Lehmann, and Wolfgang Weichardt.

Stadlmayr, Franz. See Rudolf Fittig. Stadnikoff, George L[contewitsch], cyclic compounds, 1904, A., i, 665.

copper salts of a-aminophenylacetic

acid, 1907, A., i, 318. mechanism of the reaction in the formation of a-amino- and iminoacids, 1907, A., i, 393.

iminoacetic-a-propionic acid, 1907, A., i, 1015.

imino-α-propionic butyric acid, 1907, A., i, 1016.

synthesis of imino- and nitrilo-acids, 1908, A., i, 251.

attempt to synthesise propionyliminocycloheptanecarboxylic acid, 1908, A., i, 265.

Stadnikoff, George L., iminodicarboxylic acids, 1909, A., i, 106, 772.

interaction of derivatives of iminodicarboxylic acids and a-hydroxynitriles, 1909, A., i, 771. action of ammonia on unsaturated

acids, 1909, A., i, 772; 1910, A., i,

molecular refractions of esters of imino-acids and their nitrosoderivatives, 1909, A., ii, 842.

mechanism of the reaction in the formation of organo-magnesium compounds, 1911, A., i, 435.

oxonium compounds, 1912, A., i, 109,

action of a-hydroxyisobutyronitrile on the nitrile ester on iminodiphenylacetic acid, 1912, A., i, 116.

reply to Gorsky's "mechanism of the Grignard reaction," 1912, A., i, 972.

Stadnikoff, George L., and (Mme.) Z. A. Kuzmina-Aron, action of earbon dioxide on etherates of magnesium alkyl haloids, 1912, A., i, 971.

Stadnikoff, George L. See also Wladimir W. Markownikoff, and Nicolai D.

Zelinsky.
Stadnikoff, S. See Nicolai D. Zelinsky. Stadtfeld, Heinrich. See Karl Bernhard Lehmann.

Stäble, Robert. See Gustav Schultz. Staedel, Wilhelm, chlorination of ethyl chloride, 1909, A., i, 753.

Staehelin, Rud., the part played by benzene in poisoning by coal gas,

1904, A., ii, 429.

Staehelin, Rud. See also Wilhelm Falta. Stähler, Arthur, titanium I. Hydrates of titanium trihaloids, 1905, A., ii, 40. red derivatives of hydrated vanadium

trichloride, 1905, A., ii, 41. volumetric estimation of hydroxylamine by means of tervalent titan-

ium, 1905, A., ii, 116.

separation and estimation of bismuth and mercury by the sodium phosphate method, 1907, A., ii, 655.

action of calcium oxide on hydrazine hydrate, 1909, A., i, 769.

reduction of perchlorates by titanium sesquisulphate, 1909, A., ii, 699. volumetric estimation of hydroxyl-

amine, 1909, A., ii, 758. Stähler, Arthur, and Fritz Bachran,

titanium. IV., 1911, A., ii, 1096. Stähler, Arthur, and Bruno Denk, zirconium tetraiodide, ZrI4, 1904,

A., ii, 345. zirconium halogen compounds, 1905, A., ii, 597.

Stähler, Arthur, and Friedrich Meyer, the ratio of the molecular weights of potassium chlorate and potassium chloride, 1911, A., ii, 881.

Stähler, Arthur, and Wilhelm Scharfenberg, estimation of bismuth; separation from copper, cadmium, mercury, and silver, 1906, A., ii, 55.

Stähler, Arthur, and Erik Schirm, existence of chlorosulphinic esters, 1911, A., i, 174.

Stähler, Arthur, and Heinz Wirthwein, titanium. II., 1905, A., ii, 595. vanadium sesquisulphate, 1906, A., ii,

Stähler, Arthur. See also H. Alders, Hans Goerges, Carl Dietrich Harries. and Theodore William Richards.

Stähli, F., regularities in the structure of spectra, 1908, A., ii, 445.

Stählin, Max. See Robert Pschorr. Staehling, Ch. See Alfred Guyot.

Stäuber, Kurt. See Otto Ruff.

Stafford, O. J., and H. von Wartenberg, the dissociation equilibrium S_e = 4S_o, 1911, A., ii, 700.

Stahel, Karl Arthur. See Franz Kunckell.

Stahl, Boris, absorption spectra of solutions of neodymium, 1909, A., ii, 775. Stahl, Hermann. See Otto Dimroth.

Stahl, H. S. See Howard Sprague Reed

Stahl, Willy, the spectra of argon, 1911, A., ii, 449.

Stahlschmidt, Alex. See Emil Fischer. Stahl-Schröder, M., can plant analysis disclose the amount of assimilable constituents in soil? 1904, A., ii, 438, 767.

Staiger, Fritz. See Herbert Gorke, and Arthur Hantzsch.

Stallard, George, some new o-xylene derivatives, 1906, T., 808; P., 104. Stalmann, Gerhard. See Arthur Kötz.

Stålström, Axel, action of sterilised and fermenting organic matter on the solubility of the phosphoric acid of tricalcium phosphate, 1904, A., ii, 438.

Stamm, Christian. See August Klages. See Otto Diels, and Stamm, Erich. Alfred Stock.

Stamm, Georg. See Fritz Reitzenstein. Stamoglu, Feodor. See Pavel Iw. Petrenko-Kritschenko.

Staněk, Vladimir, study of betaine, 1903, A., i, 796.

betaine periodide and the estimation of betaine by a solution of iodine in potassium iodide, 1904, A., ii, 790.

Staněk, Vladimir, estimation of betaine in the products of sugar factories, 1905, A., ii, 562.

an improved method for estimating nitrogen in amino-acids, 1905, A.,

ii, 856.

choline periodide and the quantitative precipitation of choline by potassium tri-iodide, 1906, A., ii, 60.

quantitative separation of choline and

betaine, 1906, A., ii, 314.

estimation of choline and betaine in plant tissues, and observations on lecithins, 1906, A., ii, 700.

catalase topography in sugar beet roots,

1907, A., ii, 192.

Staněk's method for estimating choline,

1908, A., ii, 239.

the reduction of cuprous oxide in the estimation of reducing sugars, 1908, A., ii, 638.

gluconic acid from an efflorescence on the walls of a sugar magazine, 1909,

A., i, 454.

dehydration of substances by means of ether, 1911, A., ii, 269.

the detection of chromium in steel,

1911, A., ii, 443.

the localisation of betaine in plants,

1911, A., ii, 818. the wandering of betaine in certain vegetative processes in plants, 1911, A., ii, 1124.

preparation of large crystals of betaine

periodide, 1912, A., i, 609. preparation of chlorophyll, 1912, A.,

i, 641.

decomposition of salts of glutamic acid on heating their aqueous solutions and a new optically active nonsugar, 1912, A., ii, 952.

Stanek, Vladimir, and K. Domin, the occurrence of betaine in the Chenopodiaceae, 1910, A., ii, 336.

estimation of betaine, 1910, A., ii, 361.

Vladimir, Staněk, and Jaroslaw Milbauer, estimation of carbon dioxide in presence of sulphites, sulphides, and organic substances, 1904, A., ii, 86.

Staněk, Vladimir, and Oldrich Miškovský, can betaine be regarded as a source of nitrogen for yeast ! 1908, A., ii, 416.

Staněk, Vladimir. See also Karl Andrlik, Jaroslaw Milbauer, and Alois Velich.

Stanewitsch, E. See Wladimir I. Palladin.

Stanford, Robert Viner, new form of pyknometer, 1905, A., ii, 631.

Stangassinger, Richard, relation of creatine to autolysis, 1908, A., ii, 515. Stangassinger, Richard. See also Rudoli

Gottlieb.

Stanger, William Harry, and Bertram Blount, cement analysis, 1903, A., ii, 43, Staniewski, M. See Tadeusz Estreicher. Stanisch, Theophil. See Erich Müller.

Staniszkis, W., phosphorus metabolism in the plant, 1909, A., ii, 923.

Stanley, Frederick Clark. See Samuel Lewis Penfield.

Stanley, Harry, solubility of some salts of the lower fatty acids, 1904, A., i, 468.

Stansbie, John Henry, influence of small quantities of elements in copper on its reactions with nitric acid, 1906, A., ii, 166; 1907, A., ii, 25.

reactions of copper, bismuth, and silver with nitric acid, 1908, A., ii,

influence of small quantities of elements in copper on its reactions with nitric acid, 1909, A., ii, 403.

Stansfield, Edgar, two simple forms of gas-pressure regulators, 1912, A., ii, 150. Stapler, Adolf. See Felix Benjamin

Ahrens.

Stappers, Léon, chloro-derivatives of propyl and isopropyl formals, 1905, A., i, 261.

Starck, Gunnar, nickelammonium hydroxide, 1904, A., ii, 40.

estimation of alkalis in silicates, 1909, A., ii, 761.

new method for the estimation of fluorine, 1911, A., ii, 436.

Starck, Gunnar, and Max Bodenstein, dissociation of iodine vapour, 1911, A., ii, 20.

Starck, Gunnar, and E. Thorin, estimation of fluorine as calcium fluoride, 1912, A., ii, 295.

Starcke, Ulla. See Einar Billmann.

Stark, Johannes, principle of electrolytic dissociation and conductivity in gases, electrolytes, and metals, 1903, A., ii, 129.

ionisation caused by the impact of negative ions of incandescent carbon, 1904, A., ii, 228.

Doppler effect in canal rays and the spectra of positive ions, 1906, A.,

relation between translation and radiation intensity of positive ions, 1906, A., ii, 514.

band spectra, 1906, A., ii, 641.

absorption and fluorescence in band spectra and the ultra-violet fluorescence of benzene, 1907, A., ii, 147.

Stark. Johannes, latent fluorescence and optical sensitisation, 1907, A., ii,

energetics and chemistry of banded spectra, 1908, A., ii, 138, 545.

the spectra of oxygen (Doppler effect with canal rays), 1908, A., ii,

valency on an atomistic electrical basis, 1908, A., ii, 574.

volatilisation produced by canal rays, 1908, A., ii, 1007. thermal and chemical absorption in

banded spectra, 1909, A., ii, 106. disintegrating action of light and

optical sensitisation, 1909, A., ii, 109.

emission of light in banded spectra, 1909, A., ii, 530.

release of valency electrons by collision, 1909, A., ii, 654.

theory of volatilisation by atomic rays, 1909, A., ii, 718.

ionisation of gases by light, 1909, A., ii, 778.

positive charge of the canal rays, 1909, A., ii, 955.

[spectroscopic investigations], 1911, A., ii, 558.

the Doppler effect of 'hydrogen canal rays, 1911, A., ii, 568.

the carrier and the emission centre of series lines, 1911, A., ii, 678.

applications of the doctrine of finite increments of energy to physico-chemical questions, 1911, A., ii,

application of a valency hypothesis to fluorescence, 1911, A., ii, 786.

the ratio of the intensities of the series lines of hydrogen in the canal ray spectrum, 1912, A., ii, 1.

a connexion between chemical energy and optical frequency, 1912, A., ii,

consequences of a valence hypothesis. I. Band spectrum and valence energy, 1912, A., ii, 403.

deductions from a valence hypothesis. Metallic conduction of electri-

city, 1912, A., ii, 621.

electrical and mechanical displacement surfaces in metals, 1912, A., ii,

Stark, Johannes, and W. Hermann, spectrum of the light of canal rays in nitrogen and hydrogen, 1906, A., ii,

Stark, Johannes, and Richard Meyer, fluorescence of benzene derivatives, 1907, A., ii, 418.

Stark, Johannes, and Walter Steubing. the distribution of intensity in the spectra of the canal rays in hydrogen, 1908, A., ii, 546.

fluorescence and photo-electric sensitiveness of organic substances, 1908,

A., ii, 746.

fluorescence of organic substances, 1908, A., ii, 911.

Stark, Johannes, and Georg Wendt, emission of series lines by solid metallic compounds under the influence of canal rays; limiting value of the exciting energy, 1912, A., ii,720. emission of bands by solid metallic

compounds under the influence of canal rays, 1912, A., ii, 721.

Stark, Otto, 3-amino-2-methylquinoline,

1907, A., i, 973.

fluorescence of 3-amino-2-methylquinoline and 3-amino-4-hydroxy-2methylquinoline; use of 3-amino-2methylquinoline as an indicator, 1907, A., i, 974. constitution of acetylacetonecarbamide

[4:6-dimethyl-2-pyrimidone]. Action of bromine on acetylacetonecarbamide and on its benzylidene derivatives, 1909, A., i, 259.

constitution of acetylacetonecarbamide (4:6-dimethyl-2-pyrimidone); con densation with aromatic aldehydes I., 1909, A., i, 260.

new method of bromination; bromina tion with aqueous hypobromous acid, 1910, A., i, 234.

synthesis of meta-dicyclic systems; synthesis of a demethylated pinone,

1912, A., i, 868.

Stark, Otto, and Max Bögemann, 4:6-dimethyl-2-pyrimidone. III. Condensation with aromatic aldehydes, 1910, A., i, 437.

Stark, Otto, and Felix Hoffmann, new quinoline derivatives and examples of steric hindrance, 1909, A., i, 255.

Stark, Otto, and Paul Horrmann, relationships between perbromides and bromo-substitution products observed with acetylacetonecarbamide [4:6-dimethyl-2-pyrimidone] and its tautomeride, 1911, A., i, 572.

Starke, Hermann, experiments on the secondary rays of radium, 1908, A., ii,

341.

Starkenstein, Emil,[physiological] action of oxycaffeine and other methyl derivatives of uric acid, 1907, A., ii, 640.

the relationships of cycloses to the animal organism, 1909, A., ii, 77.

Starkenstein, Emil, the influence of neutral salts on ferment action, 1910, A., i, 449.

the properties and modes of action of the diastatic ferment in warmblooded animals, 1910, A., ii, 426.

the glycogen content in tunicates; the influence of iron on the estimation of glycogen, 1910, A., ii, 792.

influence of iron on the estimation of glycogen, 1910, A., ii, 807.

the biological significance of inositolphosphoric acid (phytin), A., ii, 132.

ionic action of the phosphoric acids,

1911, A., ii, 513.

the behaviour of uranvl salts of dibasic phosphoric acids with indicators, 1911, A., ii, 537.

the independence of the diastatic action on the lipoids, 1911, A., ii, 747.

the influence of phenylcinchonic acid (atophan) on purine metabolism, 1911, A., ii, 753.

Starkenstein, Emil. See also Richard

H. Kahn.

Starling, Ernest Henry, chemical correlation of the functions of the body, 1905, A., ii, 735.

Starling, Ernest Henry, Joseph Barcroft, and William Bate Hardy, the dissociation of oxyhæmoglobin at high

altitudes, 1912, A., ii, 572. Starling, Ernest Henry. See also Joseph Barcroft, William Maddock Bayliss, Ernst Jerusalem, Riukichi Kaya, and Frank P. Knowlton.

Starling, Walter William. See George

Barger.

Staronka, Wilhelm, additive compounds of mercury salts and aromatic bases,

1910, A., i, 876.

Stasevitsch, Nikolas Wasiliwitsch, equilibrium in the system composed of zinc nitrate, ammonia, and water, 1911, A., ii, 476.

Stassano, A. See A. Dastre.

Stassano, Henri, and A. Daumas, double function of calcium in the coagulation of blood and lymph, 1910, A., ii, 514.

Stassano, Henri. See also F. Billon.

Stassen, Carl. See Georg Schroeter. Stassoff, B. D. See Efim Semen London.

Statescu, C., solutions of salts heterogeneously magnetic in a heterogeneous magnetic field, 1911, A., ii, 850.

Statescu, C. See also Woldemar Voigt. Statiropoulos, Johannes Gabriel. Henry Lord Wheeler.

Staub, W. See Robert Chodat.

Staubach, Franz. See Ludwig Knorr. Stauber, Alice, protein degradation in the intestine of man, 1910, A., ii, 627. Stauber, Alice. See also Karl Glaessner.

Staudinger, Hermann, ketens, 1905, A., i, 444.

action of ethyl sodiomalonate on ethyl ethoxysuccinate and ethyl ethoxybenzylmalonate, 1905, A., i. 736.

removal of chlorine from a-chlorinated fluorene derivatives, 1906, A., i, 824. ketens. III. Diphenyleneketen, 1906,

A., i, 861.

ketens. IV. Reactions of diphenyl-

keten, 1907, A., i, 424. ketens. VIII. Preparation of quinonoid hydrocarbons from diphenylketen, 1908, A., i, 410.

IX. Coloured hydrocarbons from diphenylketen, 1908, A., i, 411. transformation of carboxylic acids into

their aldehydes, 1908, A., i, 654. oxalyl chloride, 1908, A., i, 938.

oxalyl chloride. III. Its action on carbonyl compounds, 1909, A., i, 905. ketens. XIX. Formation and prepara-

tion of diphenylketen, 1911, A., i, 650.

reactivity of the carbonyl group, 1912, A., i, 193.

the autoxidation of organic compounds, 1912, A., i, 229.

autoxidation of trichloroethylene, 1912, A., i, 330.

Staudinger, Hermann, E. Anthes, and Max Reinhold Schöller, oxalyl chloride. IV. The Friedel and Crafts' reaction oxalyl chloride and oxalyl bromide, 1912, A., i, 567.

Staudinger, Hermann, and Stanislaw Bereza, ketens. XI. New method of formation of carbon suboxide,

1909, A., i, 83.

ketens. XIV. Ethyl ethylketencarb-

oxylate, 1910, A., i, 89. ketens. III. Action of diphenylketen on quinones, 1911, A., i, 459.

Staudinger, Hermann, and Julian Buchwitz, ketens. XIII. Action of diphenylketen on carbonyl derivatives, 1910, A., i, 46.

Staudinger, Hermann, Stanislaw Bereza, Hermann Göller, Josef Mayer, and Josef Modrzejewski, ketens. Formation and fission of four-membered rings, 1911, A., i, 306.

Staudinger, Hermann, Stanislaw Bereza, Helmut Wilhelm Klever, and Stanislaw Josef Mayer, ketens. XVII. Phenylketen and methylketen, 1911, A., i

Standinger, Hermann, and Karl Clar, ketens. XX. Attempts to prepare quinoketens, 1911, A., i, 638.

Staudinger, Hermann, Karl Clar, and Emerich Czako, ketens. XXIII. The reactivity of halogen atoms towards

metals, 1911, A., i, 624.

Staudinger, Hermann, Hermann Göller, and Max Reinhold Schöller, ketens. XVIII. Decomposition of benzilic acid, 1911, A., i, 308.

Staudinger, Hermann, and Sergius Jelagin, ketens. XV. Action of diphenylketen on nitroso-compounds,

1911, A., i, 215.

Staudinger, Hermann, and Helmut Wilhelm Klever, ketens. II. Dimethylketen, 1906, A., i, 234; 1907, A., i,

ketens. VI. Keten, 1908, A., i, 246, 394.

ketens. VII. Classification, 1908, A., i, 318.

isoprene from terpene hydrocarbons,

1911, A., i, 731.

Staudinger, Hermann, Helmut Wilhelm Klever, and Paul Kober, ketens. II. Dimethylketen bases, 1910, A., i, 586.

Staudinger, Hermann, and Norbert Kon, ketens. V. Reactivity of the carbonyl group, 1911, A., i, 876.

Staudinger, Hermann, and Josef Kubin-XII. Preparation of sky, ketens.

keten, 1909, A., i, 880.

Staudinger, Hermann, and Otto Kupfer, XXII. Attempts to preketens. pare w-methoxyphenylketen, 1911, A., i, 641.

attempted preparation of methylene derivatives, 1911, A., i, 702.

action of hydrazine on carbonyl compounds, 1911, A., i, 751.

reactions of methylene. III. Diazo-

methane, 1912, A., i, 245.

Staudinger, Hermann, and Erwin Ott, ketens. X. Malonic semichloride, malonic anhydride, and its transformation into keten, 1908, A., i, 602.

diethylmalonic anhydride, 1908, A., i, 939.

ketens. XXI. Attempts to prepare alleneketens, 1911, A., i, 639.

Standinger, Hermann, and Leopold Ruzička, ketens. IV. Phenylmethylketen, 1911, A., i, 462.

Staudinger, Hermann, and Hippolyt Stockmann, oxalyl chloride. II. Action of oxalyl chloride on dimethylaniline, 1909, A., i, 796.

Staudinger, Hermann. See also Oscar Doebner, and Daniel Vorländer.

Stavenhagen, [Friedrich Rudolph Otto] Alfred, oxidation of atmospheric nitrogen in the high tension arc, 1905, A., ii, 517.

Stavenhagen, Alfred, and E. Schuchard, nitrous oxide. I., 1910, A., ii, 774.

Stavorinus, D., estimation of carbon disulphide in benzene, 1906, A., ii, 580.

Stavrolopoulos, Andreas. See Herman Decker.

Stead, G., anode and cathode spectra of various gases and vapours, 1911, A., ii. 830.

separation of spectra in compound gases, 1911, A., ii, 1041.

spectrum of argon, 1912, A., ii, 876. Steains & Co., Frederick, preparation of peroxide acids from the anhydrides of dibasic acids, 1906, A., i, 799.

Stebutt, Alexander, influence of some calcium compounds on the manurial value of ammonium sulphate and calcium cyanamide, 1909, A., ii, 177.

Steche, Otto. See Percy Waentig. Stechele, Fritz. See Julius von Braun.

Stecher, Emil. See Franz Fischer. Steel, Frederick William, detection of arsenic and selenium in sulphur, 1903, A., ii, 41.

Steel, Frederick William. See also W.

B. Hirt. Steel. Matthew, influence of magnesium sulphate on metabolism, 1908, A.,

Folin's method for the estimation of urinary ammonia nitrogen, 1911, A., ii, 68.

absorption of aluminium from aluminised foods, 1911, A., ii, 507.

Steel, Matthew, and William John Gies, paranucleo-protagon, 1907, A., i, 1097. the use of bone ash in metabolism experiments on dogs, 1907, A., ii, 975.

Folin's method of estimating ammonia in urine, 1908, A., ii, 776.

Steele, Bertram Dillon, a dynamical study of the Friedel-Crafts' reaction, 1903, T., 1470; P., 209.

some reactions of vanadium tetrachloride, 1903, P., 222.

halogen hydrides as conducting sol-III. Transport numbers, 1905, A., ii, 222.

the velocity and mechanism of the reaction between iodine and hypophosphorous acid, 1907, T., 1641; P., 213.

electrolysis of salt solutions in liquefied sulphur dioxide at low temperatures, 1907, A., ii, 925.

Steele, Bertram Dillon, the oxidation of phosphorous acid by iodine, 1908, T., 2203; P., 193.

an automatic Toepler pump designed to collect the gas from the apparatus being exhausted, 1910, A., ii, 602.

Steele, Bertram Dillon, and Lancelot Salisbury Bagster, binary mixtures of some liquefied gases, 1910, T., 2607;

Steele, Bertram Dillon, and Kerr Grant, sensitive micro-balances and a new method of weighing minute quantities

1909, A., ii, 876.

Steele, Bertram Dillon, and Frederick Murray Godschall Johnson, the solubility curves of the hydrates of nickel sulphate, 1903, P., 275; 1904, T., 113.

Steele, Bertram Dillon, and Douglas McIntosh, conductivity of substances dissolved in certain liquefied gases,

1903, P., 220.

Steele, Bertram Dillon, Douglas Mc-Intosh, and Ebenezer Henry Archibald, halogen hydrides as conducting solvents. IV., 1905, A., ii, 222.

Steele, Bertram Dillon. See also (Miss) Stella Deakin, Robert Beckett Denison, Douglas McIntosh, and (Sir) William Ramsay.

Steele, Victor, the action of hydrogen cyanide on carvone hydrosulphide,

1911, P., 240.

Steele, Victor. See also Arthur Lapworth.

Steenbock, H., estimation of benzoic, hippuric, and phenaceturic acids in urine, 1912, A., ii, 501.

Steenbock, H. See also Edwin Bret Hart.

Steensma, Frederik Alardus, colour reactions of proteins, indole, and scatole with aromatic aldehydes and nitrites, 1906, A., ii, 315.

a new reaction for antipyrine, 1907,

A., ii, 995.

detection of free hydrochloric acid in the stomach contents, 1908, A., ii, 318.

colour reactions in bio-chemistry. I.. 1908, A., ii, 442.

detection of the bile pigments, 1908,

A., ii, 442. laboratory hints, 1912, A., ii, 1161.

Stefanini, Annibale. See Angelo Battelli.

Stefanowska, (Mlle.) M., increase in the weights of the organic and mineral substances of oats as a function of the age, 1905, A., ii, 194.

Stefansen, Stefan, and Henrik Gusta, Söderbaum, Icelandic fodder plants, 1904, A., ii, 509.

Steffen, Th. See Ernst Weinland.

Steffens, Max. See Georg Wilhelm August Kahlbaum.

Steger, Alphonse, mixed crystals of mercuric iodide and silver iodide, 1903, A., ii, 482.

Steglich, Br., manurial experiments with the two commercial forms of calcium evanamide and with calcium nitrate, 1909, A., ii, 260.

Stegmann, L. See I. W. Bissegger,

and Ernst Winterstein.

Stegmüller, Philipp, heat of formation of hydrogen iodide from the elements, 1910, A., ii, 269.

Stegmüller, Philipp. See Beck, and Roland Scholl. See also Karl

Stehman, John V. R., estimation of manganese in iron and steel, 1903, A., ii, 243.

platinum crucible for carbon combus-

tions, 1903, A., ii, 452.

Steigelmann, Friedrich R., electrolytic preparation of lead peroxide from lead sulphide, 1906, A., ii, 854.

Steiger, E., new gas-generating appara-

tus, 1907, A., ii, 339.

Steiger, George, action of silver nitrate and thallous nitrate on certain natural silicates, 1905, A., ii, 707.

estimation of small amounts of fluor-

ine, 1908, A., ii, 426.

Steiger. George. See also Frank Wigglesworth Clarke.

Steimmig, Gerhard. See Johannes Thiele.

Stein, A., molecular vibrations of solid substances, 1911, A., ii, 84.

the linear expansion of solid elements as a function of the absolute melting point, 1912, A., ii, 128.

relationship between electrical resistance, fusion temperature, and atomic volume of the metals, 1912, A., ii, 418.

See Fritz Ullmann. Stein, Albert. See Ernst Mayerhofer. Stein, Ernst. Stein, E. H. See Karl Reicher.

Stein, Georg von, the formation of lactic acid in antiseptic autolysis of the liver, 1912, A., ii, 662.

Stein, Gerh., preparation of certain

silicates, 1907, A., ii, 763. Stein, Gustav. See Adolf Windaus.

Stein, Hugo. See Otto Diels.

Stein, Israel. See Carl Adam Bischoff. Stein, M., new automatic pipette, 1906, A., ii, 797.

Stein, Rebecca. See Fritz Ephraim. Stein, Richard. See Walter Dieckmann.

Steinbach, Alfred. See Hans Rupe.

Steinbach, N. See Waldemar M. Fischer.

Steinbeck, Eugen. See Emil Abderhalden.

Steinberg, David Bernard. See John Theodore Hewitt.

Steinberg, J. See Friedrich Kehrmann. Steinbock, Hermann. See Lorenz Ach.

Steinbrecher, Ernst. See Johannes Gadamer.

Steinbrenck, Adolf. See Paul Jacobson.
Steindorff, Adolf, action of phosphorus pentachloride on trisubstituted carbamides, 1904, A., i, 452.

Steindorff, Adolf. See also Julius von

Braun, and Otto Wallach.

Steinebach, Schuster, combined suction and washing flask with three-way cock and tube reaching to the bottom, 1906, A., ii, 433.

Steinegger, Rudolf, the "aldehyde" value of milk, 1906, A., ii, 130.

Steiner, H. See Karl von der Heide. Steiner, Hans. See Wilhelm Biltz, and Johannes Schroeder.

Steiner, M. See Franz Sachs.

Steiner, Otto, bell process of electrolysing aqueous solutions of alkali chlorides, 1904, A., ii, 483.

Steiner, S. H. See Marston Taylor Bogert.

Steinert, Paul. See Franz Sachs.

Steinfels, Wilhelm, estimation of glycerol, 1911, A., ii, 159.

Steingroever, Joseph. See Emil Fischer. Steinhausen, Jacob, enhanced lines, 1905, A., ii, 782.

Steinhorst, H. See Arthur Kötz.

Steinitz, Franz, and Richard Weigert, influence of carbohydrate diet on the composition of the child, 1905, A, ii, 180.

Steinitz, Franz. See also Leo Langstein. Steinkopf, Otto. See August Michaelis. Steinkopf, Wilhelm, attempts to synthesise nitroacetonitrile, 1905, A., i, 122.

preparation of mono- and di-bromoacetonitriles, 1905, A., i, 756.

trichloroacetimino-methyl ether, 1907, A., i. 488.

apparatus for crystallising and filtering in indifferent gases, 1907, A., ii, 161.

preparation of halogen-substituted acetonitriles, 1908, A., i, 720.

steam distillation under reduced pressure, 1908, A., ii, 575.

Steinkopf, Wilhelm, apparatus for fractional distillation under reduced pressure, 1908, A., ii, 663.

preparation of nitromethane, 1909, A., i, 78.

nitroacetonitrile. IV., 1909, A., i, 216.

nitroacetonitrile. V. Nitroacetic acid, 1909, A., i, 559.

apparatus for the preparation of acetylene, 1909, A., i, 753.

aliphatic nitro-compounds. VI. Free nitroacetic acid, 1909, A., i, 874.

filtering apparatus for substances which are hygroscopic or altered by exposure to air, 1911, A., ii, 105.

apparatus for preserving and measuring poisonous, hygroscopic, or low-boiling liquids, 1911, A., ii, 106.

new method for the preparation of thiophen, 1912, A., i, 292. bromoacetic anhydride, 1912, A., i, 935.

bromoacette anhydride, 1912, A., i, 935. Steinkopf, Wilhelm, and Czeslau Benedek, o-bromophenyl- and a-bromophenyl-acetamides, 1908, A., i, 981.

negative substituted amino-oximes.
II. Phenylnitroethenylamino-oxime,

1908, A., i, 1012.

Steinkopf, Wilhelm, Czeslau Benedek, H. Grünupp, and Georg Kirchhoff, action of phosphorus pentachloride on halogenated acid amides, 1908, A., i, 961.

Steinkopf, Wilhelm, and Erwin Blümmer, some ethers of cholesterol, 1911,

A., i, 971.

Steinkopf, Wilhelm, and Ludwig Bohrmann, attempts to synthesise nitroacetonitrile. II. Halogenated amino-oximes, 1907, A., i, 490. nitroacetonitrile. III., 1908, A., i,

327.

Steinkopf, Wilhelm, Ludwig Bohrmann, Czeslau Benedek, H. Grünupp, Georg Kirchhoff, and Boris Jürgens, aliphatic nitro-compounds. VII. Influence of negative atoms and groups in derivatives of acetonitriles and acetamide, 1910, A., i, 305.

Steinkopf, Wilhelm, and H. M. Daege, aliphatic nitro-compounds. IX. Action of phenylcarbimide on sodium nitromethane and nitroethane, 1911, A., i,

280

Steinkopf, Wilhelm, and Wilhelm Frommel, preparation of methyl bromide, 1905, A., i, 501. Steinkopf, Wilhelm, and H. Grünupp,

Steinkopf, Wilhelm, and H. Grünupp, negative substituted amino-oximes, III. Brominated amino-oximes, 1908, A., i, 966. Steinkopf, Wilhelm, and Boris Jürgens, aliphatic nitro-compounds. X. Hydroxamyl chlorides, 1911, A., i, 530.

aliphatic nitro-compounds. XII. Constitution of aci-nitro-compounds,

1912, A., i, 152.

Steinkopf, Wilhelm, and Georg Kirchhoff, preparation of nitromethane. II., 1909, A., i, 754.

II., 1909, A., i, 754.

Steinkopf, Wilhelm, A. K. Koss, and S. Liebmann, search for cholesterol in Java petroleum, 1912, A., i, 554.

Steinkopf, Wilhelm, Wiatscheslaw Malinowski, and Alexander Supan, action of hydrogen chloride and methyl alcohol on negatively substituted nitriles, 1911, A., i, 946.

Steinkopf, Wilhelm, and Johann Sargarian, composition of tannin, 1911,

A., i, 1004.

Steinkopf, Wilhelm, and Alexander Supan, aliphatic nitro-compounds. VIII. a-Nitropropionic acid, 1911, A., i, 4.

aliphatic nitro-compounds. XI. α-Nitroisobutyric acid, 1911, A., i,

946

Steinkopf, Wilhelm. See also Carl Engler, and Roland Scholl.

Steinlen, Rudolf L., new form of washbottle and safety bunsen burner, 1904, A., ii, 722.

new laboratory apparatus, 1904, A., ii, 811.

crucible refrigerator, 1905, A., ii, 349.

automatic safety siphon, 1906, A., ii, 531.

Steinmann, Albert, indirect estimation of fat in milk, 1904, A., ii, 596, 789.

assay of silver by the touch stone, 1911, A., ii, 658.

assay of platinum, 1911, A., ii, 1035.

Steinmann, Albert. See also Edwin Ackermann, and Amé Pictet.

Steinmetz, Hermann, transformation of polymorphic substances, 1905, A., ii, 685.

glucinum acetates, 1907, A., i, 673. crystallographic examination of some thiocyano-compounds, 1909, A., i, 461.

Steinmetz, Hermann. See also Wilhelm Otto Rabe, Ulrich Rück, and Ernst Weinschenk.

Steinweg, Eugen, the constitution of tetracalcium phosphate and its reduction by iron, 1912, A., ii, 349.

Steinwehr, Helmuth von, supposed transition point of the hydrate of cadmium sulphate, CdSO₄ 8_3 H₂O, 1903, A., ii, 147.

Steinwehr, Helmuth von. See also Wilhelm Jaeger.

Štekl, Lad. See Josef Hanuš.

Stellbaum, Carl. See Heinrich Biltz.

Stelzner, K. See Eilhard Wiedemann. Stenberg, G. A., p-tolylethylamine and its optically active forms, 1910, A., i, 241.

Stenger, Erich. See Louis Lewin, and Julius Precht.

Stenquist, David, electrical conductivities of potassium chloride, bromide, and iodide in ethyl and methyl alcohols, 1906, A., ii, 827.

Stenz, A. See Reinhold von Walther. Stenzel, Gustav. See Stanislaus von Kostanecki.

Stenzel, S. See Bronislaw Radziszewski.

Stenzl, Hans. See Heinrich Wieland.
Štěp, Josef, [the radioactivity of pitch-blende from St. Joachimsthal], 1909,
A., ii, 635.

Stépanoff, (Mile.) Aimée, removal of halogens from the benzene nucleus by the action of sodium and ethyl alcohol, 1905, A., i, 335.

estimation of halogens in carbon compounds by means of sodium and ethyl alcohol, 1907, A., ii, 50.

pieric acid, 1910, A., i, 471. colour of ammonium pierate, 1910,

A., i, 472. Stépanoff, (Mlle.) Aimée. See also Friedrich Kehrmann.

Stepanoff, Nikolas Ivanowitsch, electrical conductivity of magnesium-lead alloys, 1909, A., ii, 12.

electrical conductivity of alloys in relation to the electron theory, 1912, A., ii, 890.

Stepanoff, Nikolas Ivanowitsch, See also Nicolai S. Kurnakoff.

Stepf, Karl. See Heinrich Biltz.

Stephan, Alfred, compound of santalol and formaldehyde, 1904, A., i, 814. Stephan, Carl. See Paul Jannasch.

Stephan, Erich. See Otto Diels, and

Otto Poppenberg.

Stephen, Henry, and Charles Weizmann, tyrosine and its derivatives containing substituents in the benzene ring; preliminary note, 1912, P., 160.

Stephen, Henry. See also Harold Davies, and Charles Weizmann.

Stephens, Frank George Coad. See Raphael Meldola. Stephenson, Henry Holder, a simple burette for the estimation of carbon dioxide, 1910, A., ii, 242.

molecular volumes of solids, 1910,

A., ii, 932.

Stephenson, J. See (the Earl of) Berke-

Stephenson, Marjory, nature of animal

lactase, 1912, A., i, 738.

Stepp, Wilhelm, the importance of lipoids in nutrition, 1911, A., ii,

the preparation of secretin, 1912, A.,

ii. 366.

Steppuhn, O., and Hans Schellbach, formic acid as an intermediate product in sugar cleavage in animals, 1912, A., ii, 956.

Steppuhn, O. See also Hartwig Franzen,

and Rudolf Gottlieb.

Stepski, Richard von, products of the slow combustion of isopentane, nhexane, and isobutyl alcohol, 1903, A., i, 61.

Sterba, Jean, some cerium compounds,

1904, A., ii, 662.

chemical action of cathode rays, 1907,

A., ii, 421.

the radioactivity of the spring sediments of Teplitz-Schönauer, 1911, A., ii, 360.

Stern, Arthur Landauer, the so-called "hydrocellulose," 1904, T., 336;

P., 43.

Stern, Ernst, chemical kinetics of the benzoin synthesis (catalysis eyanide ions), 1905, A., ii, 150. micrography of cement, 1908, A., ii,

589.

the microscopic structure of Portland

cement, 1909, A., ii, 733.

Stern, Felix, the excretion of ethereal sulphates and glycuronic acids after administration of aromatic compounds,

1910, A., ii, 880. Stern, Felix. See also Carl Tollens.

Stern, Hedwig, the pinacone from phenyl ethyl ketone, 1906, A., i, 271.

Stern, Hermann. See Julius Tafel.

Stern, Joh. Georg Leonh., new form of platinum resistance thermometer, and molecular-weight determinations in fused potassium nitrate, 1909, A., ii, 376.

Stern, Karl Leo. See Friedrich Kehrmann.

Stern, Leo. See Herman Decker.

Stern, (Mlle.) Lina. See Fréd Battelli. Stern, Max, and Hans Thierfelder, phosphatides of egg-yolk. I., 1907, A., ii,

896.

Stern, Max. See also Otto Diels.

Stern, O. See Otto Sackur.

Stern, Richard. See Emil Liefmann, and Paul Pfeiffer.

Sternberg, Wilhelm, sense of taste in pharmacy and pharmacology, 1905, A., ii, 409.

Sterner-Rainer, Roland, a modification of the gold dust test, 1912, A., ii, 300.

Steubing, Walter, optical properties of colloidal gold solutions, 1908, A., ii,

fluorescence and band spectra of oxygen, 1910, A., ii, 913.

photo-electric experiments with anthracene, 1910, A., ii, 1021.

spectroscopy of oxygen, 1911, A., ii, 558; 1912, A., ii, 109.

a new radiant emission from the spark, 1911, A., ii, 838; 1912, A., ii, 618.

Steubing, Walter. See also Johannes Stark.

Steudel, Hermann, salts of the hexone bases with picrolonic acid, 1903, A., i, 431; 1905, A., i, 461.

feeding experiments with pyrimidine compounds, 1903, A., ii, 669.

thymus-nucleic acids, 1904, A., i, 837; 1905, A., i, 398; 1906, A., i, 125. oxidation of nucleic acids, 1906, A., i,

915; 1907, A., i, 369.

composition of nucleic acids of thymus and herring-roe, 1907, A., i, 168, 1097.

nucleic acids, 1907, A., i, 738.

formation of pyrimidine derivatives from purine bases, 1908, A., i, 66.

guanylic acid from the pancreas, 1908, A., i, 70.

the carbohydrate group in the nucleic acid, 1908, A., i, 487, 710.

cleavage products of nucleic acid, 1908, A., i, 931.

histo-chemistry of spermatozoa, 1911, A., ii, 626, 905.

formation of nucleic acids from the thymus gland, 1912, A., i, 400.

Steudel, Hermann, and Percy Brigl, guanylic acid from the pancreas. II., 1910, A., i, 703.

thymic acid, 1911, A., i, 342.

Steudel, Hermann. See also Albrecht Kossel, and Friedrich Kutscher.

Steuer, O. R. See Emilio Noelting.

Stevanovič, S., some copper ores: the zircon group, 1903, A., ii, 301. covellite and enargite from Servia, 1908, A., ii, 396.

Steven, Alec Bowring. See Arthur George Perkin.

Stevens, Alviso Burdett, comparison of chemical and physiological methods of assaying aconite, 1904, A., ii, 99. nitrogen in gums, 1905, A., i, 574.

Stevens, Alviso Burdett. See also

Alexander Tschirch.

Stevens, Hannah, and Clarence B. May, decomposition of uric acid by organic alkaline solvents, 1911, A., i, 403.

Stevens, Henry Potter. See Clayton Beadle, and Robert Stollé.

Stevenson, (Miss) Elizabeth Findlay, protective action of colouring matters, 1912. A., ii, 513.

Stevenson, (Miss) Elizabeth Findlay. See also Thomas Stewart Patterson, and

Richard Zsigmondy.

Stevenson, John, chemical and geological history of the atmosphere, 1905, A., ii, 239; 1906, A., ii, 156.

Stevenson, Louisa Stone, the fluorescence of anthracene, 1912, A., ii, 111,

Stevenson, Reston, manostats, 1907, A., ii, 252.

Stevenson, Reston, and Williams McKim Marriott, generator for the continuous preparation of gases on a large scale in the laboratory, 1904, A., ii, 249.

See also Charles Stevenson, Reston. Baskerville, John Livingston and

Rutgers Morgan.

Stevenson, (Sir) Thomas, obituary notice

of, 1909, T., 2213.

Stévignon, H., compounds of piperazine with phenols, 1910, A., i, 781. Stewart, Al. See Henri Wuyts.

Stewart, Alfred Walter, the addition of sodium hydrogen sulphite to ketonic compounds, 1905, T., 185; P., 13,

the velocity of oxime formation in certain ketones, 1905, T., 410; P.,

the transmutation of geometrical isomerides, 1905, P., 73; discussion

the relation between absorption spectra and optical rotatory power. Part I. The effect of unsaturation and stereoisomerism, 1907, T., 199; P., 8; discussion, P., 8.

the relation between absorption spectra and optical rotatory power. II., 1907, T., 1537; P., 197.

the relation between dielectric constant and chemical constitution. Stereoisomeric compounds, 1908, T., 1059; P., 124.

an apparatus for determining the specific inductive capacity of organic liquids, 1908, T., 1062; P., 124.

Stewart, Alfred Walter, the carbonyl group in the nascent state, 1911, A., i, 210.

Stewart, Alfred Walter, and Edward Charles Cyril Baly, the relation between absorption spectra and chemical constitution. Part I. chemical reactivity of the carbonyl group, 1906, T., 489; P., 33.

the relation between absorption spectra and chemical constitution. Part IV. The reactivity of the substituted quinones, 1906, T., 618; P., 85.

Stewart, Alfred Walter, and Robert Wright, absorption spectra. Influence of the solvent and of dilution on the validity of Beer's law, 1911, A., ii, 1043.

ewart, Alfred Walter. See also Edward Charles Cyril Baly, Cecil Stewart, Reginald Crymble, William Gerald Glendinning, Alexander Killen Macbeth, and Norman Thomas Mortimer Wilsmore.

Stewart, George Neil, behaviour of nucleated red corpuscles to hæmolytic agents, 1903, A., ii, 31.

influence of cold on the action of some hæmolytic agents, 1903, A., ii, 443. differences of potential between blood and serum, and between normal and laked blood, 1903, A., ii, 559.

influence of the stromata and liquid of laked corpuscles on the production of hæmolysins and agglutinins, 1904, A., ii, 497.

hæmolysinogenic and agglutininogenic action of laked corpuscles, 1905, A., ii. 47.

Stewart, George Neil. See also Charles Claude Guthrie.

Stewart, Hugh Angus, action of adrenaline in producing cardiac hypertrophy, 1912, A., ii, 965.

Stewart, H. W. See Amos William Peters.

Stewart, M. A. See Arthur Amos Noyes. Stewart, Morris N. See Charles Lathrop Parsons.

Stewart, Robert, occurrence of potassium nitrate in Western America, 1912, A., ii, 49.

Loew's lime-magnesium ratio, 1912, A., ii, 84.

Stewart, Robert, and Joseph E. Greaves, , influence of chlorine on the estimation of nitric nitrogen, 1910, A., ii,

movement of nitric nitrogen in the soil and its relation to nitrogen fixation, 1912, A., ii, 595.

Steyrer, Anton, chemistry of rigor mortis, 1903, A., ii, 674.

Stiasny, Edmund, colloidal reaction for some metallic salts, 1909, ..., ii, 186.

Stiasny, Edmund, and B. M. Das, the reaction between sodium thiosulphate and a mixture of potassium dichromate and sulphuric acid; a contribution to the chemistry of chrome tannage, 1912, A., ii, 945.

Stiasny, Edmund. See also Ramni

Paniker.

Stich, Conrad, solubility of phosphorus, 1903, A., ii, 540.

detection of mercury in urine according to Almén, 1909, A., ii, 1055.

Stiegler, Alfred. See August Michaelis.
Stieglitz, Julius [Oscar], theories of indicators, 1904, A., ii, 17; 1908, A., i, 652.

syn- and anti-stereoisomerism of nitrogen compounds, 1908, A., i,

726.

catalysis, 1908, A., ii, 29.

catalysis. I. Catalysis of esters and of imino-esters by acids, 1908, A., ii, 167.

catalysis. II. Catalysis of imino-

esters, 1908, A., ii, 168.

catalysis. III. The theories of esterification and saponification, 1908, A., ii, 472.

the solubility product, 1908, A., ii, 673. Stieglitz, Julius, and Edith E. Barnard, chloronium salts, 1905, A., i, 699.

Stieglitz, Julius, and Ira Harris Derby, study of hydrolysis by conductivity methods, 1904, A., ii, 464.

Stieglitz, Julius, and Richard Blair Earle, the Beckmann rearrangement. III. Stereoisomeric chloroimino-acid ethers, 1904, A., i, 39.

the Beckmann rearrangement. IV.
The formation of acylalkylcarbamides in Hofmann's reaction, 1904,

A., i, 40.

Stieglitz, Julius, Howard Haynes Higbee, and Bernhard C. Hesse, the Beckmann rearrangement. II., 1903, A., i, 235.

Stieglitz, Julius, and R. W. Noble, isocarbamides, 1905, A., i, 639.

Stieglitz, Julius, and Peter P. Peterson, stereoisomeric chloroiminoketones, 1910, A., i, 323.

Stieglitz, Julius, and Henry T. Upson, molecular rearrangement of aminophenyl alkyl carbonates, 1904, A., i, 575.

Stieglitz, Julius. See also Max Darwin Slimmer.

Stieldorf, Peter. See Hartwig Franzen. Stiepel, Carl, preparation of betaine salts from molasses, 1905, A., i, 416.

estimation of glycerol in its solutions by means of the specific gravity, 1905, A., ii, 121.

Stierlin, R. See Georg Lunge. Stietzel, Fritz. See Karl Löffler.

Stiles, Percy Goldthwait, influence of calcium and potassium salts on the tone of plain muscle, 1903, A., ii, 163.

Stiles, Percy Goldthwait, and William Herbert Beers, the masking of ionic effects by organic substances, 1905,

A., ii, 736.

Stiles, Percy Goldthwait, and Graham Lusk, formation of dextrose from the end-products of pancreatic proteolysis, 1903, A., ii, 668.

action of phloridzin, 1903, A., ii, 675.
Stiles, Percy Goldthwait. See also Marie
M. Harlow, Carl Spencer Milliken,

and John Birt Patten. Stille, Werner. See Rudolf Friedrich

Weinland.

Stillesen, Morten, fatty oil from the fruits of Aesculus hippocastanum, 1909, A., ii, 513,

Stillieh, Otto, action of acetic anhydride and sulphuric acid on nitroaminobenzyl-p-nitroaniline, 1903, A., i,

rôle of sulphuric acid when acetylating with acetic anhydride, 1905, A., i, 318.

sulphoacetic acid, 1906, A., i, 552. sulphoacetic acid, II. Sulphoacetic acid and aromatic amines, 1906, A., i, 626.

Stillman, John Maxson, and Alvin Joseph Cox, precipitation of calcium and magnesium by sodium carbonate, 1903, A., ii, 647.

Stillman, John Maxson, and E. C. O'Neill, saids of the fat of the California bay tree, 1903, A., ii, 171,

Stillman, Thomas Bliss, and Peter T. Austin, analysis of gelatin dynamites, 1906, A., ii, 585.

Stillwell, Albert G., estimation of acetic acid in acetate of lime, 1904, A., ii, 374.

Stimmelmayr, Anton. See Ludwig Weiss. Stine, Charles M. See Harry Clary Jones.

Stirnus, August. See Theodor Posner. Stobbe, [Johann Hermann August Adolph] Hans, preparation of teraconic acid, 1903, A., i, 231.

aromatic butadienedicarboxylic acids. I., 1904, A., i, 588

[Johann Hermann August Adolph | Hans, butadiene derivatives. II. Coloured anhydrides of butadiene-By-dicarboxylic acids, 1904, A., i. 589.

colour of fulgides and of other unsaturated compounds, 1906, A., i,

desmotropic forms of ethyl acetoacetate at low temperatures, 1907, A., i, 177.

colour reactions during the hydrolysis of acid anhydrides, 1908, A., i, 985. phototropy of the fulgides and other substances, 1908, A., ii, 339.

photochemical reactions of the white and yellow diphenyloctatetrenes, 1909, A., i, 219.

colour of fluorescence and solvent, 1909,

A., ii, 282.

relationship between the colour and constitution of unsaturated ketones and their salts, 1910, A., i, 43.

liquid and solid distyrene, 1910, A., i,

310.

absorption spectra of the cinnamic acids, 1910, A., ii, 247.

mono- and di-ethyl esters of diphenylitaconic acid, 1911, A., i, 540.

isomerism and isomorphism of the yellow and the red fluorenones, 1911, A., i, 651.

transformations of allo- and isocinnamic acids in the fused and crystalline states, 1911, A., i, 859.

isomerism and polymorphism, 1911,

A., ii, 970.

semicyclic 1:5-diketones of the cyclopentane series, 1912, A., i, 779.

optically active semicyclic 1:5-diketones of the cyclohexane series,

1912, A., i, 780.

Stobbe, Hans, and Theodor Badenhausen, butadiene derivatives. XVI. Anomalies in the synthesis of fulgenic

acids, 1906, A., i, 279.

Stobbe, Hans, Theodor Badenhausen, Erich Benary, Richard Eckert, Ferdinand Gademann, Richard Härtel, Rudolf Hennicke, Harald Kalning, Karl Kautzsch, Curt Kohlmann, Karl Leuner, Alfred Lenzner, Georg Posnjak, Gustav Reddelien, Robert Rose, Siegfried Seydel, Walter Vieweg, and Emil Wahl, fulgides, 1911, A., i, 373.

Stobbe, Hans, Theodor Badenhausen, Erich Benary, Karl Kautzsch, Alfred Lenzner, and Rudolf Nettel, butadiene compounds. XV. Colour of methoxyderivatives of mono-, di-, and triphenylfulgides, 1906, A., i, 278.

Stobbe, Hans, and Erich Ebert, bleaching and polymerisation, 1911, A., ii, 452

absorption of light of some corresponding ethane, ethylene, and acetyl derivatives, 1911, A., ii.

fluorescence and radioluminescence of some hydrocarbons with ethane, ethylene, and acetylene residues, 1911, A., ii, 562.

Stobbe, Hans, and Richard Eckert. butadiene compounds. XI. Parallel coloured furyl- and phenyl-fulgides,

1906, A., i, 101.

Stobbe, Hans, Ferdinand Gademann, Alfred Lenzner, and Robert Rose, butadiene compounds. VII. colour of the fulgenic acids fulgides, 1905, A., i, 857.

Stobbe. Hans, Robert Georgi, and Richard Härtel, methods for the preparation of stereoisomeric benzylideneanisylidenecyclopentanones and similar unsymmetrical derivatives of cyclic ketones, 1909, A., i, 309.

Stobbe, Hans, and Ferdinand Gollücke, indoneacetic acids. III. "Indonisation," and "anhydrisation," 1906.

A., i, 361.

Stobbe, Hans, and Richard Härtel, light absorption, basicity, constitution, and salts of ketones of the dibenzylideneacetone [distyryl ketone] dibenzylidenecyclopentanone series, 1910, A., i, 43.

Stobbe, Hans, Richard Härtel, and Siegfried Seydel, relationship between the colour and constitution of unsaturated ketones and their salts, 1910,

A., ii, 4.

Stobbe, Hans, and Max Heller, Bztetrahydroquinoline derivatives from semicyclic 1:5-diketones of the cyclohexane series, 1903, A., i, 115.

Stobbe, Hans, and Otto Horn, indoneacetic acids. IV. Configuration of phenylitaconic and phenylaticonic

acids, 1909, A., i, 31.

the colours of indoneacetic acids and their carbazones, 1909, A., i, 102.

Stobbe, Hans, Otto Horn, and Phokion Naoum, phenylitaconic acid, 1909, A., i, 105.

Hans. Willy Keding, and Stobbe, Ferdinand Gollücke, a Bordeaux-red chrysoketonecarboxylic acid and its yellow derivatives; a contribution to the theory of colour, 1907, A., i, 765.

Stobbe, Hans, Willy Keding, Phokion Naoum, and Victor von Vigier, a product of the action of light on diphenylfulgide and the polymerisation of phenylpropiolic acid, 1907, A., i, 769.

Stobbe, Hans, Paul Kohlmann, Phokion Naoum, and Kurt Kohlmann, triarylbutadienedicarboxylic acids; (butadiene compounds. V.), 1904, A., i, 672.

Stobbe, Hans, and Albert Küllenberg, butadiene compounds. XII. Yellow nitrotriphenylfulgenic acids artheir red fulgides, 1906, A., i, 91.

butadiene compounds. XIII. Aminotriphenylfulgenic acid, 1906, A., i,

Stobbe, Hans, Alfred Lenzer, and Emil Wahl, butadiene compounds. Yellow monoarylfulgides, 1906, A., i,

Stobbe, Hans, and Karl Leuner, butadiene compounds. VIII. Colourless alkylfulgides, 1905, A., i, 857.

butadiene compounds. cumyldimethylfulgenic acids and a third isomeride, 1906, A., i, 22.

butadiene compounds. XIV. Nitrophenyldimethylfulgenic acids and their yellow fulgides, 1906, A., i, 183.

Stobbe, Hans, and Ernst Müller, determination of the molecular weight of ethyl acetoacetate in freezing chloroform, 1907, A., i, 178.

Stobbe, Hans, Phokion Naoum, and Karl Kautzsch, butadiene derivatives. III. Dibenzylidenesuccinic acid, 1904, A.,

Stobbe, Hans, and Max Noetzel, yydiphenyl-a-methylitaconic acid, 1906,

A., i, 362.

Stobbe, Hans, and Georg Posnjak, the real state of metastyrene and the polymerisation of styrene by light and heat, 1910, A., i, 235.

liquid and solid distyrene, 1910, A.,

i, 235.

Stobbe, Hans, and Fritz Reuss, refraction of light by allo- and iso-cinnamic acids, 1911, A., i, 859.

polymerisation of cyclopentadiene,

1912, A., i, 842.

Stobbe, Hans, and Robert Rose, configuration of the stereoisomeric phenylmethylitaconic acids; (indoneacetic acids. II.), 1904, A., i, 503.

Stobbe, Hans, and Arthur Rosenburg, dicyclic ketone-alcohol prepared by the addition of menthone to phenyl styryl ketone, 1912, A., i, 785.

Stobbe, Hans, and Conrad Rücker. action of light on cinnamylideneacetophenone, 1911, A., i, 385.

Stobbe, Hans, and Siegfried Seydel. light absorption, basicity, constitution, and salts of certain unsaturated cyclic ketones, ketone acids, and ketone esters, 1910, A., i, 45.

Stobbe, Hans, and Victor von Vigier, thermochromic properties of dibenzylidenesuccinic anhydride; (butadiene compounds. IV.), 1904,

A., i, 672,

formation of stereoisomeric butanedicarboxylic acids by reduction of butadienedicarboxylic acids; (butadiene compounds. VI.), 1904, A., i, 673.

Stobbe. Hans, and Hans Volland. synthesis of a pyrhydrindene derivative from a semicyclic 1:5-diketone of the pentamethylene series, 1903,

A., i, 115.

Stobbe, Hans, and Arthur Werdermann, tautomerism, especially in the semicyclic 1:3-diketone of the pentamethylene series, 1903, 421.

derivatives of 1:3-diketones containing

nitrogen, 1903, A., i, 423.

Stobbe, Hans, and Forsyth James Wilson, action of light on the stereoisomeric piperonylideneacetones and on other unsaturated ketones, 1910, T., 1722; P., 206.

isomerism and polymorphism. Ketones of the type of benzylidenedeoxybenzoin and their interconversion by heat, light, and other

agencies, 1910, A., i, 623. Stock, Alfred [Eduard], action of liquefied ammonia on phosphorus, 1903,

A., ii, 421.

solubility of nitrogen in liquid oxygen, 1904, A., ii, 396.

decomposition of antimony hydride, 1905, A., ii, 96.

two modifications of the Töpler mercury air pump, 1905, A., ii, 514.

porous materials as substitutes for stopcocks in the manipulation of gases, 1908, A., ii, 99.

Hittorf's phosphorus, 1908, A., ii,

176, 274.

the mercury bath, a too-little known, useful expedient in gas-analytical

work, 1909, A., ii, 89.

the sintering-point curve: a simple means of detecting chemical compounds between two components, 1909, A., ii, 543.

Stock. Alfred [Eduard], phosphorus suboxide, 1910, A., ii, 121.

allotropic forms of phosphorus, 1910, A., ii, 288.

aluminium tube furnace, 1912, A., ii,

Stock, Alfred, and Heinrich von Bezold. sulphides of phosphorus. III. Vapour densities of the compounds, P4S3, P4S7, and P2S, 1908, A., ii, 274.

Stock, Alfred, Heinrich von Bezold, Berla Herscovici, and Max Rudolph, the compounds of sulphur and phosphorus. IV. The existence of phosphorus disulphide, P3S6, 1909, A., ii, 569.

Stock, Alfred, and Martin Blix, action of ammonia on boron sulphide, 1903, A., ii, 208.

Stock, Alfred, and Herbert Blumenthal. carbon telluride, CTe2, 1911, A., ii, 722.

Stock, Alfred, and Max Bodenstein, theory of the decomposition of anti-

mony hydride, 1907, A., ii, 181. Stock, Alfred, Willy Böttcher, and Walter Lenger, preparation and properties of solid hydrogen phosphide, P₁₂H₆, 1909, A., ii, 727.

a new solid hydrogen phosphide, P9H2,

1909, A., ii, 727.

action of liquefied ammonia on the two solid hydrides of phosphorus, 1909, A., ii, 728.

Stock, Alfred, Eusebio Echeandia, and Paul Rud of Voigt, decomposition of arsenic hydride, 1908, A., ii, 488.

decomposition of antimony hydride,

1908, A., ii, 503.

Stock, Alfred, and Kurt Friederici, the compound "P₄S₁₀," as described in the German patent No. 239162, 1912, A., ii, 1166.

Stock, Alfred, and Franz Gomolka, red phosphorus and the so-called "Hittorf's phosphorus," 1910, A., ii,

Stock, Alfred, Franz Gomolka, and Hans Heynemann, decomposition of antimony hydride, 1907, A., ii, 180.

Stock, Alfred, and Hans Grüneberg, phosphorus nitride, 1907, A., ii, 541. Stock, Alfred, and Oskar Guttmann,

decomposition of antimony hydride as an example of a heterogeneous catalytic reaction, 1904, A., ii, 246. stibine and yellow antimony, 1904, A., ii, 267.

decomposition of antimony hydride,

1904, A., ii, 489.

Stock, Alfred, and Berla Herscovici. compounds of sulphur and phosphorus. VI. Tetraphosphorus heptasulphide, P₄S₇, 1910, A., ii, 201.

compounds of sulphur and phosphorus. VII. Phosphorus pentasulphide, P₄S₁₀ (P₂S₅), 1910, A., ii, 499.

Stock, Alfred, and Hans Heynemann. permeability of glass for gas, 1909, A., ii, 563.

the sun as a source of heat for chemical experiments, 1909, A., ii, 720.

volatility of the bromides of radium, barium, strontium, and calcium, 1909, A., ii, 1004.

Stock, Alfred, and Berthold Hoffmann, action of ammonia on phosphorus pentasulphide and the nitrite of phosphorus, P3N5, 1903, A., ii,

working with liquefied gases, 1903,

A., ii, 359.

Alfred, Berthold Hoffmann. Franz Müller, Hans von Schönthan, and Hans Kuchler, action of ammonia on phosphorus pentasulphide: thiophosphates and thiophosphoric acids, 1909, A., ii, 535.

Alfred, and Walter Holle, Stock, preparation of boron nitride and calcium boride, 1908, A., ii, 687.

Stock, Alfred, and Otto Johannsen, action of ammonia ou phosphorus; observations on the modifications of phosphorus, 1908, A., ii, 583.

Stock, Alfred, and Hans Küchler, Thomsen's supposed synthesis of carbon monosulphide, CS, 1904, A.,

ii, 119.

Stock, Alfred, and Carl Nielsen, simple sensitive thermometer for low temperatures, 1906, A., ii, 521. mixtures of liquid oxygen and nitro-

gen, 1906, A., ii, 844.

analysis of gases rich in one or more constituents, 1906, A., ii, 894.

Stock, Alfred, and Max Rudolph, compounds of sulphur and phosphorus.
V. Tetraphosphorus trisulphide P₄S₃, 1910, A., ii, 200.

Stock, Alfred, and Wilhelm Scharfenberg, sulphides of phosphorus. Phosphorus pentasulphide, 1908, A., ii, 274.

Stock, Alfred, Hans Schrader, and Erich Stamm, red phosphorus, 1912, A., ii, 639.

Stock, Alfred, and Werner Siebert, preparation of yellow arsenic, 1905, A., ii, 25.

Stock, Alfred, and Werner Siebert, preparation of yellow arsenic by means of the electric arc, 1905, A., ii. 315.

modifications of antimony, 1906, A.,

ii, 34.

Stock, Alfred, and Kurt Thiel, phosphorus pentasulphide, 1905, A., ii, 703.

Stock. Alfred, and Franz Wrede, heat of formation of phosphorus nitride, 1907, A., ii, 604.

heat of formation of antimony hydride.

1908, A., ii, 257.

Stock, Josef. See Oscar Piloty.

Stockem, Lorenz, alloys of calcium, 1906, A., ii, 285.

Stockem, Lorenz, See also Johann Albert Wilhelm Borchers, and Heinrich Danneel.

Stockhausen, Johannes, chemical composition of the dog's body, 1909, A., ii, 1034.

Stockings, William Ernest. See William Arthur Bone, and Julien

Drugman.

Stockman. Ralph, and Francis James Charteris, action of arsenic on the bone marrow of man and animals, 1903, A., ii, 501.

action of lead, mercury, phosphorus, iron, and quinine on the bonemarrow of rabbits, 1904, A., ii, 65.

Stockmann, H., the lactone of a-omethoxyphenyl-o-hydroxy-p-tolylacetic acid, 1912, A., i, 862.

Stockmann, Hippolyt. See Hermann

Staudinger.

Stockmayer, Hugo. See Carl Hell. Stockton, Edith, and C. G. Eldredge, fruits of Caulophyllum thalictroides and Cornus sericea, 1908, A., ii, 978.

Stoddard, John Tappan, rapid electroanalysis with stationary electrodes,

1909, A., ii, 347.

Stoddard, W. B., products formed by the action of heat on p-sulphamidobenzoic acid, 1912, A., i, 111. Stoddart, Charles W., estimation of

sulphur in coal, 1903, A., ii, 40. phosphate availability in relation to

soil activity, 1909, A., ii, 1048.
Stoddart, Charles W., and Charles Warren Hill, the stearate separation

of the rare earths, 1911, A., ii, 727. Stoddart, Charles W. See also A. R.

Whitson

Stodel, G. See Victor Henri.

Stoecker, Max, a constituent of gas purification residues: iron carbonylferrocyanide, 1904 A., i, 655.

Stoecker, Max, Berthier's method for estimating calorific power and Welter's hypothesis, 1907, A., ii, 504.

Stoecker, Max, and Friedrich Krafft. oxidation of diphenyl diselenide, 1906,

A., i, 568.

Stæcklin, Eloi de, a new artificial peroxydase, 1909, A., i, 196.

oxidation of alcohols by simultaneous action of ferrous tannate and hydrogen peroxide, 1909, A., i, 198.

new method for detecting traces of alcohols, 1910, A., ii, 162.

oxydase properties of oxyhæmoglobin,

1911, A., ii, 620.

Stæcklin, Eloi de, and Crochetelle. accidental presence of thiocyanates in milk and their origin, 1910, A., ii,

Stæcklin, Eloi de, and E. Vulquin. oxidation of polyhydric alcohols by a peroxydase system, 1909, A., i, 451.

Stæcklin, Eloi de. See also Jules Wolff.

Stoecklin, L., Fiehe's reaction in the analysis of honey, 1912, A., ii,

rapid method for the detection of salicylic acid, 1912, A., ii, 699.

Stöhr, Ottmar. See Karl Bernhard Lehmann.

Stöhr, Vrat., the effect of the new nitrogenous fertilisers on hemp, 1908, A., ii, 421.

See Wilhelm Will. Stöhrer.

Stöhrer, Walter. See Robert Pschorr.

Stoeltzner, Helene, influence of strontium on the growth and composition of bone, 1908, A., ii, 769.

Störmer, Kurt, action of carbon disulphide and similar substances on soils.

1909, A., ii, 608.

Störmer, Richard. See Lorenz Hiltner. Stoermer, Richard [Heinrich Friedrich], phosphorus tribromide as a reducing agent, 1904, A., i, 181.

synthesis of aldehydes and ketones from as-disubstituted ethylene glycols and their ethers; a correction, 1907, A., i, 204.

1-phenyl-5-methylpyrazole, 1907, A., i, 252.

coumarandione, the analogue of isatin in the coumarone series, 1909, A., i.

174; 1912, A., i, 206. conversion of aromatic acid azoimides into arylcarbimides, 1909, A., i, 785.

conversion of stable stereoisomeric ethylene derivatives into the labile modifications by ultra-violet light, 1910, A., i, 114.

Stoermer, Richard, and Paul Atenstädt, action of phenoxyacetyl chloride on benzene and its derivatives, 1903, A., i 41

Stoermer, Richard, and Theodor Biesenbach, elimination of carbon dioxide and carbon monoxide from α-phenoxycinnamic acids, 1905, A., i, 524.

Stoermer, Richard, and Curt Brachmann, "oxindigo" [2:2'-diketo-Δ^{1:1}-dicoumaran], 1911, A., i, 220.

Stoermer, Richard, Bräntigam, Egon Friderici, and Wilhelm Neckel, conversion of stable stereoisomerides into labile modifications by ultra-violet light. II., 1911, A., i, 295.

Stoermer, Richard, Claus Decker, and Karl Hildebrandt, migration of phenyl in the synthesis of phenylated coumarones; phosphorus tribromide as a reducing agent. III., 1911, A., i, 664.

Stoermer, Richard, and Heinrich Fincke, new synthesis of cinnoline derivatives, 1909, A., i, 841.

Stoermer, Richard, and Egon Friderici, stereoisomeric β-aryleinnamic acids, 1908, A., i, 179.

Stoermer, Richard, Egon Friderici, and H. Altgelt, hydrolysis of phenolic ethers, 1908, A., i, 190.

Stoermer, Richard, and Carl Friemel, action of phenol on methylcoumaric acid dibromide and the constitution of Werner's "hydroxyphenylcoumaran," 1911, A., i, 632.

interaction of homologous phenols with methylcoumaric acid dibromide. II., 1912, A., i, 45.

Stoermer, Richard, and Otto Gaus, cinnoline syntheses; 4-anisylcinnoline, 1912, A., i, 1025.

Stoermer, Richard, and Friedrich Göhl, synthesis of coumaran and its homologyes 1903 A i 848

logues, 1903, A., i, 848.

Stoermer, Richard, and Paul Heymann, determination of the configuration of the stereoisomeric cinnamic acids,

1912, A., i, 974. Stoermer, Richard, and Diedrich Johannsen, thionpyrazolones, 1907, A., i, 966.

Stoermer, Richard, and Otto Kippe, synthesis, isomeric changes, and decompositions of phenylated coumarones and coumarans, 1904, A., i, 182.

condensation of benzaldehyde and ethyl phenoxyacetate; Claisen's cinnamic acid synthesis by means of sodium, 1905, A., i, 526, 777. Stoermer, Richard, and Wilhelm König, 1- and 2-aminocoumaran (coumaranamine), 1906. A., i. 200.

amine), 1906, A., i, 200.
Stoermer, Richard, and Ottocar Martinsen, phosphorus tribromide as a reducing agent (conversion of pyrazolones into pyrazoles), 1907, A., i,
446.

Stoermer, Richard, and Ernst Oetker, an alcohol derived from coumarin and its conversion into a coumarone derivative, 1904, A., i, 244.

Stoermer, Richard, and Max Reuter, phenylated coumarones, 1904, A., i, 181.

Stoermer, Richard, and Max Schäffer, some 1-acylcoumarones and the decomposition of 1-acetylcoumarone, 1903, A., i, 846.

Stoermer, Richard, Eduard (Freiherr) Schenck zu Schweinsberg, Fr. Sibbern-Sibbers, and Paul Riebel, synthesis of aldehydes and ketones from as-disubstituted ethylene glycols and their ethers, 1906, A., i, 581.

Stoermer, Richard, and Max Simon, geometrical isomerism of derivatives of diphenylethylene, 1905, A., i, 53.

Stoermer, Richard, and Richard Wehln, condensation of phenoxyacetone with benzaldehyde, 1903, A., i, 40.

Stötter, Hermann. See Martin Onslow Forster, and Wolfgang Weichardt.

Stoffel, A., binary and ternary alloys of tin, lead, bismuth, and cadmium, 1907, A., ii, 357.

formation of iron carbonyl, 1911, A., ii, 986.

Stoffella, G. See Henryk Golblum.

Stohmann, Adolf. See Hans Theodor Bucherer.

Stohr, Edward. See Kurt Brand, and Karl Elbs.

Storcoff, A. See Max Wunder.

Stokes, (Miss) Eleanor Marguerite. See James Frederick Spencer.

Stokes, Henry Newlin, ferrous and ferric sulphides, 1907, A., ii, 471.

action of various solutions on pyrites and marcasite, 1907, A., ii, 471.

Stokes, Henry Newlin, and John R. Cain, colorimetric estimation of iron with special reference to chemical reagents, 1907, A., ii, 581.

Stokes, Henry Newlin. See also Wil-

liam Francis Hillebrand.

Stokes, Joseph Arthur. See (Sir) William Augustus Tilden.

Stoklasa, Julius, carbohydrate combustion in the animal organism, 1905, A., ii, 179.

lactolase, an enzyme causing the formation of lactic acid in plant

cells, 1905, A., ii, 192.

transformations of sodium nitrate in the soil of sugar-beet fields, 1905, A., ii, 854.

chemical reactions in the eruption of Vesuvius in April 1906, 1906, A.,

the amount and origin of the ammonia in the products of the eruption of Vesuvius in April 1906, 1906, A., ii, 864.

physiological function of potassium in vegetable organs, 1908, A., ii, 417.

the chemical changes involved in the assimilation of free nitrogen by azotobacter and radiobacter, 1908, A., ii, 880.

the accelerating effect of potassium on sugar degradation; alimentary glycosuria, 1909, A., ii, 904.

the glycolytic enzymes of the pancreas, 1909, A., ii, 907.

can sodium nitrate be replaced by calcium nitrate for sugar-beet? 1909, A., ii, 1049.

biochemical circulation of the phosphate ion in soils, 1911, A., ii,

429.

physiological importance of manganese and aluminium in the vegetable cell, 1911, A., ii, 643.

biological absorption in soils, 1912,

A., ii, 198.

Stoklasa, Julius, Vladimir Brdlik, and Adolf Ernest, the phosphorus content of chlorophyll, 1909, A., i, 248.

Stoklasa, Julius, Vladimir Brdlik, and J. Just, phosphorus, an essential constituent of chlorophyll, 1908, A., i, 279.

Stoklasa, Julius, and F. Czerný, isolation of the enzyme which effects anaërobic respiration in the cells of the higher plants and animals, 1903, A., ii, 320.

enzymes which induce fermentation isolated from the cells of the higher

animals, 1904, A., i, 275.

Stoklasa, Julius, F. Czerný, Johann Jelínek, Eugen Simáčeck, and Eugen Vítek, alcoholic fermentation in animal tissues, 1904, A., ii, 272.

Stoklasa, Julius, F. Ducháček, and J. Pitra, the influence of bacteria on the decomposition of bone, 1903, A., ii, 169. Stoklasa, Julius, and Adolf Ernest, origin, amount, and importance of carbon dioxide in soils, 1905, A., ii, 607.

chemical nature of root secretions,

1909, A., ii, 256.

Stoklasa, Julius, Adolf Ernest, and Karl Chocenský, glycolytic enzymes in vegetable organisms, 1907, A., ii, 291.

Stoklasa, Julius, Adolf Ernest, Franz Straňák, and Eugen Vítek, the chemical changes involved in the assimilation of free nitrogen by azotobacter and radiobacter, 1908, A., ii, 975.

Stoklasa, Julius, Johann Jelinek, and Adolf Ernest, loss of nitrogen in soil manured with sodium nitrate,

1906, A., ii, 303.

influence of bacteria on the changes of nitric acid in soils, 1907, A., ii,

642.

Stoklasa, Julius, Johann Jelinek, and Eugen Vitek, anaerobic metabolism of higher plants and its relation to alcoholic fermentation, 1903, A., ii, 388.

intramolecular respiration of the sugar beet, 1903, A., ii, 746.

enzymes in the sugar-beet, 1904, A., ii,

Stoklasa, Julius, Johann Sebor, and Wenzel Zdobnický, the photochemical synthesis of carbohydrates under the action of ultra-violet rays, 1912, A., i,

Stoklasa, Julius, Adolf E. J. Trnka, and Eugen Vitek, chemical processes in the assimilation of elementary nitrogen by azotobacter and radiobacter, 1906, A., ii, 382.

Stoklasa, Julius, and Eugen Vitek, influence of different carbohydrates and organic acids on the decomposition of nitrates by bacteria, 1905, A., ii,

342, 472.

Stoklasa, Julius, and Wenzel Zdobnický, photochemical synthesis of carbohydrates from carbon dioxide and hydrogen in the absence of chlorophyll, 1911, A., i, 178.

photochemical synthesis of carbohydrates in absence of chlorophyll,

1911, A., i, 769.

Stokvis, C. S., and N. H. Swellengrebel, purification of water by infusoria,

1912, A., ii, 193.

Stoland, O. O., the relative toxicity of dog's normal and hypertrophied thyroids to animals susceptible to thyroid feeding, 1912, A., ii, 467.

Stolberg, Carl, separation of calcium and magnesium, 1904, A., ii, 591.

Stoll, Arthur. See Richard Willstätter. Stoll, Carl. See Roland Scholl.

Stoll, Ludwig. See Erich Beschke. Stolle, Ferdinand, caramel. V. Decom-

position products of caramelan, 1904, A., i, 228.

Stolle, Fr. See Francis Marre.

Stollé, Robert, [action of iodine on hydrazines], 1903, A., i, 119.

action of hydrazine hydrate on ethylene bromide, 1903, A., i, 305.

condensation of acetone with ethyl

succinate, 1903, A., i, 317. formation of heterocyclic compounds from hydrazine derivatives, 1903, A., i, 721; 1904, A., i, 102, 453.

volumetric estimation of hydrazine,

1903, A., ii, 100.

formation of heterocyclic compounds from hydrazine derivatives. III. Dihydrotetrazines, 1904, A., i, 200.

formation of heterocyclic compounds from hydrazine derivatives. Osotetrazines, 1904, A., i, 200. triaminoguanidine, 1904, A., i, 980.

formation of heterocyclic compounds from hydrazine derivatives. XVIII. Action of ammonia on tetrabromobenzylideneazine, 1905, A., i, 249.

condensation of ethyl acetoacetate with phenylmethylpyrazolone and the products formed by the action of hydrazine and of phenylhydrazine on dehydracetic acid, 1905, A., i, 838.

condensation of ethyl acetoacetate with phenylmethylpyrazolone, 1906, A., i, 48.

condensation of aldehydes with s-dihydrotetrazines, 1906, A., i, 315.

conversion of hydrazine derivatives into heterocyclic compounds. XIX. Diacidylhydrazide dichlorides, 1906, A., i, 453.

conversion of hydrazine derivatives into heterocyclic compounds. XXIII. Constitution of s-dihydrotetrazines, 1907, A., i, 359.

condensation of formaldehyde with hydrazine hydrate, 1907, A., i, 496.

conversion of hydrazine derivatives into heterocyclic compounds. XXIV. N-Aminotriazole (s-dihydrotetrazine), 1907, A., i, 654.

action of magnesium on ethyl bromoacetate, 1908, A., i, 310.

formation of carbodiphenylimide from phenylcarbimide, 1908, A., i, 415.

Stolle, Robert, action of nitrous esters on hydrazine, phenylhydrazine, and benzylhydrazine in alkaline solution, 1908, A., i, 917.

conversion of hydrazine derivatives into heterocyclic compounds. XXV. N-amino-osotriazoles, 1909, A., i,

derivatives of osotetrazines and osotriazoles, 1909, A., i, 337. action of thionyl chloride on benzilic

acid, 1910, A., i, 737.

fission of chloroform and carbon dioxide from trichloroacetic acid, 1910, A., ii, 1119.

action of hydrazine hydrate on sodamide, 1911, A., ii, 201.

preparation of ethyl oxalhydrazinate,

1911, A., i, 357.

acetaldehyde-hydrazine, 1911, A., i,

conversion of hydrazine derivatives heterocyclic compounds. into XXVI. Action of chlorine on benzaldazine and benzovlbenzylidenehydrazine, 1912, A., i, 504.

p-dimethylaminobenzenediazonium

chloride, 1912, A., i, 920. Stollé, Robert, and Adolf Bambach, conversion of hydrazine derivatives into compounds. XXII. heterocyclic Diacylhydrazide dichlorides of substituted benzoic acids and of a-naphthoic acid, 1906, A., i, 709.

Stollé, Robert, and Alfred Benrath, action of iodine and halogenated substances on the metallic derivatives of dibenzoylhydrazide, 1904, A., i, 935.

Stolle, Robert, and Percy Ewart Bowles, thiocarbohydrazide, 1908, A., i, 474.

Stollé, Robert, and Friedrich Hermann Dellschaft, formation of heterocyclic compounds from hydrazine derivatives. XIII. Dipentadecylfurodiazole and dipentadecylthiodiazole, 1904, A., i, 697.

Stollé, Robert, and Hans Foerster, formation of heterocyclic compounds from hydrazine derivatives. VII. Conversion of s-di-m-chlorobenzoylhydrazide into diazole derivatives, 1904, A., i, 627.

Stollé. Robert, and Leo Gutmann, formation of heterocyclic compounds from XI. Conhydrazine derivatives. version of isobutyric acid into heterocyclic compounds, 1904, A.,

formation of heterocyclic compounds XIV. from hydrazine derivatives. Selenodiazole, 1904, A., i, 697.

Stollé, Robert, and Hermann Hille, formation of heterocyclic compounds from hydrazine derivatives. Conversion of the hydrazines of propionic and isovaleric acids into heterocyclic compounds, 1904, A., i, 695.

Stolle, Robert, and Kurt Hoffmann, hydrazinecarboxylic acid, 1905, A.,

i, 28.

diaminoguanidine, 1905, A., i, 28. Stollé, Robert, Julius Holzapfel, Karl Otto Leverkus, and J. Mampel, preparations and reactions of azo-acyl com-

pounds, 1912, A., i, 225.

Stolle, Robert, and Akop Johannissien, formation of heterocyclic compounds from hydrazine derivatives. Conversion of the s-dibromobenzovlhydrazines into derivatives of furodiazole [oxadiazole] and thiodiazole, 1904, A., i, 694.

Stolle, Robert, and Walter Kind, formation of heterocyclic compounds from hydrazine derivatives. XVI. Diazoles and bisdiazoles, 1905, A., i, 96.

Stolle, Robert, and Julius Laux, new method of preparation of azo-compounds, 1911, A., i, 508.

Stolle, Robert, Karl Otto Leverkus, and R. Krauch, hydrazidicarboxylhydraz-

ine, 1910, A., i, 789.

Stollé, Robert, and Walter Möring, condensation of aldehydes with pdiketohexamethylene, 1904, A., i, 875,

Stollé, Robert, and Eduard Münch, formation of heterocyclic compounds from hydrazine derivatives. The metallic derivatives of the condensation products of acylhydrazines with aldehydes and ketones and their behaviour towards acid chlorides and iodine, 1905, A., i, 94.

Stolle, Robert, Eduard Münch, and Walter Kind, formation of heterocyclic compounds from hydrazine derivatives. XVII. Diphenylosotetrazine and Diphenylosotriazole,

1905, A., i, 97. Stollé, Robert, and Christian Schätzlein, formation of heterocyclic compounds from hydrazine derivatives. Conversion of s-dilaurylhydrazine into diazole derivatives, 1904, A., i, 697.

Stollé, Robert, and Fr. Schmidt, action of alkalis on bisdiphenylacetylhydrazide chloride, 1912, A.,

preparation of azo-compounds by removal of halogen in the 1:6- and 1:10-positions, 1912, A., i, 1035.

Stolle, Robert, and Henry Potter Stevens, formation of heterocyclic compounds from hydrazine derivatives. Tolyl and benzyl derivatives of furodiazole [1:2:4-oxadiazole] and 1:3:4thiodiazole, 1904, A., i, 626.

Stollé, Robert, and Carl Thomae, conversion of hydrazine derivatives into heterocyclic compounds. XX. benzoylhydrazide dichloride, 1906, A.,

i. 461.

Stolle, Robert, and Anton Weindel, conversion of hydrazine derivatives into heterocyclic compounds. acylhydrazide dichlorides of substituted benzoic acids and their reaction products, 1906, A., i, 707.

Stolle, Robert, and Gustav Zinsser, formation of heterocyclic compounds from hydrazine derivatives. X. Conversion of the n-butyrylhydrazides into heterocyclic compounds, 1904,

A., i, 695.

Stolte, Karl, the fate of monoaminoacids in the body after intravascular injection, 1904, A., ii, 196.

the degradation of lævulosazine (ditetrahydroxybutylpyrazine) in the animal body, 1908, A., i, 833.

behaviour of glucosamine, and of the first product of its transformation, in the animal body, 1908, A., ii, 50.

a method for ash analysis, 1911, A., ii, 946.

Stolte, Karl. See also Richard Lederer. Stoltzenberg, Felicitas. See H. Beuttenmüller.

Stoltzenberg, Hugo, steam inlet-tube, 1908, A., ii, 828.

new safety valve, 1908, A., ii, 828. new forms of condenser, 1908, A., ii.

938; 1909, A., ii, 306. new form of test-tube holder, 1908, A., ii, 1027.

circulating pump, 1908, A., ii, 1028. a boat funnel, 1908, A., ii, 1071.

improved form of safety valve, 1909, A., ii, 723.

melting-point apparatus which can also be used for the determination of solubilities with small quantities of substance, 1910, A., ii, 17.

melting-point determinations at low temperatures, 1910, A., ii, 182.

use of the melting-point apparatus for low temperatures as a low temperature bath in physico-chemical laboratories, 1910, A., ii, 267.

apparatus for gas analysis by con-

densation, 1910, A., ii, 649.

Stoltzenberg, Hugo, determination of melting points of crystalline liquids; 1911, A., ii, 697.

precipitate produced by mercuric acetate from molasses; isolation of

adenine, 1912, A., i, 397. a new method of isolating betaine hydrochloride from molasses residue; separation of glycine, betaine, and glutamic acid; absence of betaine from the fission products of certain proteins, 1912, A., i, 680.

filtering cap for pipettes, 1912, A., ii,

estimation of nitrogen in betaine and in molasses, etc., 1912, A., ii, 601.

Stoltzenberg, Hugo, and M. E. Huth. liquid-crystalline phases of the monohaloids of thallium and silver, 1910, A., ii, 295.

Stoltzenberg, Hugo. See also Ernst Erd-

Stolz, Friedrich, 5-imino-1-phenyl-2:3dimethylpyrine, 1904, A., i, 113.

1-phenyl-4-methylpyrazolone, A., i, 942.

dimethylaminoazoantipyrine, 1909, A., i, 70.

Stolz, Friedrich, and Hans Meyer, adrenaline and alkylaminoacetylcatechol, 1905, A. i, 106.

Cameron, George volumetric estimation of zinc, 1908, A., ii, 632.

Stoof, H. See Robert Pschorr.

Stookey, Lyman Brumbaugh, formation of glycogen from glyco-proteins, 1903, A., ii, 440.

peptone. II., 1906, A., i, 327.

protein peptone, 1906, A., i, 327. glycine as a product of uricolysis,

1908, A., i, 373.

a possible significance of the Cammidge reaction, 1910, A., ii, 358.

the urine in eclampsia, 1910, A., ii,

Stookey, Lyman Brumbaugh. See also Frank Austin Gooch, and Phoebus A. Levene.

Stoop, Franz. See Emil Erlenmeyer, jun. Stoppani, Ermenegildo. See Arnaldo Piutti.

Stoppani, Mario L. See Stanislaus von Kostanecki.

Storch, Karl, caseinogen of asses' milk, 1903, A., i, 214.

Storch, Ludwig, the indophenine reaction, 1904, A., i, 610.

Storck, J. See Gustav Wimmer.

Storen, Ragnizald, separation of iron from the other members of the iron group, 1907, A., ii, 582.

Storey, Robert. See John Limel Simon. sen.

Storey, Thomas Andrew, influence of exercise on human muscle, 1903, A., ii,

Storey, Walter Frederick. See Treat Baldwin Johnson, and Henry Lord Wheeler.

Storm, Douglas. See Karl Andreas Hofmann.

Stortenbeker, Willem, potassium sulphates, 1903, A., ii, 143.

gaps in the mixture series in the case of isomorphous substances, 1903, A., ii, 470.

isomorphism of potassium and thallous

salts, 1905, A., ii, 390. detection of iodoform, 1905, A., ii, 424. polymorphism of rubidium dichromate, 1907, A., ii, 764.

thallous salts, 1907, A., ii, 770.

rubidium dichromate, 1908, A., ii,

gaps in miscibility of isomorphous substances; zinc silicofluoride and stannifluoride, 1909, A., ii, 869.

an acid potassium sulphate, 1911, A., ii, 392.

preparation of normal solutions, 1912, A., ii, 864. Story, William E., partial pressures of

liquid mixtures, 1910, A., ii, 184. Story-Maskelyne, Nevil, obituary notice

of, 1912, T., 692.

Storz, Ludwig. See Rudolf Friedrich Weinland.

Stotesbury, Charles. See Charles Dorée. Stoward, Frederick, influence of certain acids on the inversion of sucrose by sucrase [invertase], 1911, A., i, 1052.

Stoyanoff, N., measurement of the intensity of the field along the axis of a coil of wire by weighing, and its application to the deduction of absolute values of the Verdet constant of certain liquids, 1909, A., ii, 638.

Stracham, Earle K. See Richard Sidney

Curtiss.

Strachan, James, a new primary voltaic cell of the Daniell type, 1908, A., ii, 801.

the "Hughes reaction" of potassium iodide on paper, and its bearing on the question of acidity in paper, 1911, A., ii, 542.

catalytic action of copper oxide, 1911,

A., ii, 606.

Strache, Hugo, explanation of the periodic system of the elements on the basis of the electron theory, 1909, A., ii, 34.

Strache, Hugo, Rudolf Jahoda, and Ulrich Genzken, the autolysator; new apparatus for continuous automatic gas analysis, 1907, A., ii, 127.

Stracke, G. J., insensibility of higher plants towards their own poisons,

1905, A., ii, 853.

Strada, Ferdinando, nucleo-protein of

pus, 1909, A., i, 274.

Strakosch, Siegfried, carbohydrate metabolism of the sugar-beet (Beta vulgaris), 1908, A., ii, 125. Stramer, Wilhelm.

See Eduard Jordis. Straňák, Franz, assimilation of nitrogen of the air by soil micro-organisms, 1909, A., ii, 692.

Stranak. Franz. See also Julius Stoklasa.

Strandberg, Ove. See Hans Jansen.

Strandmark, Johan Edvard, celsian and other baryta-felspars, 1907, A., ii, 364. Strange, Edward Halford. See Harold

Baily Dixon.

Stránsky, J., rapid estimation of carbon dioxide in mineral waters, 1908, A., ii,

Strasser, B. See J. Zenneck.

Strassner, Walter, the reducing action of the tissues, 1911, A., ii, 57.

Straub, A., detection of small quantities of zinc in wine, 1912, A., ii, 388.

Straub, Hermann, the influence of strophanthine, adrenaline, and muscarine on the electro-cardiogram, 1910, A., ii, 434.

Straub, Hermann. See also Joseph Barcroft.

Straub, Jan, constitution of the compound of silver chloride with ammonia,

1911, A., ii, 883. Straub, Walther, reaction between yellow phosphorus and copper in aqueous solution, 1903, A., ii, 593.

estimation of phosphorus dissolved in

oil, 1903, A., ii, 691.

action of eosin solution on oxidisable substances, 1904, A., i, 896.

action of muscarine and atropine, 1907, A., ii, 801.

quantitative investigations on the chemistry of strophanthin action, 1910, A., ii, 1094.

the pharmacodynamic action of narcotine in opium, 1912, A., ii, 790. Straube, Erich. See Adolf Riedel.

Strauch, Friedrich Wilhelm, comparative observations on the composition and cleavage of different kinds of silk. XII. The monoamino-acids from the "gelatin" of Indian tussore silk, 1911, A., i, 511.

Strauch, Friedrich Wilhelm. See also Emil Abderhalden.

Strauch. Hugo. See Rudolf scheider.

Straughn, Martin Norris, and Walter Jones, the nuclein ferments of yeast, 1909, A., ii, 690.

Straumer, Paul. See Otto Diels.

Straus, Fritz, symmetrical ethyl ketopentadienedicarboxylic acid, 1904, A., i, 851.

additive compounds of dibenzylideneacetone and hydrogen chloride, 1904, A., i, 899.

course of the addition of bromine to conjugated ethylene linkings, 1909,

A., i, 638.

Straus, Fritz, and Anton Ackermann, dibenzylideneacetone and triphenylmethane. III. Ketochloride and chlorocarbinol of pp-dichlorobenzylideneacetophenone; [p-chlorophenyl p-chlorostyryl ketone], 1909, A., i, 489.

isomeric arylimines of unsaturated

ketones, 1910, A., i, 241.

Straus, Fritz, Anton Ackermann, and dibenzylideneacetone Lutz, [distyryl ketone] and triphenylmethane. V. Nature of the linking of the halogen atoms in the keto-haloids of unsaturated ketones. I., 1910, A., i; 119.

Straus, Fritz, and Richard Bormann. tetramethyldiaminobenzophenone and dianilinodiphenylmethane, 1910, A., i,

Straus, Fritz, and Fritz Caspari, dibenzylideneacetone and triphenylmethane. II. Distyrylchlorocarbinol, 1907, A., i, 609.

Straus, Fritz, and Oscar Ecker, dibenzylideneacetone and triphenylmethane.

I., 1906, A., i, 859.

Straus, Fritz, and W. Heitz, dibenzylideneacetone [distyryl ketone] and triphenylmethane. VIII. So-called keto-haloids of unsaturated ketones and their transformation products, 1912, A., i, 989.

Straus, Fritz, and Werner Hüssy, dibenzylideneacetone [distyryl ketone] and triphenylmethane. IV. Differences in the reactivity of halogens in the -CCl₂-group, 1909, A., i, 490.

Straus, Fritz, Jean B. Krier, and Georg Lutz, dibenzylideneacetone (distyryl ketone) and triphenylmethane. Nature of the linking of the halogen atoms in the keto-haloids of unsaturated ketones. II., 1910, A., i, 565.

Straus, Fritz, Georg Lutz, and Werner Hüssy, dibenzylideneacetone [distyryl ketone] and triphenylmethane. VI. Ketochlorides of dianisylideneacetone [di-p-methoxystyryl ketone] and dicinnamylideneacetone, 1910, A., i, 563.

Straus, Fritz, and Rudolf Müller, acetylene linking, 1906, A., i, 77.

Straus, Fritz. See also Johannes Thiele. Straus, Heinrich. See Otto Fischer.

Straus, J., carbohydrate ferments in lepidoptera and diptera in different stages of development, 1909, A., ii, 328.

Strauss, Eduard, detection of urabilin in urine, 1909, A., ii, 195.

Strauss, Eduard, and Bernhard Gschwendner, tannins, 1906, A., i, 596.

Strauss, Eduard. See also Emil Abderhalden, and Arthur Korn.

Strauss, Hermann, estimation of glycerol in soap-lyes, 1905, A., ii, 865. occurrence of indole in human gastric

contents, 1907, A., ii, 185.

Strauss, Hermann: See also Emil

Fischer, and Carl Neuberg.

Strauss, K. See Hans Reckleben, and

Strauss, K. See Hans Reckleben, and Johannes Scheiber.

Strausz, David, preparation of formic acid, 1909, A., i, 693.

Straw, Alonzo. See Willis Rodney Whitney.

Strebel, Otto. See August Michaelis.

Strebinger, Robert, the formation of lakes between p-nitrobenzeneazo-\(\beta\)-naphthol and aluminium and antimony compounds, 1912, A., i, 1038.

Strecker, Wilhelm, action of methyl sulphate on alkali polysulphides,

1908, A., i, 386.

precipitation of iron by ammonia in presence of tartaric acid, 1908, A.,

ii, 71.

action of organo-magnesium compounds on boron trichloride, sulphur chloride, and on the chloride and esters of sulphurous acid, 1910, A., i, 532.

Strecker, Wilhelm, and Paul Schiffer, titration of phosphates, 1911, A., ii,

768.

Strecker, Wilhelm, and Michael Feodorowitsch Schurigin, the origin of phosphorus haloids on platinum metals, 1909. A., ii, 585.

Strecker, Wilhelm. See also Karl Auwers, and Martin Kochmann.

Streintz, Franz, electrical conductivity of compressed powders, 1903, A., ii, 127.

Streintz, Franz, electrical resistance of lead peroxide, 1904, A., ii, 604.

temperature-coefficient of the resistance of tantalum, 1905, A., ii, 432.

simple relation between the size of the atoms of metals and the temperature-coefficient of the resistance, 1910, A., ii, 821.

evolution of gas and capacity of the lead accumulator, 1910, A., ii, 925.

migration of ions in the water voltameter, 1910, A., ii, 928; 1911, A., ii, 15.

Streitberger, Fritz. See Walther Borsche, and Hermann Matthes.

Streitwolf, Karl. See Ludwig Claisen. Stremme, Hermann; precipitation of gelatinous mixtures of alumina and silica, and their relation to allophane, halloysite, and montmorillonite, 1908, A., ii, 1041.

acid content of moor water, 1911, A.,

ii, 70.

allophane, halloysite, and montmorillonite are mixtures of colloidal alumina and silica, 1911, A., ii, 406.

Streng, Osv. See Thorvald Madsen. Strengers, Theodorus, See Ernst Cohen. Strich, Michael. See Julius Wohlge-

muth.

Strickler, Edwin. See Ernst Winterstein.

Striegier, Curt, semicyclic 1:5-diketones prepared by the addition of cyclopentanone to phenyl methylene-dioxystyryl ketone and phenyl p-methoxystyryl ketone, 1912, A., i, 781.

two stereoisomeric semicyclic 1:5-diketones from 3-methylcyclohexanone and phenyl methylcnedioxystyryl ketone, 1912, A., i, 783.

ketone, 1912, A., i, 783.

Strigel, Arthur, and Julius Dodt, estimation of potassium as perchlorate in potassium manures, 1912, A., ii, 1095.

Stritar, Milan Josef, estimation of glycerol and the methoxyl group, 1904, A., ii, 95.

estimation of methyl alcohol in commercial formaldehyde, 1904, A., ii, 686

estimation of small amounts of ethyl alcohol, 1907, A., ii, 134.

Stritar, Milan Josef, and Richard Fanto, theory of saponification. III., 1907, A., i, 464.

saponification of glycerides during ester exchanges in homogeneous system, 1908, A., ii, 677, 1021. Stritar, Milan Josef, and H. Zeidler, estimation of methyl alcohol by the iodide process, especially in products of the distillation of wood, 1904, A., ii, 686.

Stritar, Milan Josef. See also Richard

Fanto.

Stritt, Walter, the poisonous action of the cyanogen compounds employed as artificial manures, 1909, A., ii, 690.

Stritter, Robert, occurrence in milk serum of substances which react with naphthalene-B-sulphonic 1905, A., ii, 869.

Strobel, Max. See Julius Schmidt. Ström, Knut T., polymeric coumaric

acids, 1904, A., i, 505.

Ström, Knut T. See also Leopold

Rosenthaler.

Strömholm, Daniel, a class of double salts, 1903, A., i, 138.

double salt of silver iodide, 1903, A.,

tetra-alkylpiperazonium compounds, 1903, A., i, 291. periodides, 1903, A., i, 462.

mercuric chloride and water, 1903, A., ii, 547.

molecular compounds of iodine, 1903,

A., ii, 644.

basic lead salts, 1904, A., ii, 258. compounds formed by the action of ammonia or amines on mercury salts, 1906, A., i, 935.

abnormal increase of solubility with

organic substances, 1906, A., ii, 75. amorphous precipitations. I. Partial cleavage of bivalent bases on precipitation of chromic or aluminium hydroxide, 1906, A., ii, 343.

amorphous precipitations. II. Basic salts of bivalent metallic oxides, II. Basic

1906, A., ii, 344.

chromates and mercuric chloride, 1912,

A., ii, 648.

Strömholm, Daniel, and Theodor Svedberg, the radioactive elements. and II., 1909, A., ii, 200, 849.

Strohmer, Friedrich, respiration of sugarbeet root, 1903, A., ii, 566.

field experiments on calcium cyanamide with sugar-beet, 1907, A., ii, 646. the storage and transportation of

sucrose in the beet (Beta vulgaris), 1908, A., ii, 726.

Strohmer, Friedrich, Hermann Briem, and Ottokar Fallada, the influence of light on the composition of the sugar-beet, 1911, A., ii, 763.

production of sucrose in sugar-beet,

1912, A., ii, 1205.

Strohmer, Friedrich, and Ottokar Fallada. action of ammonium chloride on aqueous sucrose solutions, 1906, A., i. 729.

composition of the seed of sugar-beet,

1906, A., ii, 484.

presence of optically active non-sugars in the beet influencing the polarisation results, 1911, A., ii, 427.

manuring of sugar-beets with sodium

chloride, 1912, A., ii, 83.

Stroman, A., chemical experiments on flames, 1907, A., ii, 8.

experiment on colour dispersion, 1907,

A., ii, 917.

Stroman, Hermann, a demonstration of atmospheric humidity and cold produced by evaporation, 1909, A., ii,

Stromberg, Heinrich, the changes in the blood-clotting produced by loss of blood in an animal, 1912, A., ii, 59.

the methods of investigation and characters of the blood-clotting process, 1912, A., ii, 59.

Stromeyer, C. E., grouping of the chemical elements, 1907, A., ii, 445.

Strong, Richard Pearson, virulence and immunising power of micro-organisms, 1905, A., ii, 843.

Strong, William Walker, penetrating radiation, 1908, A., ii, 142.

radioactivity of compounds of erbium, potassium, and rubidium, 1909, A., ii. 715.

uranium and neodymium aggregates, 1910, A., ii, 812.

Strong, William Walker. See also Harry Clary Jones.

Stroschein, Fritz. See Ernst Mohr.

Strschalkovsky, M., action of a mixture of ethyl a-bromopropionate and ptolualdehyde on zinc, 1909, A., i, 304. Strube, F. See Lothar Wöhler.

Struck, H. See Wilhelm Matthies.

Strübel, Paul. See Emil Abderhalden. Strübin, Paul. See Adolf Kaufmann.

See Richard. Walther Struensee. Schrauth.

Strum, S. See Erich Beschke.

Strunck, Ernst. See Daniel Vorländer. Strunk, H., and Hans W. Priess, the existence of sulphur fixed as sulphite in wool, 1912, A., i, 147.

Strusiewicz, Boleslaus von, the nutritive value of amino-compounds, 1905, A.,

ii, 734.

Struszyński, M., and Wojeiech Sventoslavsky, preparation of solid diazonium salts by means of nitrosyl chloride, 1912, A., i, 55.

Struthers, Robert de Jersey Fleming, some interactions of metallic cyanides with organic bases, 1905, P., 95.

some reactions of phenylhydrazine with metallic cyanides and other

salts, 1908, P., 179.

Struthers, Robert de Jersey Fleming, and James Ernest Marsh, photographic radiation of some mercury compounds, 1905, T., 377; P., 67.

Struthers, Robert de Jersey Fleming. See also James Ernest Marsh.

Strutt, John William. See (Lord)
Rayleigh.

Strutt, (Hon.) Robert John, radioactivity of certain minerals and mineral waters, 1904, A., ii, 306.

radioactive minerals, 1905, 787.

distribution of radium in the earth's crust, and the earth's internal heat, 1906, A., ii, 411, 716.

origin of the gases evolved by mineral

springs, 1907, A., ii, 791.

association of helium and thorium in minerals, 1908, A., ii, 144.

helium and radioactivity in rare and common minerals, 1908, A., ii, 649.

accumulation of helium in geological time, 1908, A., ii, 922; 1910, A., ii, 9, 175, 920.

helium in saline minerals, and its probable connexion with potassium, 1908, A., ii, 923.

leakage of helium from radioactive minerals, 1909, A., ii, 457.

spontaneous luminosity of a uranium

mineral, 1909, A., ii, 951.
measurements of the rate at which
helium is produced in thorianite
and pitchblende, with a minimum
estimate of their antiquity, 1910,
A., ii, 1023.

the radium content of basalt, 1910,

A., ii, 1025.

a chemically active modification of nitrogen produced by the electric discharge, 1911, A., ii, 482; 1912, A., ii, 153, 477, 935.

the flame arising from the nitrogenburning arc, 1911, A., ii, 1056.

the after-glow of electric discharge and kindred phenomena, 1912, A., ii, 126.

the after-luminosity of electric discharge in hydrogen observed by Hertz, 1912, A., ii, 725.

molecular statistics of some chemical actions, 1912, A., ii, 1045.

Strutt, (Hon.) Robert John, absorption of helium and other gases under the electric discharge, 1912, A., ii, 1052.

Strutt, (Hon.) Robert John, and Alfred Fowler, spectroscopic investigations in connexion with the active modification of nitrogen. II. Spectra of elements and compounds excited by the nitrogen, 1912, A., ii, 214.

Strutt, (Hon.) Robert John. See also

Alfred Fowler.

Strutz, Anton. See Carl Hahn.

Struve, Heinrich [Wilhelm] von, occurrence and properties of choline, 1903, A., ii, 116.

choline in plant and animal organisms,

1904, A., ii, 364.

hot-gilding and discoloration of gilded surfaces, 1907, A., ii, 403. detection of arsenic by means of the

Marsh apparatus, 1908, A., ii, 131. Struye, Karl, molecular weight of hexa-

contane, 1908, A., i, 749.

Struve, Karl. See also Robert Behrend. Strzelecka, (Mlle.) Marie, xylene thiocyanates, 1909, A., i, 791.

the action of ammonia on aromatic thiocyanates, 1911, A., i, 196.

Strzyzowski, Casimir, estimation of chlorine in animal secretions, organs, foods, etc., 1903, A., ii, 450.

modification of Marsh's apparatus,

1904, A., ii, 444.

a new metabolic product in the urine in severe cases of diabetes, 1906, A., ii, 472.

detection of arsenic in foods or organs,

1907, A., ii, 299.

the capacity of the animal body to produce multivalent precipitating

sera, 1910, A., ii, 623.

occurrence of mercury in the hair of persons who have received subcutaneous doses of mercury compounds; micro-chemical detection of very small quantities of mercury, 1912, A., ii, 1213.

Stscherbina, Nadezdy, mono- and diacetyldihydrophenazines, 1907, A., i,

353.

Stuart, Alexander Thomas, Volhard's method for the estimation of chlorine in potable waters, 1911, A., ii, 926.

Stuart, William, etherisation as an aid in rhubarb forcing, 1905, A., ii, 756.

Stubbs, Clifford Morgan, the influence of inactive electrolytes on the optical activity of l-malic acid in aqueous solution, 1911, T., 2265; P., 225.

See Albert

Stubbs, James Arthur. Ernest Dunstan. Stuchetz, Josef, substituted rhodanic acids and their aldehyde condensation products. IV., 1905, A., i,

action of sodium hypobromite on some amino-compounds, 1906, A., i,

Stuchlik, Leo, analysis of Margueles' platinum sulphate, 1904, A., ii, 742.

Stuckert, Ludwig, refraction of gases; its application to analysis, 1910, A., ii, 245, 342.

Bernhard. See Alexander Studer, Tschirch.

Studzinski, J., poisonous properties of blood, 1910, A., ii, 624.

the depressor action of the suprarenals,

1911, A., ii, 509.

Stüber, W., a ptomaine resembling veratrine, 1904, A., ii, 302.

estimation of potassium nitrate in meats and flesh products, 1905, A., ii. 765.

composition of tomatoes and tomato

juice, 1906, A., ii, 575. Stüber, W. See also K. Farnsteiner. Stümmer, Rudolf, condensation products

of carbazole and diphenylene oxide with phthalic anhydride, 1907, A., i,

Stuer, Bernhard Conrad, action of ammonia on sulphuryl chloride [and carbonyl chloride], 1905, A., i, 579.

Stuer. Bernhard Conrad. See also Arthur Hantzsch.

Stüting, Leander, red region of the arc spectra of nickel, cobait, and chromium, 1909, A., ii, 359.

Stützel, Hermann. See Julius Schmidt. Stull, Wilfred Newsome. See Theodore

William Richards.

Stumpf, Felix, test of Beer's law of absorption, 1909, A., ii, 198.

optical investigation of an optically active liquid crystalline substance, 1910, A., ii, 809; 1912, A., ii, 336.

Sturli, G., trachyte from Monte Amiata in Tuscany and the supposed element X contained therein, 1903, A., ii, 159.

Sturm, E. See Georg Wilhelm August Kahlbaum.

Stutterheim, G. A., [detection and] estimation of dextrose in urine, 1912, A., ii, 100.

Stutz, Karl, the anhydride of mandelic

acid, 1912, A., i, 32.

Stutzer, Albert, action of nitrites on plants, 1906, A., ii, 570.

estimation of digestible proteins in foods, 1906, A., ii, 820.

Stutzer, Albert, amounts of potassium and other important constituents in various grasses, 1907, A., ii, 47.

pot experiments with soils containing

copper, 1907, A., ii, 47.

pot experiments on the action of calcium cyanamide, 1907, A., ii, 48. action of Wolter's phosphate, 1907,

A., ii, 48.

action of very large amounts of ammonium sulphate in presence of organic matters and calcium carbonate, 1907, A., ii, 645.

action of nitrite and inoculating soil on soja beans, 1907, A., ii, 646. action of calcium nitrate, 1907, A., ii,

use of calcium nitrate in oxidising

fusions, 1907, A., ii, 906.

the organic compounds of nitrogen, phosphorus, and sulphur in vegetables, 1908, A., ii, 124.

manurial experiments with calcium cyanamide, 1908, A., ii, 623.

manuring experiments with calcium cyanamide for potatoes, 1908, A., ii, 726.

action of calcium evanamide on carrots. kohl-rabi, and mangolds under damp climatic conditions, 1909, A., ii, 260.

manurial experiments with calcium nitrate on potatoes, 1909, A., ii,

manurial experiments with calcium nitrate on tobacco and tomatoes, 1909, A., ii, 929.

analysis of calcium cyanamide, 1911,

A., ii, 777. Stutzer, Albert, and Samuel Goy, estimation of calcium nitrate and calcium

nitrite, 1911, A., ii, 933.

Stutzer, Albert, and Ernst Merres, action of the enzymes of gastric and pancreatic juices on vegetable proteins. II., 1908, A., ii, 404.

Stutzer, Albert, Ernst Merres, and Leopold Seidler, estimation of nitrogenous metabolism products in fæces, 1908,

A., ii, 443.

Stutzer, Albert, and Alfred Reich, analysis of the water of the Dead Sea,

1907, A., ii, 791.

Stutzer, Albert, and Friedrich Reis, calcium cyanamide and some of its decomposition products, 1910, A., ii, 537.

Stutzer, Albert, and Wilhelm Rothe. action of some soil micro-organisms on ammonium sulphate and sodium nitrate, 1905, A., ii, 546.

Stutzer, Albert, and Julius Söll, the physiological action of cyanamide and some of its derivatives, 1910, A., ii, 641.

estimation of nitrogen existing as cyanamide and as dicyanodiamide in calcium cyanamide, 1910, A., ii,

1009.

Stutzer, Albert, Hans Wangnick, and Wilhelm Rothe, further simplification of the method of estimating the pepsin-soluble nitrogen of foods, 1906, A., ii, 820.

Stutzer, Albert, and Josef Edmund von Wolosewicz, estimation of proteinnitrogen contained in beet-molasses,

1906, A., ii, 912.

Stutzer, Albert. See also Max Haase, Detlev Lienau, Wilhelm Rothe, Paul Salecker, Leopold Seidler, Julius Söll,

and David Warmbrunn.

Suais, Emile, formation of hydrols and aldehydes; action of diazo-hydroxides on amino-derivatives of diand tri-phenylmethane, 1907, A., i, 568.

Subak, Walther, condensation of isobutaldehyde with m-hydroxybenzaldehyde and m-ethoxybenzaldehyde, 1903,

A., i, 493.

Subbotin, W. See Leo A. Tschugaeff. Suchannek, Walter. See Felix Kaufter. Sucheni, Antoni, amalgam potentials,

1906, A., ii, 826.

Suchodski, W. A., compressibility coefficients of liquids, 1910, A., ii,

823

Suckert, Friedrich. See Wolf Müller. Suckrow, Fritz. See Bernhard Schöndorff.

Sudborough, John Joseph, influence of radium radiations on labile stereoisomerides, 1904, P., 166.

the formation and hydrolysis of esters of ketonic acids, 1912, T., 1227; P.,

93

Sudborough, John Joseph, and Stanley Hoskings Beard, additive compounds of s-trinitrobenzene with arylamines; combination as affected by the constitution of the arylamine, 1910, T., 773; P., 71.

additive compounds of phenols and phenolic ethers with aromatic polynitro-derivatives, 1911, T., 209;

P., 5

Sudborough, John Joseph, and Thomas Huuss Davies, diortho-substituted benzoic acid. Part VI. Conversion of methyl into ethyl esters, 1905, P., 87; discussion, P., 87. Sudborough, John Joseph, and Morton James Pryce Davis, esterification constants of substituted acrylic acids. Part IV., 1909, T., 975; P., 147.

Sudborough, John Joseph, and James Mylam Gittins, the esterification constants of the normal fatty acids,

1908, T., 210; P., 14.

esterification constants of substituted acrylic acids. Part III., 1909, T., 315; P., 31.

Sudborough, John Joseph, and Harold Hibbert, differentiation of primary, secondary, and tertiary amines; preliminary note, 1904, P., 165.

estimation of primary, secondary, and tertiary amines. Part I., 1909, T.,

477 ; P., 75.

Sudborough, John Joseph, Harold Hibbert, and Stanley Hoskings Beard, additive compounds of anhydrous magnesium bromide with organic oxygen and nitrogen compounds, 1904, P., 165.

Sudborough, John Joseph, and Thomas Campbell James, a-chlorocinnamic acids, 1905, P., 86; 1906, T.,

105.

Sudborough, John Joseph, and Norman Picton, influence of substituents in the trinitrobenzene molecule on the formation of additive compounds with arylamines, 1906, T., 583; P., 84.

Sudborough, John Joseph, and David James Roberts, esterification constants of substituted acrylic acids, 1905, T.,

1840 : P., 86.

Sudborough, John Joseph, and William Roberts, diortho-substituted benzoic acids. Part V. Formation of salts from diortho-substituted benzoic acids and organic bases, 1903, P., 286; 1904, T., 234.

Sudborough, John Joseph, and Ebenezer Rees Thomas, esterification constants of substituted acrylic acids. Part II., 1907, T., 1033; P., 146.

the separation of mixtures of organic acids by partial esterification, 1911,

T., 2307; P., 279.

Sudborough, John Joseph, and John Thomas, the addition of bromine to cinnamic acid and its esters; preliminary notice, 1906, P., 318.

the addition of bromine to unsaturated compounds. Parts I. and II., 1907, P., 147; 1910, T., 715, 2450; P.,

294.

Sudborough, John Joseph, and Walter Thomas, simple method for the estimation of acetyl groups, 1905, T., 1752; P., 88. Sudborough, John Joseph, and Kenworthy James Thompson, the action of alkalis on cinnamic acid dibromide and its esters, 1903, T., 666; P., 106.

B-bromoeinnamic acids, 1903, T., 1153;

P., 204.

Sudborough, John Joseph, and (Miss)
Margaret Kathleen Turner, the esterification constants of some substituted
acetic and benzoic acids, 1912, T., 237;
P 5

Sudborough, John Joseph, and Gwilym Williams, the addition of bromine to the α- and β-chloro- and bromo-cinnamic acids and their methyl esters,

1907, P., 146.

Sudborough, John Joseph. See also William Arthur Bone, Harold Hibbert, Thomas Campbell James, Ebenezer Rees Thomas, and Thomas Williams.

Süchting, H., injurious action of crude potassium salts on potatoes, 1905,

A., ii, 277.

vegetation experiments and critical studies on the relation of the activity of sodium nitrate and ammonium sulphate, 1907, A., ii, 646.

improved method for estimating the acidity of soils, 1908, A., ii, 231.

a stirrer for vacuum distillation flasks, 1909, A., ii, 35.

Süchting, H., and Th. Arnd, Albert's method of determining soil acidity, 1910, A., ii, 364.
Süchting, H. See also Bruno Tacke.

Süss, J., crystallisation of mixed solutions of manganous chloride and potassium chloride, 1912, A., ii, 1175.

Süss, Josef Hans, conductivity measurements with organic acids, 1906, A., i,

86.

Süss, Paul, saponin contained in Lychnis flos cuculi, 1903, A., i, 192.

occurrence of salicylic acid in berries and stone fruits, 1904, A., ii, 71. Süsser, Arthur. See Heinrich Wieland.

Süsser, Arthur. See Heinrich Wieland. Süsskind, Elias, application of Grignard's reaction to ethyl chloroacetate, 1906, A., i, 133.

Supfie, Karl, estimation of iron, ammonia, and nitrous acid in waters by means of the Autenrieth-Koenigsberger colorimeter, 1911, A., ii, 940.

Sugden, S., the action of the "luminator" apparatus for treating hard

water, 1912, A., ii, 454.

Sugiura, K., and Philip Adolph Kober, iodometric copper titrations, 1912, A., ii, 689.

Sugiura, K. See also Philip Adolph Kober. Suhl, Rüdger. See Theodor Zincke.

Suida, Hermann, photochemical behaviour of nitroterephthalaldehyde, 1912, A., i, 117.

autoxidation of benzenoid hydrocarbons when exposed to light, 1912, A., i, 957.

See also

Suida, Hermann.

Wegscheider.
Suida, Hermann, jun., unsymmetrical aromatic derivatives of oxamide, 1910,

A., i, 665; 1911, A., i, 365.
Suida, Wilhelm, behaviour of coal-tar

dyes towards starch, silicic acid, and

silicates, 1905, A., i, 75.
influence of active groups in the
textile fibres on the process of
dyeing, 1905, A., i, 457.

causes of the coloration of animal fibres, 1907, A., ii, 112; 1910, A., i.

761.

picrates, 1908, A., i, 523.

salt formation by aminophenols, 1911, A., i, 284.

Suida, Wilhelm. See also Julius Mauthner, P. Gelmo, and Fritz Glassner.

Sulima, Th. See Efim Semen London.

Sullivan, Arthur L., and Charles Albert Crampton, crystalline appearance of calcium tartrate as a distinctive and delicate test for the presence of tartaric acid or tartrates, 1906, A., ii, 907.

Sullivan, Eugene Cornelius, calcium sulphate in ammonium sulphate

solution, 1905, A., ii, 453.

chemistry of ore disposition; precipitation of copper by natural silicates, 1905, A., ii, 642.

Sullivan, Eugene Cornelius, and William C. Taylor, estimation of zine by

weighing it as zinc sulphate, 1910, A., ii, 455. Sullivan, Michael Xavier, digestion in

elasmobranches, 1906, A., ii, 100. action of fertilising salts on plant

action of fertilising salts on plant enzymes, 1909, A., ii, 514.

origin of creatinine in soils, 1912, A., ii, 86.

Sullivan, Michael Xavier, and F. R. Reid, oxidation in soil, 1912, A., ii, 483.

Sullivan, Michael Xavier. See also Oswald Schreiner.

Sulser, Jacob. See Stanislaus von Kostanecki.

Sulzberger, August. See Fritz Fichter. Sulzberger, Nathanael, [azo-colouring matters from the amino-anilides of the higher fatty acids], 1908, A., i, 226. Sulzberger, Nathanael, [interaction of diazo-salts and aromatic amides of the higher fatty acids, 1908, A., i,

preparation of additive compounds of chloral with amides, 1908, A., i,

[esters of salicylic acid and the higher aliphatic acids], 1909, A., i, 304. Sulze, Walter, the carbamino-reaction, 1911, A., ii, 128.

Sulzer, H., preparation of ammonia and formic acid from calcium cyanamide, 1912, A., i, 610.

N. N. See Vetscheslav Sum. Tischtschenko.

Summerer, A. See Alfred Werner.

Sumner, Francis Bertody, relations between fishes and their surrounding medium, 1907, A., ii, 567.

Sumner, J. B. See Henry Augustus

Sumuleanu, Cornelius, 6-nitroso-3:4-dimethoxybenzoic acid, 1903, A., i,

aminovanillin, 1903, A., i, 634.

See Heinrich Gold-Sunde, Einar. schmidt, and John Sebelien.

Sundell, Ivar. See Gustav Keppeler. Sunder, Charles, sodium hypochlorite,

1903, A., ii, 144.

Sundstrom, Carl, rapid method for estimating sulphur in coal and coke, 1903, A., ii, 326.

Sundvik, Ernst Edvard, formation of uroxanic acid and of allantoin from uric acid, 1904, A., i, 478.

beeswax. II. Psyllostearyl alcohol as

a constituent, 1907, A., i, 887. psylla wax. IV. Psyllic acid and its salts, 1908, A., i, 123.

analysis of organic mixtures with the aid of the refractometer, 1908, A., ii. 990.

xanthine substances from uric acid, 1911, A., i, 584.

beeswax. III. Are the alcohols from psylla wax and beeswax identical? 1911, A., i, 599.

xanthine derivatives from uric acid. IV. Preparation of xanthine and hypoxanthine, 1912, A., i, 321.

Supan, Alexander. See Wilhelm Steinkopf.

Suppan, Leo R. A. See Charles Edward Caspari.

Surdo. See Lo Surdo.

Surenjanz, Jac. See Leo A. Tschugaeff. Surgunoff, N. I., a bole-like mineral from the Southern Urals, 1904, A., ii 669.

Surgunoff, N. I., crystallography of the anhydride of menthyl xanthate, 1909, A., i, 244.

monoclinic variety of sodium alums.

1909, A., ii, 1001.

crystalline form and optical characters of pinocampheol methyl xanthate. 1912, A., i, 120.

Surre, Léon, detection of hexamethylenetetramine and formaldehyde in wine,

1910, A., ii, 808.

estimation of nicotine in the presence of pyridine bases, 1911, A., ii, 778.

Surveyor, Nusservanji Fakirji, influence of sodium nitrite on metabolism. 1906, A., ii, 560.

excretion of urobilin in disease, 1908,

A., ii, 1057.

Sury, Joseph von, radioactivity of some Swiss mineral springs, 1907, A., ii, 662.

Sustschinsky, Peter von, geikielite, ilmenite, and hæmatite, 1903, A., ii, 84.

examination of some artificially prepared compounds, 1904, A., ii, 30. artificial formation of magnetite and

sillimanite, 1907, A., ii, 278.

Sutcliffe, Robert. See William Colebrook Reynolds.

Suter, F. See Th. Knapp.

Suter, Moritz. See Carl Graebe.

Sutherland, (Miss) Brenda. See (Miss) Leila Green.

Sutherland, (Miss) Maggie Millen Jeffs. See George Gerald Henderson.

Sutherland, William, molecular constitution of aqueous solutions, 1906, A., ii, 603.

nature of electrical and chemical stimulation, 1906, A., ii, 871.

a molecular theory of the electric properties of nerve, 1906, A., ii, 871.

chemistry of globulin, 1907, A., i, 569. ionisation in solutions and two new types of viscosity, 1907, A., ii, 599.

another method of measuring large molecular masses, 1908, A., i, 930.

molecular diameters, 1909, A., ii, 222; 1910, A., ii, 116.

the fundamental constant of atomic vibration and the nature of dielectric capacity, 1910, A., ii, 116.

constitution of water, 1910, A., ii,

the mechanical vibration of atoms, 1910, A., ii, 946.

weak electrolytes, and towards a dynamical theory of solutions, 1911, A., ii, 703.

Sutherland, William Dunbar, and David McCay, observations on the inhibitory influence exerted by hypertonic saline solutions and calcium chloride solutions on the action of specific hæmolysins with suggestions as to the therapy of blackwater fever, 1910. A., ii. 223.

Sutherst, Walter Frederick, reversion of superphosphate of lime in the soil,

1903, A., ii, 38.

estimation of available phosphoric acid in manures, 1903, A., ii, 390.

weathered hay, 1905, A., ii, 649. root-sap acidity, 1906, A., ii, 300.

manganese compounds as fertilisers for maize, 1908, A., ii, 528.

rapid volumetric estimation of sugar. 1912, A., ii, 99.

Suto. Kenzo. elementary analysis of organic substances, 1909, A., ii, 270.

Suto, Kenzo. See also Muneo Kumagawa

Sutter, Theodor. See Franz Sachs.

Sutthoff, Wilhelm, the nature of the cutin contained in "crude fibre," 1909, A., ii, 695.

Wilhelm. Sutthoff, See also Josef

König, and Josef Tillmans. Sutton, Harvey, high temperatures and

heat stroke, 1908, A., ii, 972. Suwa, Akikazu, the extractives from fish

flesh, 1909, A., ii, 77. extracts of selachian organs. I. Ex-

tracts of acanthias muscle, 1909, A., ii, 685.

organ-extracts of selachian fishes. II.,

1909, A., ii, 819.

comparative investigation on the composition and cleavage products of different silks. XI. The monoaminoacids of the cocoon of the Japanese silk "haruko," 1910, A., i, 794.

the fate of non-nitrogenous components of aromatic amino-acids in the normal body, 1911, A., ii, 634.

Suwa, Akikazu, See also Emil Abder-

halden.

Suyver, Jan Frederik, transformations of the isomeric trithioaldehydes, 1905, A., i, 741.

Shigehiro, action of highly Suzuki, diluted potassium iodide on plants, 1903, A., ii, 173.

poisonous action of potassium ferrocyanide on plants, 1903, A., ii, 174. injurious effect of an excess of lime applied to the soil, 1905, A., ii,

manuring with kainite, 1905, A., ii, 348.

Suzuki, Shigehiro, formation of anthocyanin in barley stems, 1906, A., ii, 884.

formation of humus, 1906, A., ii,

humus formation, 1908, A., ii, 127, 421.

continuous growth of peas on the same soil, 1908, A., ii, 617.

the formation of oxides of nitrogen during denitrification, 1911, A., ii, 916.

Suzuki, Shinkichi K., proteolytic changes in Lima bean during germination,

1907, A., ii, 805.

Suzuki, Shinkichi K., and Edwin Bret Hart, quantitative estimation of lactic acid in cheese, 1910, A., ii, 81.

Suzuki, Shinkichi K., E. G. Hastings, and Edwin Bret Hart, the production of volatile fatty acids and esters in Cheddar cheese, and their relation to the development of flavour, 1910, A., ii, 738.

Suzuki, Tatsuji. See Max Bodenstein. Suzuki, Tsuneo, oximes and imides of benzenedisulphonic acids, 1908, A.,

the change of cobaltous into cobaltic nitrite, 1910, T., 726; P., 27.

Suzuki, Umetaro, T. Shimamura, and S. Odake, oryzanin, a constituent of rice husks and its physiological significance, 1912, A., ii, 980.

Suzuki, Umetaro, and Kiyohisa Yoshimura, occurrence of salts of anhydrooxymethylenediphosphoric acid phytin in plants, 1908, A., ii, 124.

Suzuki, Umetaro, Kiyohisa Yoshimura, and Shōzo Fuji, proteins of rice seeds,

1909, A., ii, 927.

Suzuki, Umetaro, Kiyohisa Yoshimura, and Ryngo Inouye, hydrolysis of wild

silk, 1909, A., i, 859.

Suzuki, Umetaro, Kiyohisa Yoshimura, and M. Takaishi, an enzyme, phytase, which decomposes anhydroxymethylenediphosphoric acid, 1908, A., i, 235.

Suzuki, Umetaro, Kiyohisa Yoshimura, M. Yamakawa, and Y. Irie, extractives of fish muscle, 1909, A., ii,

910.

Suzuki, Umetaro. See also Eugen Bamberger, Emil Fischer, and Hermann Leuchs.

Suzzi, Filippo, use of mineral oil for the determination of the Maumené figure of oils, 1905, A., ii, 619.

Svedberg, Andrea Andreen. See Theodor Svedberg.

1125

Svedberg, Theodor, electric preparation of colloidal metals, 1905, A., ii, 817. electrical preparation of colloidal solu-

tions, 1906, A., ii, 330.

intrinsic movement of particles in colloidal solutions, 1907, A., ii, 17, 160.

electric synthesis of colloids, 1907, A., ii, 529; 1908, A., ii, 255.

stability of colloidal solutions, 1907, A., ii, 535; 1908, A., ii, 364.

significance of the movement of particles in colloidal solutions in relation to the limits of validity of the second law of thermodynamics, 1907, A., ii, 536.

colloidal solutions, 1908, A., ii, 23. new proof of the existence of molecules, 1909, A., ii, 277, 561, 728.

equilibrium in the system: colloidal sulphur-solution of crystalloid, 1909, A., ii, 309.

existence and properties of dispersive systems in the region between colloidal and crystalloidal solutions,

1909, A., ii, 389. diffusion-velocity and size of particles in disperse systems, 1909, A., ii,

645; 1912, A., ii, 142.

preparation of colloidal solutions by the disintegration of metals by ultraviolet light, 1910, A., ii, 23.

existence and properties of disperse systems in the region separating colloidal and crystalloidal solutions, 1910, A., ii, 108.

formation of disperse systems by metals under the influence of ultraviolet light and Röntgen rays, 1910,

A., ii, 277.

formation of ultra-microscopic gold particles by the action of ultraviolet light on solutions of gold salts, 1910, A., ii, 509.

validity of the Boyle-Gay-Lussac laws for colloidal solutions, 1910, A., ii,

772.

proof of the movements of dissolved molecules demanded by the molecular kinetic theory, 1910, A., ii, 1047.

test of the validity of Van der Waals's equation of condition for colloidal solutions, 1912, A., ii, 29.

spontaneous alterations of concentration in solutions and gases. I. and II., 1912. A., ii, 905, 906.

II., 1912. A., ii, 905, 906.

Svedberg, Theodor, and Knud Estrup, determination of the dimensional distribution of the colloidal particles in a disperse system, 1912, A., ii, 143.

Svedberg, Theodor, and Katsuji Inouye, validity of the Boyle-Gay-Lussac laws for colloidal solutions. II., 1911, A., ii, 703.

the structure of ultra-microscopic par-

ticles, 1911, A., ii, 866.

ultra-microscopic observation of a temperature coagulation, 1911, A., ii, 1077. the Brownian movement of particles

in colloidal solutions. III., 1912, A., ii, 143.

Svedberg, Theodor, and Nils Pihlblad, new proof of the existence of mole-

cules, 1910, A., ii, 946.

Svedberg, Theodor, and Andrea Andrean Svedberg, rate of diffusion and relative size of dissolved molecules, 1911, A., ii, 375.

Svedberg, Theodor. See also Daniel

Strömholm.

Sventoslavsky, Wojciech [Waclawo-witsch], thermochemical investigations of organic compounds; aliphatic series, 1909, A., ii, 23.

thermochemical investigations of organic compounds: aromatic series,

1909, A., ii, 213.

thermochemical investigations of organic compounds. III. Nitrogen compounds, 1909, A., ii, 547.

heat of the reaction of formation of quinone dichloroimides, 1909, A., ii,

thermochemical investigations on nitro-compounds, 1909, A., ii, 863. calorimetric investigation of the formation of azo-compounds, 1909, A., ii,

864. thermochemistry of nitroso-com-

pounds, 1909, A., ii, 864. an electrical apparatus for the direct determination of the water value of a calorimeter, 1910, A., ii, 102.

thermochemical investigations. IV.-VII. Sulphur, halogen, and unsaturated compounds, 1910, A., ii, 187.

thermochemical investigations; diazoand azo-compounds, 1910, A., ii, 588, 691; 1911, A., ii, 667.

thermochemical analysis of tautomeric compounds, 1911, A., ii, 188.

thermochemical studies. V. Diazoand azo-compounds; monoamines, 1911, A., ii, 967.

Sventoslavsky, Wojciech, S. Gerich, W. Osmulsky, Skrjischevsky, and S. Tschegoleff, thermochemistry of nitrous acid, 1909, A., ii, 794.

Sventoslavsky, Wojciech See also Wladimir Georg Schaposchnikoff, and

M. Struszyński.

Syoboda, Hanno, the unsuitability of the Märcker-Bühring solution for the estimation of total phosphoric acid in basic slags, 1904, A., ii, 147.

Märcker-Bühring's solution, Wagner's magnesium citrate mixture, and ferrous citrate magnesium mixture,

1905, A., ii, 419.

phosphoric acid with different citric acid solubility as manure for meadows, 1909, A., ii, 177.

Svoboda, Hanno. See also Josef Schindler. Svoboda, Josef, abnormal course of Michael's condensation, 1903, A., i, 174.

Swaab, B., estimation of carbon dioxide in the air, 1904, A., ii, 367.

Swaab, E. J., distillation of ether, 1906, A., i, 922.

Swadkowsky, W. See K. Lazinsky. Swain, Robert Eckles, scatosine, 1903. A., ii, 225.

urine of the coyote, 1905, A., ii, 186.

Swain, Robert Eckles, and W. G. Bateman, toxicity of thallium salts, 1910, A., ii, 229.

Swann, William Francis Gray, specific heats of air and carbon dioxide at atmospheric pressure by the continuous electrical method at 20° and 100°, 1909, A., ii, 465.

Swart, S. P., the permeability of artificial lipoid membranes for pro-fer-

ments, 1907, A., ii, 934.

Swarts, Frédéric, difluoroethyl alcohol, 1903, A., i, 222.

hydrolysis of organic haloids by insoluble oxides in presence of water, 1903, A., i, 725.

difluoroacetic acid, 1903, A., i, 727. alkylamines containing fluorine, 1904, A., i, 853, 977.

difluorochloroacetic acid, 1906, A., i,

chlorination of difluoroethyl alcohol, 1907, A., i, 669.

heat of formation of some organic fluorine compounds, 1907, A., ii, 9;

1908, A., ii, 354; 1909, A., ii, 297. a new basis for atomic weights, 1907, A., ii, 612.

preparation of difluoroethyl alcohol, 1908, A., i, 752.

difluoroethyl bromide and tetrafluorodiethyl hydrogen phosphate, 1909, A., i, 202.

fluorodibromoethane and as-fluorobromoethylene, 1909, A., i, 689.

heat of formation of aniline and some of its derivatives, 1909, A., ii, 296.

Swarts, Frédéric, some fluoro-derivatives of methane, 1910, A., i, 293.

fluorobromo-derivatives containing two atoms of carbon, 1911, A., i, 762.

Swartz, Mary Davies, the nutritive value of some soluble pentosans, mannans, lævulans, and galactans, 1910, A., ii,

Swaving, Antonie Johan, influence of feeding with cottonseed meal and sesame cakes on the composition of butter fat, 1903, A., ii, 340.

Sweet, Joshua Edwin, and Phoebus A. Levene, nuclein metabolism in a dog with an Eck's fistula, 1908, A., ii, 119.

Swellengrebel, N. H., plasmolysis and turgor-regulation of pressed veast. 1905, A., ii, 473.

Swellengrebel, N. H. See also C. S. Stokvis.

Swett, Charles E., separation of bismuth from alloys containing also lead and tin, 1910, A., ii, 1004.

Swett, Otis D., solvents for use with the Munroe crucible, 1909, A., ii, 755. apparatus for the estimation of arsenic.

1910, A., ii, 895.

Swietoslawski. See Sventoslavsky.

Swinburne, James, separation of oxygen by cold, 1911, A., ii, 387.

Swinne, Richard, some relations existing between the radio-elements, 1912. A., ii, 219.

dependence of the density and surface tension of liquids on the temperature, 1912, A., ii, 432.

Swinne, Richard. See also Oskar Lutz. and Paul Walden.

Swinton, Alan Archibald Campbell, transit of ions in the electric arc, 1906, A., ii, 69.

conversion of diamond into coke in high vacuum by cathode rays, 1909, A., ii, 458.

Swinton, Alan Archibald Campbell. See also (the Hon. Sir) Charles Algernon Parsons.

Swinton, Alan Edulf. See Frederick Daniel Chattaway.

Swirlowsky, Ed., action of dilute hydrochloric acid on proteins, 1906, A., i, 775.

Sy, Albert Philip, new stability test for nitrocellulose powders, 1903, A., ii,

analysis of maple products, 1906, A., ii. 811.

apparatus for polarising at 87°, 1908, A., ii, 1076.

Sylvester, John Percival. See Henry Barker Hill.

Syme, William Anderson. See Solomon Farley Acree.

Symes, William Legge, density of expired air and respiratory quotient, 1904, A., ii, 622.

Neumann's method of estimating chlorides, 1905, A., ii, 416.

the action of gitalin on the excised frog's heart, 1912, A., ii, 790.

Symes, William Legge, and Victor Herbert Veley, the effect of some local ansesthetics on nerve, 1911, A., ii, 508.

Symes, William Legge. See also John Addyman Gardner, John Percy Lockhart Mummery, Victor Herbert Veley, and Augustus Désiré Waller.

Symmers, Douglas, organic phosphorus in urine, 1905, A., ii, 102; 1906, A.,

ii, 186.

Syniewski, Victor, action of formaldehyde on starch; iodo-compound of amylodextrin, 1903, A., i, 68. constitution of starch, 1903, A., i,

69.

mlrom

Sypkens-Toxopéus, W. See Otto A. Oesterle.

Szabrański, Władislaus. See Stanislaus von Kostanecki.

Szádeczky, Julius von, earth-gas in Transylvania in the tertiary basin, 1912, A., ii, 171.

Szántó, Olga, the proteolytic action of taka-diastase, 1912, A., i,

815.

Szathmáry de Szachmár, Ladislaus von, [m-hydroxyphenyl mercaptan],1910, A., i, 733.

calcium silicates in cement, 1911, A., ii, 40.

Székely, Alexander. See Gustav Schultz.

Székely, S., estimation of fat by the method of direct hydrolysis, 1912, A., ii, 872.

Széki, Tiberius, di-isoapiole, di-isoeugenol methyl ether, and diasarone, 1906, A., i, 660.

derivatives of asarone, 1906, A., i, 660.

abnormal behaviour of asarylaldehyde, 1909, A., i, 919.

new derivatives in the triphenylmethane series, 1911, A., i, 634.

Széki, Tiberius. See also Rudolf

Fabinyi.

Szelinski, Bruno, [the interaction of hydroaromatic ketones and magnesium aryl haloids], 1909, A., i, 246.

Szelinski, Bruno. See also Walter Dieckmann, and Alfred Einhorn.

Szilárd, Béla, electrolytic preparation of alkyloxides and alkylcarbonates, 1906, A., i, 621.

autocatalysis and decomposition in a photochemical system, 1906, A., ii, 425.

colloidal compound of thorium with uranium, 1907, A., ii, 97.

uranyl silver chromate, 1907, A., ii,

radioactivity of uranyl molybdate, 1907, A., ii, 731.

action of certain substances on potassium iodide, 1907, A., ii, 757.

mode of formation of thorianite and uraninite, 1907, A., ii, 888.

action of thorium nitrate and of uranyl nitrate on albumins, 1908, A., i, 68.

colloidal hydroxides of thorium, zirconium, and uranium, 1908, A., ii,

radio-lead, 1908, A., ii, 141.

heterogeneous colloidal hydroxides of uranyl, thorium, zirconium, lead, yttrium, iron, and copper, 1908, A., ii, 197.

actinium and ionium, 1909, A., ii, 663.

isolation and relative activity of uranium-X, 1909, A., ii, 715.

a method of registering the length of the path of α-rays, and a peculiarity of the path, 1909, A., ii, 716.

principal uranium and thorium minerals, 1909, A., ii, 815.

an apparatus for the measurement of radioactivity, 1910, A., ii, 7; 1911, A., ii, 565.

the chemical reactions of radioactive elements, 1911, A., ii, 172.

radioactivity of the thermal springs of Saint Lucasbad (Hungary), 1912, A., ii, 525.

Szili, Alexander, hydroxyl ions of feetal (placental) blood, 1906, A., ii, 867.

acid intoxication, 1906, A., ii, 878. poisoning with inorganic and organic acids, 1909, A., ii, 1042.

Szlagier, Anton von. See Stanislaus von Kostanecki.

Sznadjer, L. See Adolf Kaufmann. Szontágh, Felix von. See Arthur Zaitschek.

Szreter, I., oxidation of oxyhæmoglobin, 1907, A., i, 807.

Szreter, I., action of pure hydrogen peroxide on crystallised oxyhæmoglobin, 1909, A., i, 620.

oxidation of pure oxyhæmoglobin by hydrogen peroxide, 1910, A., i, 599.

Sztankay, Aba von, anisotheobromine, 1907, A., i, 1071.

Szubinski. See Carl Jacobj.

Szücs, Joseph, and Bruno Kisch, the combined action of fluorescent materials and alcohols, 1912, A., ii, 791.

Szulc, L. See Franz Kunckell.

Szwejkowska, (Frl.) M. See Felicia Zwayer.

Szydlowski, Leo, action of nitrous acid

on lysine, 1907, A., i, 18. Szymanowski, Z. See J. See J. Dunin-Borkowski.

Szyszkowski, Bohdan von, neutral salt

action, 1907, A., ii, 238.

experimental and thermodynamic researches on neutral salt action, 1908, A., ii, 761.

new method for calibrating capillary

tubes, 1908, A., ii, 827.

capillary properties of aqueous solutions of fatty acids, 1908, A., ii, 1018. nature of neutral salt action, 1910, A., ii, 703.

colorimetric investigation of neutral salt action, 1912, A., ii, 146.

T.

T., J. C., connexion between boiling point and molecule weight of substances, 1912, A., ii, 1136.

Tabellini, G. See Maurizio Padoa. Taber, Walter C., solubility of calcium

sulphate in phosphoric acid solutions, 1906, A., ii, 852

Taber, Walter C. See also James Munsie Bell, and Herman Schreiber.

Taboury, Felix, action of sulphur and of selenium on magnesium phenyl and magnesium a-naphthyl bromides, 1903, A., i, 748.

action of sulphur and of selenium on the organo-magnesium compounds of mono- and di-halogenated aromatic hydrocarbons, 1904, A., i, 493.

mixed phenolic sulphides; 1905, A., i,

action of sulphur on the organomagnesium derivatives of p-bromoanisole and -phenetole, 1905, A., i,

selenium compounds, 1906, A., i, 834.

Taboury, Félix, action of bromine in presence of aluminium bromide on thiophenol and on phenyl disulphide, 1907, A., i, 837.

presence of selenium in mineral waters from La Roche-Posay, 1909, A., ii,

preparation of bromides from primary and secondary saturated alcohols. 1911, A., i, 173.

Taboury, Félix. See also Fernand Bodroux, and Marcel Godchot.

Tacconi, Emilio, taramellite, silicate of iron and barium, 1908, A., ii. 863.

Tachau, Hermann, the passage of drugs into the sweat, 1912, A., ii, 184.

Tachau, Hermann. See also Gustav Embden, and Ernst Friedmann.

Tacke, Bruno, vegetation experiments with marsh soil, 1903, A., ii, 176.

action of different crude phosphates on peat and other soils, 1903, A., ii, 570. action of calcium cyanamide on peat

soils, 1904, A., ii, 768.

production and utilisation of nitrous oxide by bacteria, 1910, A., ii, 231.

is the hygroscopic nature of "potash salts" an advantage to vegetation? 1910, A., ii, 340.

Tacke, Bruno, and H. Süchting, Süchting's method for estimating acidity of soils, 1908, A., ii, 994.

humic acids, 1912, A., i, 473. Tadokoro, T. See Kiichi Miyake, and Kintaro Oshima.

Taegen, Hermann, the purgative action of sulphur, 1912, A., ii, 964.

Taegener, W. See Otto Sackur.
Tänzler, Paul, coefficient of internal
friction of mixtures of argon and helium, 1906, A., ii, 728.

magnetic behaviour of air, argon, and helium in relation to oxygen, 1908,

A., ii, 152.

Täuber, Ernst, [action of iron in the formation of cyanides], 1903, A., i,

the influence of light on white lead blackened by hydrogen sulphide, 1910, A., ii, 955.

Tafel, Julius, action of canal rays on zinc oxide. II., 1904, A., ii, 463.

polarisation observed during cathodic liberation of hydrogen, 1905, A., ii,

remarkable formation of alkyl derivatives of mercury, 1906, A., i, 941.

cathode potential and electrolytic reduction in sulphuric acid solutions, 1906, A., ii, 263.

Tafel, Julius, intermediate products in chemical reactions, 1907, A., i, 748. reduction of hydroxylamine at copper cathodes, 1908, A., ii, 582.

electrolytic reduction of methyl isoamyl ketone to isoheptane, 1909,

A., i, 766.

unsaturated lead alkyls, 1911, A., i.

Tafel, Julius, and Franz Andre, an anomaly in the reduction of ethyl acetoacetate, 1912, A., i, 234.

Tafel, Julius, and Heinrich Bublitz, the camphidones, 1906, A., i, 43.

Tafel, Julius, and Julius Dodt, reduction of theophylline and paraxanthine, 1907, A., i, 984.

acidity of deoxyxanthines, 1907, A.,

i, 985.

Tafel. Julius, and Bruno Emmert, cause of the spontaneous depression of the cathode potential in the electrolysis of dilute sulphuric acid, 1905, A., ii, 569.

electrolytic reduction of succinimide,

1906, A., ii, 216.

electrolytic reduction of lævulic acid and a-dimethyl-lævulic acid, 1911, A., i, 764.

Tafel, Julius, and Edward Percy Frankland, diamino-acids from deoxyxanth-

ines, 1909, A., i, 829.

Tafel, Julius, and Gustav Friedrichs, electrolytic reduction of carboxylic acids and their esters in sulphuric acid solution, 1904, A., i, 849.

Tafel, Julius, and Hans Hahl, complete reduction of ethyl benzylaceto-acetate, 1907, A., i, 765.

electrolytic reduction of hydroxylamine at copper cathodes, 1908, A., ii, 174.

Tafel, Julius, and August Herterich, 1-methyldeoxyxanthine, 1911, A., i,

Tafel, Julius, and Percy Alfred Houseman, isopurone, 1907, A., i, 984.

Tafel, Julius, and Wilhelm Jürgens, preparation of hydrocarbons by electrolytic reduction of acetoacetic esters, 1909, A., i, 545.

Tafel, Julius, and Paul Lavaczeck, thiopyrrolidone, 1905, A., i, 465;

1907, A., i, 720.

Tafel, Julius, and Rudolf Mayer, hydrolysis of xanthines and deoxyxanthines, 1908, A., i, 742.

Tafel, Julius, and Kurt Naumann, relation between cathode potential and electrolytic reducing action, 1905, A., ii, 224.

Tafel, Julius, and Ephraim Pfeffermann, electrolytic reduction of acetylacetonedioxime: dimethylpyrazolidine, 1903, A., i, 287.

Tafel, Julius, and Wilhelm Schepss. the electrolytic reduction of anisaldehyde, 1911, A., i, 784.

the electrolytic reduction of ketones. 1912, A., i, 8.

Tafel, Julius, and Hermann Stern, ethyl diaminosuccinate, 1905, A., i, 417.

Tafel, Julius, and Herbert Bryan Thompson, electrolytic reduction of ethylbarbituric acid, 1908, A., i, 58.

Tafel, Julius, and Otto Wassmuth, pyrrolidone, 1907, A., i, 719.
Tafel, Victor E., alloys of zinc and

nickel, 1908, A., ii, 105.

constitution of the copper-zinc-nickel alloys, and of the binary systems: copper-nickel, copper-zinc, and nickel-zinc, 1908, A., ii, 846.

Taffanel, J., safety explosives employed

in mines, 1911, A., ii, 38.

Taffe, Henri, detection of salicylic acid in foods by the ferric chloride test, 1903, A., ii, 394.

Taggart, Walter T., electrolytic pre-cipitation of nickel from phosphate

solutions, 1904, A., ii, 91.

Tagliavini, Achille, characteristic reaction of free tartaric acid, 1907,

A., ii, 721. detection of "saccharin" in wines,

1907, A., ii, 913.

new salts of guaiacolsulphonic acid, 1909, A., i, 224.

Tahara, Yoshisumi, tetrodon poison, 1911,

A., ii, 133.

Taipale, K. A., action of potassium cyanide on isobutaldehyde, 1909, A., i, 764. Tait, John, action of yohimbine on the

heart, with special reference to toxic heart-block, 1910, A., ii, 434. blood coagulation in the amphipod

Gammarus, 1910, A., ii, 725.

colour change in the isopod, Ligia oceanica, 1910, A., ii, 731.

Tait, John, and James Andrew Gunn, physiological action of yohimbine on medullated nerve, 1908, A., ii, 412.

Tait, John. See also Harold Pringle. Taitelbaum, Itzek, fuel batteries, 1910,

A., ii, 573. Takahashi, Dengo, estimation of sugar in the blood, 1912, A., ii, 100.

Takahashi, Dengo. See also Leonor Michaelis, and Peter Rona.

Takahashi, Teizō, production of alcohol in phænogams, 1903, A., ii, 170.

Takahashi, Teizō, can nitrite provide oxygen in anaerobic culture of bacteria? 1905, A., ii, 340.

is germination possible in absence of

air ? 1905, A., ii, 343.

detection and estimation of fusel oil, 1905, A., ii, 358.

some new varieties of Mycoderma yeast, 1905, A., ii, 437.

new variety of Mycoderma yeast as a cause of a saké disease, 1906, A., ii,

Takaishi, M. See Umetaro Suzuki.

Takaki, Kenji, the lysinogen of the blood-disks, 1908, A., ii, 512. the material in the brain which unites

with tetanus toxin, 1908, A., ii, 521. Takamine, Jokichi, extraction of the active substance of suprarenal capsules,

1903, A., i, 376.

Takeda, K., detection of trimethylamine in urine, 1909, A., ii, 837.

certain bases which occur in the urine during phosphorus poisoning, 1910, A., ii, 797.

Takemura, M., action of proteolytic enzymes on protamines, 1910, A., i,

phosphorus-content of sera in normal, syphylitic, and carcinoma cases, 1910, A., ii, 636.

the non-coagulable nitrogen of sera of normal, syphylitic, and tumour

cases, 1910, A., ii, 636. accumulation of iodine in the tissues

of tumours, 1911, A., ii, 633. Takeuchi, Tokusaburo, behaviour of algæ to salts at certain concentrations, 1908, A., ii, 613.

composition of rice straw, 1908, A., ii,

gypsum as a manure, 1908, A., ii, 624. absorption of varying amounts of lime and magnesia by plants, 1908, A., ii,

differences of susceptibility of plants to stimulation, 1909, A., ii, 922. urease in higher plants, 1909, A., ii,

925.

yield of leaves of Polygonum tinctorium with abundant nitrogenous manure, 1909, A., ii, 927.

improvements in sand culture, 1909,

A., ii, 928.

secondary calcium phosphate as a

manure, 1909, A., ii, 930. Takeuchi, Tokusaburo, an and Inouye, an enzyme in the silkworm which produces ammonia as a cleavage product of amino-compounds, 1909, A., ii, 912.

Talbot, Henry Paul, See Alpheus Grant Woodman.

Tallarico, Giuseppe, the hydrolytic and catalytic ferments acting during the process of ripening of fruit, 1908, A., ii, 724.

Talon, Mile., source of error in sugar analyses owing to formation of ethers of dextrose, 1906, A., ii, 634.

Taltavall, William Allan, and William John Gies, influence of quinic acid on uric acid excretion, 1903, A., ii, 563.

Tamaru, S., alloys of silicon with tin, lead, and thallium, 1909, A., ii, 149. alloys of calcium and silicon, 1909, A., ii, 400.

Tamayo, Alfredo Espinosa, detection of nitrates in the presence of chlorates, bromates, etc., 1910, A., ii, 450. analysis of gastric juice, 1910, A., ii,

a new ureometer, 1912, A., ii, 212.

Rudolph, constituents Tambach. Digitalis leaves, 1912, A., i, 375.

Tambach, Rudolph, and Carl Jaeger, narceine. I. Alkylnarceines and alkylhomonarceines, 1906, A., i, 879.

Tambon, J., separation and estimation of zinc oxide in "zinc white," "zinc grey," paints, and lithopones, 1907, A., ii, 815.

Tambor, Josef, B. Aronstamm, St. Baranowski, St. Cukier, and Walter Tomi, the flavone group, 1908, A., i, 358.

Tambor, Josef, St. Baranowski, Alfred Comtesse, and Walter Tomi, isoorcacetophenone dimethyl ether, 1908, A., i, 349.

Tambor, Josef, S. Günsburg, O. Keller, Chanschy-Herzenberg, B. Rosenknopf, and J. Lichtenbaum, studies in the coumarone group, 1912, A., i, 43.

Tambor, Josef, and A. Schürch, complete methylation with methyl sulphate,

1910, A., i, 558.

Tambor, Josef. See also Axel Blom, E. Bonifazi, A. Göschke, Stanislaus von Kostanecki, S. Ludwinowsky, Pistermann, and (Frl.) Gertrud Woker.

Tamburello, Antonio, derivatives comenic acid, 1904, A., i, 142. lactone of triacetic acid, 1905, A., i, 258.

Tamburello, Antonio, and A. Milazzo, action of diazo-derivatives of aliphatic hydrocarbons on cyanogen and its derivatives. III. Halogenated compounds, 1907, A., i, 1088.

Tamburello, Antonio. See also Francesco Carlo Palazzo, and Alberto

Peratoner.

Tamburini, Astorre. See Francesco Carlo Palazzo.

Tamm, Olof, complex compounds of manganese salts with hydroxy-acids, 1910, A., ii, 855.

Tamm, Walter. See Fritz Fichter.

Tammann, Gustav [Heinrich Johann Apollon], condition diagram phenol, 1903, A., ii, 15.

determination of the composition of chemical compounds without the help of analysis, 1904, A., ii, 113.

influence of pressure on the transition temperatures of iron, 1904, A., ii,

variation of the melting point of Glauber's salt with pressure, 1904, A., ii, 235.

nfluence of pressure on the melting point of tin and of bismuth, 1904, A., ii, 567.

action of silicon on hydrated metatitanic acid, 1905, A., ii, 256.

employment of thermal analysis, 1905, A., ii, 444; 1906, A., ii, 10.

alloys of aluminium and antimony, 1906, A., ii, 88. nature of "liquid crystals." III.,

1906, A., ii, 220.

capacity of the elements for entering into chemical combination, 1906, A., ii, 346; 1907, A., ii, 857.

isomorphism of the elements, 1907, A., ii, 445.

the heat contents of binary systems, 1908, A., ii, 660.

magnetic properties of the alloys of ferromagnetic metals, 1909, A., ii,

ice [modification]. III., 1909, A., ii, 878.

crystals which are absolutely stable only at high pressures, 1909, A., ii,

superheating of crystals, 1910, A., ii,

behaviour of water at high pressures and low temperatures, 1910, A., ii, 495.

stability of the two crystalline modifications of phenol, 1910, A., ii,

equilibrium diagram of silver iodide, 1911, A., ii, 195.

abnormal dependence of the velocity of crystallisation on the temperature, 1911, A., ii, 376.

the thermodynamics of equilibria in one-component systems. I. Equilibrium of isotropic and anisotropic phases, 1912, A., ii, 19.

Tammann, Gustav [Heinrich Johann Apollon], the alteration of the properties of metals by their mechanical treatment, 1912, A., ii, 21, 1042. the thermodynamics of equilibrium in

one-component systems. II. Polymorphism, 1912, A., ii, 29.

thermodynamics of the equilibria in one-component systems. I., 1912, A., ii, 129.

determination of the molecular weight of crystalline substances, 1912, A., ii, 149.

equations of condition in the region of small volumes, 1912, A., ii, 538.

the dependence of crystalline form on temperature, and recrystallisation into conglomerates, 1912, A., ii, 630.

the determination of fusion curves for substances of low melting point, 1912, A., ii, 1135.

velocity of crystallisation. IV., 1912. A., ii, 1147.

Tammann, Gustav, and G. Masing, conglomerates obtained by compressing mixtures of the powders of two metals, 1909, A., ii, 669.

Tammann, Gustav. See also Friedrich Berwerth, Alfred Dennys Cowper, Otto Faust, Walter Fraenkel, William Einot Guertler, Karl Hüttner, Eduard Ludwig Lauer, Hermann Lautsch, Max Levin, G. Masing, Rudolf Sahmen, N. Slatowratsky, Wilhelm Treitsche, and Rudolf Vogel.

Tamura, Munemichi, the loss of fat on drying meat, 1912, A., ii, 701.

Tanaka, Masahiko, calcium resorption and calcification, 1911, A., ii, 907. calcium resorption and calcification, 1912, A., ii, 277.

Tanaka, S. See S. Maki.

Tanaka, Tamio, the enzymes of the spleen, 1912, A., ii, 69.
Tanaka, Yoshio, hydrolytic enzyme in

the resting seeds of some Gramineæ, 1908, A., i, 489.

action of acids in the enzymic decomposition of oil by castor oil seeds, 1910, A., i, 800.

preparation of "lipase powder" acting in neutral medium and its technical application, 1912, A., i, 1042.

influence of the products of change on the action of lipase, 1912, A., i, 1042.

influence of some neutral salts, nitrogenous matters, and castor seed extract on lipase, 1912, A., i, 1042.

action of lipase on oxidised and polymerised oils, 1912, A., i, 1043. Tananaeff, N., preparation of chemicallyactive silver by electrolysis, 1908, A., ii, 377.

Tananaeff, N., and D. Tsukerman, titration by means of borax in presence of glycerol, 1910, A., ii, 158.

Tanatar, Sebastian M[oiseewitsch], conversion of trimethylene into propyl-

ene, 1903, A., i, 1.

decomposition of hydrogen peroxide by electrolytic oxygen or hydrogen, 1903, A., ii, 202.

sodium salt of percarbonic acid, 1903,

A., ii, 208.

peroxides, 1903, A., ii, 539; 1909, A., ii. 484.

atomicity and atomic weight of glucinum, 1904, A., ii, 335.

perstannic acids and perstannates.

1905, A., ii, 325.

valency and atomic weight of glu-

cinum, 1907, A., ii, 261.

double compounds of hydrogen peroxide with organic compounds, 1908, A., i. 399.

reciprocal transformation of isomerides under the influence of chemical in-

duction, 1908, A., i, 750.

glucinum formates, 1910, A., i, 354. existence of real percarbonates and their differentiation from carbonates with hydrogen peroxide of crystallisation, 1910, A., ii, 203.

percarbonates, 1910, A., ii, 774. conversion of maleic into fumaric acid,

1912, A., i, 160.

Tanatar, Sebastian M., and Eduard Kurowski, some salts of glucinum and zirconium, 1907, A., i, 888.

glucinum and zirconium benzoates,

1908, A., i, 166.

acetylacetone compounds of metals of group II., 1908, A., i, 502. structure of glucinum salts, 1908, A.,

i. 758.

complex salts of glucinum and zir-

conium, 1909, A., ii, 887.

Tanatar, Sebastian M., and S. Petroff, new reaction for thallium, 1910, A., ii,

Tanatar, Sebastian M., and I. Voljansky, organic salts of yttrium, 1910, A., i, 809.

specific heat of pure yttrium oxide,

1910, A., ii, 296.

reaction between maleic acid and sodium thiosulphate, 1912, A., i,

Tandler, Rudolf, vaporisation, 1907, A., ii, 434.

Tandler, Rudolf. See also Felix Goldberger.

Tangl, Franz, inorganic metabolism in horses, 1903, A., ii, 161.

concentration of hydrogen ions in the contents of the fasting human stomach, 1906, A., ii, 871.

heat production and enzyme action.

I. General, 1907, A., i, 102. the work of the kidneys and the "specific-dynamic action" of foodstuffs, 1911, A., ii, 748.

a respiration apparatus for animals of medium size, 1912, A., ii, 1062.

the minimal energy needs of the pig; (metabolism of matter and energy during starvation), 1912, A., ii,

Tangl, Franz, and J. Csókás, elementary composition of different caseino-

gens, 1908, A., i, 302.

Tangl, Franz, and Alexander Erdélyi, the influence of the melting point of fats on their rate of disappearance from the stomach, 1911, A., ii, 742.

Tangl, Franz, and Georg von Kereszty, a wet method for the estimation of carbon in organic substances, 1911, A.,

ii. 538.

Tangl, Franz, Michael Korbuly, Stephan Weiser, and Arthur Zaitschek, feeding and metabolism of agricultural animals, 1905, A., ii, 757.

Tangl, Franz, and Stephan Weiser, glycerol of the blood, and its investigation by Zeisel's iodide method, 1906,

A., ii, 868.

Tangl, Karl, alteration of the dielectric constant of some liquids with temperature, 1903, A., ii, 348.

dielectric constants of gases at high pressures, 1908, A., ii, 558.

Tani, T. See Karl Bernhard Lehmann. See Carl Dietrich Tank, Ludwig. Harries.

Tankard, Arnold Rowsby. See Alfred Henry Allen.

Tannhäuser, Felix, methyl hydrogen dtartrate, 1908, A., i, 713.

analyses of gabbronite rocks from Neurode, Silesia, 1908, A., ii, 1047.

See Robert Tannhäuser, Fohann. Pschorr.

Tanret, Charles [Joseph], composition of manna, 1903, A., i, 9.

stachyose, 1903, A., i, 606. transformation of sugars showing multirotation, 1905, A., i, 327. ergotinine, 1906, A., i, 979.

[mutarotation of sugars], 1906, A., ii, 137.

Tanret. Charles [Joseph], detection of albumin [in urine], 1907, A., ii, 995. ergosterol and fongisterol, 1908, A., i, 637.

soluble starch, 1909, A., i, 556.

a new base isolated from ergot of rye, ergothionine, 1909, A., i, 671. relations of callose with fongose, 1910,

A., i, 654.

Tanret, Georges, gentiopierin, 1905, A., i, 655.

gentiin, 1905, A., i, 714.

gentiamarin, 1905, A., i, 803.

melezitose and turanose, 1906, A., i, 560.

inosites of mistletoe, 1908, A., ii,

two new carbohydrates from asparagus, 1909, A., i, 634.

Tanzen, A. See Joachim Biehringer.

Tanzi, B. See Gualtiero Poma.
Taponier, Edmond, action of alkali bromides on barium carbonate, 1906, A., ii, 540.

Tappeiner [(Edler) von Tappein], [Anton Josef Franz] Hermann, action of fluorescent substances on ferments and toxins, 1904, A., i, 131.

relation between the photochemical action of substances of the fluorescein series and their intensity of fluorescence and sensitiveness to light, 1906, A., ii, 512.

action of fluorescent substances on red corpuscles, 1908, A., ii, 867.

Tappeiner, Hermann von, Alb. Jodlbauer. and Hans Lehmann, photodynamic and optical behaviour of anthraquinones, 1905, A., ii, 602.

Tappeiner, Hermann von, M. Kurzmann, and Fr. Locher, sensitising action of fluorescent substances in yeast and yeast press juice, 1908, A., i, 239.

Tappeiner, Hermann von, F. Osthelder, and E. Erhardt, the point of attack of photodynamic substances in Para-

mœcia, 1908, A., ii, 867. Tappeiner, Hermann von. See also Alb.

Jodlbauer.

Tappen, Hans. See Robert Pschorr. Tapuach, M. See Paul Pfeiffer.

Tarasoff, B., action of magnesium on a mixture of allyl bromide and benzophenone: synthesis of diphenylallylcarbinol, 1910, A., i, 109.

Tarasoff, B. See also Joseph Zeltner. Tarbouriech, J., secondary amides, 1903, A., i, 681, 737.

Tarbouriech, J., and J. Hardy, a phytosterol from Echinophora spinosa, 1907, A., i, 1035.

Tarbouriech, P. Joseph, derivatives of hydroxyhexahydrobenzoic hexan-1-ol-1-carboxylic] acid, 1909, A., i, 796.

dehydration of cyclohexanolpropan-

β-ol, 1910, A., i, 32.

1-acetyl-1-methylcyclohexane, 1910, A., i, 557.

Tarbouriech, P. Joseph, and P. Saget, an organic vegetable compound of iron, 1909, A., ii, 339.

Tardy, A., and Philippe Auguste Guye, electrolysis of alkali chlorides. II., 1904, A., ii, 534.

Tardy, E., Chinese anise oil, 1903, A., i,

Japanese anise oil, 1903, A., i, 46. oil of bitter fennel, 1903, A., i, 47. essential oil of boldo, 1904, A., i, 331.

action of salicylic acid on terebenthene, 1904, A., i, 904.

Tarnowski, Paul T. See Richard Sidney Curtiss.

Tartakowsky, S., absorption and assimilation of iron, 1904, A., ii, 189, 354.

Tarugi, Nazareno, persulphates, 1903, A., ii, 238.

employment of Caro's acid for the destruction of organic substances [before testing for arsenic], 1903, A., ii, 240.

Van Deen's reaction, 1903, A., ii, 460;

1904, A., ii, 220.

action of persulphates on mercury, 1903, A., ii, 481.

behaviour of human semen towards solutions of mercuric chloride, 1904, A., ii, 63.

behaviour of platinum amalgams with nitric acid, 1904, A., ii, 131.

reducing action of aluminium in quantitative analysis, 1904, A., ii, 149.

hydroxylamine salts in qualitative analysis, 1904, A., ii, 297.

estimation of potassium, 1904, A., ii, 590.

formation and constitution of bleaching powder, 1905, A., ii, 32.

red coloration of bleaching powder, 1905, A., ii, 163.

supposed existence of thiocyanate of iron and probable constitution of the hæmoglobin of the blood, 1905, A., i, 176.

histological changes in wool-fibre by the prolonged action of water; chemical nature of the wax of corpses, 1905, A., ii, 182.

Tarugi, Nazareno, aluminium as a preventive of acute and chronic mer-

cury poisoning, 1905, A., ii, 205. some methods of forming hydrazines and their influence on biochemical analysis, 1906, A., ii, 136.

preparation of hydroxyloplatidiammine sulphate, 1906, A., ii, 618.

estimation of small quantities of manganese; new method of formation of glycerose, 1906, A., ii, 631.

new practical method for estimating potassium, 1907, A., ii, 719.

Tarugi, Nazareno, and G. Bianchi. rapid and exact method of estimating sulphates and barium salts, 1906, A., ii, 627.

Tarugi, Nazareno, and A. Bigazzi, estimation of minimal quantities of arsenic in organic substances, 1906,

A., ii, 629.

Tarugi, Nazareno, and A. Calamai, argentiferous lead mineral from Rosseto in Elba, 1906, A., ii, 620. Tarugi, Nazareno, and F. Lenci, some

colour reactions, 1912, A., ii, 397.

Tarugi, Nazareno, and A. Magri, thiocarbonates, 1909, A., ii, 481.

Tarugi, Nazareno, and Mario Marchionneschi, use of thioacetic acid in qualitative analysis, 1907, A., ii, 198.

Tarugi, Nazareno, and S. Silvatici, volumetric estimation of iron, 1905,

A., ii, 66.

Tarugi, Nazareno, and F. Sorbini, arsenic xanthate in analytical chemis-

try, 1912, A., ii, 993.

Tarugi, Nazareno, and G. Vitali, action of hydrogen peroxide on thiosulphates in presence of metallic salts, 1909, A., ii, 478.

Taschenberg, Ernst W. See Ernst J. Lesser.

Tasker, Hubert Sanderson, and Humphrey Owen Jones, the action of mercaptans on acid chlorides. Part II. The acid chlorides of phosphorus, sulphur, and nitrogen, 1909, T., 1910; P., 247.

the interaction of phenyl mercaptan and thionyl chloride, 1910, P.,

234.

Tasker, Hubert Sanderson. See also Humphrey Owen Jones, and John Edward Purvis.

Tassilly, Eugène, "alcoholysis" of Japan wax, 1911, A., i, 602.

Tassilly, Eugène, and R. Cambier, abiotic action of ultra-violet rays of chemical origin, 1910, A., ii, 882.

Tassilly, Eugène, and J. Leroide, iododerivatives of the methyl ethers of catechol, 1907, A., i, 515.

constitution of iodoguaiacol, 1908.

A., i, 161.

attempts to transform nitrous vapours into the corresponding calcium salts by the use of ethyl nitrite and nitrate, 1910, A., i, 535.

relative proportions of arsenic present in marine algæ and their prepara-

tions, 1911, A., ii, 142. Tassilly, Eugène. See also Charles Féry, and Emile Perrot.

Tassin, Wirt, the Persimmon Creek meteorite, 1904, A., ii, 671. the Mount Vernon meteorite, 1905,

A., ii, 399.

graphitic iron in a meteorite, 1907. A., ii, 278.

calcium sulphide (oldhamite) in the Allegan meteorite, 1908, A., ii, 956. meteoric chromites, 1908, A., ii, 956.

Tassin, Wirt. See also George Perkins Merrill.

Tate, William, connexion between the critical temperatures of gases and vapours and their absorption coefficients, and the viscosity of the solvent medium, 1906, A., ii, 838.

Tate, William. See also Harald Lundén. Tatlock, Charles Simpson Aitken, electrolytic estimation of nickel in nickel

ores, steel, etc., 1909, A., ii, 766. Tatlock, Robert Rattray, and Robert Tatlock Thomson, estimation of small proportions of bromine and chlorine in iodine, 1905, A., ii, 281, presence and detection of cyanogen in Java, Burma, and haricot beans, 1906, A., ii, 711.

Tattersall, George, the resolution of dl-methylhydrindamine; isomeric salts of d- and l-methylhydrindamines with d-chlorocamphorsulphonic acid, 1903, P., 287, 288; 1904, T., 169.

Tattersall, George, and Frederic Stanley Kipping, isomeric partially racemic salts containing quinquevalent nitro-Part XI. Derivatives of dlmethylhydrindamine and dl-neomethylhydrindamine; isomeric salts of the type, NR₁R₂H₃, 1903, T., 918; P., 145.

Tattersall, George. See also David Trevor Jones, and William Henry Perkin, jun.

Taub, Ludwig. See Otto Dimroth.

Tauber, Siegfried, derivatives of taurine and synthesis of taurocholic acid. 1904. A., i, 60.

Taubert, Erich, axial ratios of sillimanite, 1906, A., ii, 555.

Taubert, G. See Ferdinand Henrich.

Taurel, analysis of bauxite, 1904, A., ii, 781.

assay of glycerol, 1905, A., ii, 121.

Taurel and Griffet, estimation of the proportion of sublimed sulphur in a mixture of different sulphurs, 1911, A., ii, 533.

Taurke, Fritz, organic silicon compounds,

1905, A., i, 422.

estimation of [ammoniacal] nitrogen, 1909, A., ii, 91.

a combined extraction and distillation apparatus, 1912, A., ii, 383.

Taurke, Fritz. See also Hans Riesen-

Tausent, Max, comparative investigations on the oxidation of nitrogen in the high tension flame, 1912, A., ii, 551.

Tausent, Max. See also Emil Fromm. Taussig, Paul Camill, aromatic derivatives of oxamide and carbanilide, 1904, A., i, 663.

Giovanni. See Tavanti, Federico Giolitti.

Taveau, René de Mortemer. See John Jacob Abel, and William Albert Noyes.

Taverne, Herman Johan, sulphobenzoic acids and their nitro-derivatives obtained by the action of anhydrous nitric acid, 1906, A., i, 273.

compounds of antimony, sulphur, and chlorine, 1908, A., ii, 198.

Taylor, Alonzo Englebert, decomposition of proteins by means of bacteria, 1903, A., ii, 169.

polymerisation of globulins, 1906, A., i, 467.

action of lipase, 1906, A., i, 918.

solubility of uric acid in blood serum,

1906, A., ii, 109. synthesis of protein by trypsin, 1907, A., i, 665.

composition and derivation of prot-

amine, 1909, A., i, 344. synthesis of protamine through ferment

action, 1909, A., i, 344. are pepsin and rennin identical i 1909,

A., i, 345. inversion of sucrose and maltose by ferments, 1909, A., i, 346.

cytolysis, 1909, A., ii, 69.

conversion of glycogen into sugar by the liver, 1909, A., ii, 73.

antagonism of alcohol and carbolic acid, 1909, A., ii, 81.

synthesis through ferment action. 1910, A., i, 82.

Taylor, Alonzo Englebert, the cutaneous elimination of nitrogen, sulphur, and phosphorus, 1911, A., ii, 307. estimation of urea, 1911, A., ii, 344.

sources of error in the Folin method of estimating creatinine, 1911, A., ii.

the sulphur balance in metabolism. 1911, A., ii. 410.

output of ammonia in normal urine, 1911, A., ii, 415.

Taylor, Charles E. See Floyd Jay Metzger.

Taylor, (Miss) Clara Millicent, additive products from benzylideneaniline and methyl acetoacetate, 1903, A., i, 412.

the constitution of acetone, 1906, T., 1258; P., 173.

the rotatory powers of the d- and lmethylethylphenacylthetine salts, 1912, T., 1124; P., 148.

Taylor, (Miss) Clara Millicent. See also Thomas Hill Easterfield, Francis Ernest Francis, and James William

Taylor, Edytha E. See David Wilbur

Horn. Taylor, Francis. See Thomas Stewart Patterson.

Taylor, Floyd D. See Henry Richardson.

Taylor, Hugh Stott, the action halogens on silver salts, 1912, P., 314. Taylor, Hugh Stott. See also Henry

Bassett, jun. Taylor, John. See Augustus Edward

Dixon.

Taylor, James M., estimation of zine in the presence of iron, 1910, A., ii, 158

Taylor, John William, and Isaac Walker Hall, action of saliva, tissue fluids, bacteria, and bacterial extracts on polypeptides, 1912, A., i, 927.

Taylor, Levi Shoemaker. See Harmon

Northrop Morse.

Taylor, Murray Ross, creatine and creatinine excretion in diabetes mellitus, 1911, A., ii, 310.

Taylor, Murray Ross. See also Edward

Provan Cathcart.

Taylor, Robert Llewellyn, reaction of iodine with mercuric oxide presence of water, 1903, A., ii, 138. a higher oxide of cobalt; volumetric

estimation of cobalt, 1903, A., ii, 696. production of white ferrous ferrocyanide, 1909, A., i, 142.

some colour demonstrations of the dissociating action of water, 1909, A., ii, 796.

Taylor, Robert Llewellyn, researches on bleaching powder, 1910, T., 2541: P., 242; discussion, P., 242.

action of carbon dioxide and of air on bleaching powder, 1910, A., ii, 503. the action of chlorine on alkalis and of

carbon dioxide on bleaching powder,

1911, T., 1906; P., 243. Taylor, Robert Llewellyn, and Clifford Bostock, researches on bleaching powder. Part II. The action of dilute acids on bleaching powder, 1912, T., 444; P., 14.

Taylor, Thomas Smith, retardation of a-rays by metal foils, and its variation with the speed of the a-particles.

1908, A., ii, 793.
retardation of a-rays by metals and

gases, 1909, A., ii, 850.

the ionisation of different gases by the a-particles from polonium and the relative amounts of energy required to produce an ion, 1911, A., ii, 354.

determination of the number of ions produced by an a-particle from

polonium, 1912, A., ii, 412. the determination of the ionisation curve for the a-rays from polonium in mercury vapour, 1912, A., ii, 888. Taylor, William C. See Eugene Cornel-

ius Sullivan.

Taylor, W. E., the precipitation of aluminium hydroxide in the granular form, 1911, A., ii, 542.

Taylor, William Henry. See William

Colebrook Reynolds.

Taylor, William White, standard of relative viscosity; "negative viscosity," 1904, A., ii, 539.

new method of preparing esters, 1905,

A., i, 852.

two lecture experiments in illustration of the theory of ionisation, 1907,

A., ii, 18.

Taylor, William White, and John Kenneth Harold Inglis, suggested theory of the aluminium anode, 1903, A., ii, 260.

Taylor, William White, and T. W. Moore, the "negative" viscosity of aqueous solutions, 1908, A., ii, 818. aylor, William White, and Clerk

Ranken, viscosity of aqueous solutions of chlorides, bromides, and iodides, 1904, A., ii, 539.

Taylor, William White. See also W. S. Millar, and Clerk Ranken.

Tcharviani, and Max Wunder, separation

of iron, chromium, and aluminium, 1911, A., ii, 156.

Tcheichvili. See Tscheishwili.

Teague, Oscar, and Bertram Henry Buxton, agglutination from the physical standpoint. 111. electrical charge carried by the suspended particles, 1906, A., ii, 840.

agglutination from the physical stand-IV. The flocculation of aniline colours, 1907, A., ii, 932.

agglutination from the physical stand-V. The phenomenon of supra-optimal concentration, 1907, A., ii, 933.

mutual flocculation of colloids, 1908.

A., ii, 365.

See also Bertram Henry Teague, Oscar. Buxton, and Cyrus W. Field.

Tealdi, Mario. See Giuseppe Oddo. Tebb, (Miss) M. Christine, precipitation of proteins by alcohol and other reagents, 1903, A., i, 781.

cholesterol of brain, 1906, A., ii, 241. Tebb, (Miss) M. Christine.

Otto Rosenheim.

Tebbutt, Hamilton, asylum dysentery, 1912, A., ii, 665.

Teclu, Nicolae, synthesis of water by combustion, 1903, A., ii, 417.

preparation of solid carbon dioxide,

1903, A., ii, 422.

new quantitative method; [estimation of wood-fibre in paper], 1904, A., ii,

characterisation of flame, 1904, A., ii,

[lecture experiment]; preparation of an explosive mixture of hydrogen and oxygen, 1904, A., ii, 477.

[lecture experiment]; electrolysis of

water, 1904, A., ii, 477.

lecture apparatus [combustion, etc.], 1907, A., ii, 446.

determination of the limiting explosive mixtures of gases, 1907, A., ii,

laboratory apparatus [estimation of carbon dioxide; evolution of gases under pressure], 1907, A., ii, 504.

streams of gases through vessels, 1909, A., ii, 392.

determination of the heating and illuminating values of gas, 1909, A., ii, 441.

preparation of illuminating gas as a lecture experiment, 1910, A., ii,

cooling of flames; [lecture experiment], 1910, A., ii, 705.

the striking-back of the bunsen flame; [lecture experiment], 1910, A., ii, 705.

Teclu. Nicolae, the acetylene lamp; [lecture experiment], 1910, A., ii, 705.

explosion indicator, 1910, A., ii, 892. modified Ostwald's hydrogen sulphide apparatus, 1912, A., ii, 1051.

Tedesco, Ernst. See Fritz Ullmann. Tedesco, Fritz. See Hans Eppinger.

Teeple, John Edgar, electrolytic preparation of iodoform from acetone, 1904, A., i, 362.

electrolytic preparation of chloroform from acetone, 1904, A., i, 545.

long leaf pine oil, 1908, A., i, 355. Teeple. John Edgar. See also William

Ridgely Orndorff.

Teichert, Kurt, biology of some of the moulds occurring in dairy products, 1903, A., ii, 229.

Teichner, Herbert, constitution of the hydroxyazo-compounds, 1905, A., i,

952.

Teichner, Herbert, and Hugo Weil, preparation of 2-hydroxy-1:4-naphthaquinone, 1905, A., i, 909.

Teisserenc de Bort, L., presence of rare gases in the atmosphere at different

heights, 1908, A., ii, 763.

Telesnin, L., fermentation-coefficient of dead yeast (zymin) on various substrata, 1905, A., ii, 342.

Teletoff, Ivan [Sergeivitsch], velocities of catalytic reactions in heterogeneous systems; decomposition of hydrogen peroxide by means of platinum foil compared with catalysis by colloidal platinum, 1908, A., ii, 95.

inorganic peroxides. I. Preparation of cadmium and zinc peroxides,

1911, A., ii, 490.

Teletoff, Ivan. See also Carl Adam Bischoff, and Mieczyslaw Centnerszwer.

Telle. Fernand, rapid soap analysis, 1903, A., ii, 115.

bromine absorption of fats, 1905, A., ii, 362.

volumetric [iodometric] estimation of combined sulphuric acid, 1906, A., ii, 578.

practical modification of the method for determining the hardness of water, 1908, A., ii, 535.

Telle, Hans, kamala and rottlerin, 1906, A., i, 973; 1907, A., i, 435. compounds of bismuth with aliphatic

hydroxy-acids, 1908, A., i, 851. Telle, Hans, and Emil Huber, methods of detecting indole in bacteria cultures; formation of indole by Typhaceæ, 1911, A., ii, 317.

Telle, Lucien, volumetric estimation of aluminium salts, 1910, A., ii, 457.

Teller, George L. See J. A. Wesener.

Teltscher, Friedrich, relationship between the molecular volume and structure of solid chemical compounds, 1912, A., ii, 831.

Temme, Paul. See Carl Dietrich Harries.

Tempany, Hard Francis Watts. Harold Augustine. See

Temperley, Claude Vazeille. See William Henry Bentley.

Tenani, Mario, effect of light on the conductivity of nitrogen tetroxide vapour, 1909, A., ii, 783.

Tengström, Stephan, the bile salts of ox bile, 1904, A., ii, 428.

Teodoresco, E. C., the influence of temperature on the activity of nuclease, 1912, A., i, 1042.

assimilation of nucleic nitrogen and phosphorus by the inferior algæ,

1912, A., ii, 974.

Tereschin, Sergej, relation between density and degree of dissociation of aqueous salt solutions, 1909, A., ii, 552; 1910, A., ii, 190.

Ter-Gazarian, Gasar [Gregorevitsch], orthobaric densities of acetonitrile and propionitrile to the critical point, 1906, A., ii, 423.

orthobaric densities of homologous

liquids, 1908, A., ii, 666.

relation between the orthobaric densities of homologues, 1909, A., ii,

revision of the atomic weight of phosphorus; density of hydrogen phosphide, 1909, A., ii, 568.

density of hydrogen phosphide and atomic weight of phosphorus, 1911,

A., ii, 201.

a general relation between the physical properties of substances; application to densities, 1911, A., ii, 1066.

general relationship between the physical properties of substances; application to viscosity, capillarity, surface-tension, heat of vaporisation, and the rectilinear diameter, 1912, A., ii, 23.

Ter-Gazarian, Gasar. See also Philippe

Auguste Guye. Terlikowski, F. See Henryk Golblum. Terlinck, Egide, dehydration of a-iso-

dypnopinacolin. I., 1905, A., i, 129. Termier, Pierre, celestite from Tunis, 1903, A., ii, 489.

alunite from Réalmont, dep. Tarn, 1909, A., ii, 59.

Termier, Pierre, and André Leclére, composition of crystalline schists from the Alps, 1904, A., ii, 269.

Ternetz, Charlotte, assimilation atmospheric nitrogen by a fungus found in peat, 1904, A., ii, 761.

Terni, Alfredo, aluminium peroxide. 1912, A., ii, 944.

Terni, Alfredo. See also Riccardo Ciusa.

Terres. See Gerhard Just.

Terroine, Emile F., law of action of maltase; influence of the concentration of maltose, 1904, A., ii,

action of electrolytes on the hydrolysis of fats by the pancreatic secre-

tion, 1909, A., ii, 497. fat cleavage by pancreatic juice.

1910, A., ii, 141.

lecithin and diastatic action, 1911,

A., ii, 997.

Terroine, Émile F. See also Henri Bierry, (Mlle.) L. Kalaboukoff, André Mayer, and L. Morel.

Terry, Oliver Perkins, galvanotropism of volvox, 1906, A., ii, 185.

effect of hydrogen peroxide on gonionemus, 1909, A., ii, 422.

Terry, Oliver Perkins. See also Charles Hugh Neilson.

Ter-Sarkissjanz, Leon. See Eugen Bam-

berger.

Teruuchi, Yutaka, the action of pancreatic juice on the hæmolysis of cobra venom and its compounds with antitoxin and lecithin, 1907, A., ii, 571.

Teruuchi, Yutaka. See also Emil Abderhalden.

Theodor. Tesdorpf, See Wilhelm

Autenrieth.

Test, Charles Darwin. See Herbert Newby McCov.

Testoni, Giuseppe, estimation of "saccharin " [o-benzoicsulphinide] various foods, 1910, A., ii, 167.

estimation of sucrose in the presence of other sugars, 1912, A., 1104.

Testoni, Giuseppe, and Luigi Mascarelli, transformation of 2-methylpyrrolidine into 2-methylpyrrole, 1904, A., i, 188.

Testoni, Giuseppe. See also Luigi Mascarelli.

Tetzner, F. See Paul Buttenberg. Tetzner, Friedrich. See August Klages. Teufel, C. See Adalbert Kolb.

Tezner, Ernst, analysis of the lowering of the freezing point in physiological fluids, 1908, A., ii, 16.

Tezner, Ernst, and Johann Roska, analysis of the lowering of the freezing point in physiological fluids. II. Lowering of the freezing point of suspensions, 1908, A., ii, 810.

Thaer. Willi, deposition of protein through amides, 1909, A., ii, 608. effect of lime and humus on the mechanical and physical properties of clay, loam, and sandy soils, 1911, A., ii, 648.

Thal, A. See Karl Andreas Hofmann. Thannhauser, Siegfried J. See Oscar Piloty.

Thar, H., the purine bases of the bone-

marrow, 1910, A., ii, 141.

Thatcher, C. J., electrolytic oxidation of sodium thiosulphate and the mechanism of the process, 1904, A., ii, 395.

Thatcher, Roscoe Wilfred, reaction between lime and sulphur, 1908, A., ii,

Thatcher, Roscoe Wilfred, and Harris Ralph Watkins, nitrogen content of wheat and its distribution to different parts of an individual plant, 1907, A., ii, 983.

Thayer, A. E., and Charles George Lewis Wolf, toxicity of tetraphosphorus trisulphide, 1904, A., ii, 197.

Thede, Johannes. See Otto Wallach. Theimer, E. See Adolf Grün.

Theodor, Hermann, amount of water in butters of various origin, and their Reichert-Meissl numbers, 1905, A., ii, 361.

Volhard's copper titration, 1908, A., ii, 898.

Theodorescu, George. See Hermann Leuchs.

Theodorovits, K. See Lothar Wöhler. Theopold, Wilhelm. See Franz Kunckell.

Thesmar, Georges. See Luc. Baumann. Theulier, Eugène, oil of verbena from Grasse, 1903, A., i, 189.

Theusner, Martin, the constitution of blast-furnace slags, 1909, A., ii, 240.

Thévenaz, William. See Carl Graebe. Thibault, Paul, derivatives and constitution of bismuthogallic acid, 1903, A., i, 633.

action of hydrated bismuth oxide on isomerides of gallic acid; bismuthopyrogallolearboxylic acid, 1903, A., i, 701.

combination of bismuth with tannic acid, 1903, A., i, 761.

some compounds of bismuth with the hydroxybenzoic acids, 1904, A., i, 166.

Thibault, Paul, bismuth phthalate and mellitate and pyrophoric bismuth, 1904, A., i, 247

bismuthoprotocatechuic acid,

A., i, 320.

protocatechnic anilide, 1904, A., i,

pyrophoric bismuth, 1904, A., ii, 179.

Thibaut, Rudolf, specific heat of different gases and vapours, 1911, A., ii, 695.

Thiel, Alfred, estimation of zinc as sulphide, 1903, A., ii, 105.

solubility of homogeneous mixtures; mixed depolarisers, 1903, A., ii,

estimation of sulphuric acid in presence of zinc, 1903, A., ii, 691.

indium, 1904, A., ii, 177, 410, 618. volatility of indium oxide, 1906, A., ii, 169.

movements on mercury of crystals while dissolving due to electrocapillarity, 1906, A., ii, 325.

experimental demonstration of osmosis,

1906, A., ii, 337.

strength of the second stage [of the dissociation] of phenolcarboxylic and phenolsulphonic acids, 1908, A., i,

electrolytic estimation of nickel in nitrate solutions and its separation from copper, 1908, A., ii, 539.

simple arrangement for filling glass tubes with liquid carbon dioxide, 1908, A., ii, 943.

minimum conductivity in the titration of acids, 1909, A., ii, 115.

constitution of orsellinic acid, 1912, A., i, 982.

Thiel, Alfred, and K. Keller, the behaviour of iron towards solutions of stannous salts, 1910, A., ii, 962.

Thiel, Alfred, and A. M. Kieser, estimation of zine as sulphide, 1903, A., ii, 334.

Thiel, Alfred, and Hermann Koelsch, indium. II., 1910, A., ii, 413.

Thiel, Alfred, and Herman Ohl, the precipitation of nickel sulphide from aqueous solutions, 1909, A., ii, 318.

Thiel, Alfred, and Hermann Roemer, distribution of a base between two acids, 1907, A., ii, 940.

comparative experiments the basicity and strength of acids and phenols, 1908, A., i, 787.

Thiel, Alfred, Adalbert Schumacher, and Hermann Roemer, acid function of aromatic hydroxyl, 1906, A., i, 22.

Thiel, Alfred, and Adolf Windelschmidt. periodical phenomena in electrolysis, 1906, A., ii, 827.

periodic phenomena in the electrolysis of nickel salts, 1907, A., ii, 601.

See also Alfred. Friedrich Wilhelm Küster.

Thiel, Eugen. See Adolf Franke.

Thiel, Fritz. See Karl Löffler, and Theodor Pfeiffer.

Thiel, Kurt. See Otto Ruff, and Alfred Stock.

Thiele, Albrecht. See Alfred Wohl.

Thiele, F. C., free sulphur in petroleum from Beaumont, 1903, A., ii, 83.

Thiele, Francis Hugo, the yellow colour of the skin in cases of jaundice in which the urine is free from bilepigment, 1903, A., ii, 385.

cystinuria and diamines 1907, A., ii,

789; 1908, A., ii, 971.

Thiele, Hermann, detection of ozone by means of silver, 1906, A., ii, 250. reactions in ultra-violet light, 1908,

A., ii, 79.

Thiele, Hermann, and Robert Calberla, determination of the solubility of salt mixtures at temperatures considerably above the boiling points of their saturated solutions, 1906, A., ii, 604.

Thiele, Hermann, and Robert Marc, the preparation of alcoholic solutions of potassium hydroxide which will remain

colourless, 1904, A., ii, 843.

Thiele, Hermann, and Kurt Wolf, destruction of bacteria by light, 1906, A., ii, 567.

Thiele. [Friedrich Karl] Johannes, isomerism of the salts of aminoazobenzene, 1904, A., i, 208.

an automatic steam generator and superheater, 1906, A., ii, 78.

lecture experiments; [densities of oxygen and hydrogen; structure of flames; effect of substituents in the benzene nucleus], 1906, A., ii, 661.

a new melting point apparatus, 1907, A., ii, 330.

aromatic and aliphatic isodiazo-compounds (iso-azotates) from hydrazines, 1908, A., i, 927.

preparation of azoimide, 1908, A., ii,

940.

hydrazo- and azo-methane, 1909, A., i, 560.

nitrosohydrazines, isoazotates [isodiazo-compounds], and azo-compounds of the aliphatic series, 1910, A., i. 888.

apparatus for laboratories and lecture experiments, 1910, A., ii, 1054.

Thiele, [Friedrich Karl] Johannes, constitution of aliphatic diazo-compounds and of azoimide, 1911, A., i, 845; 1912, A., i, 16.

Thiele, Johannes, and Hans Balhorn, a quinonoid hydrocarbon, 1904, A., i,

491.

Thiele, Johannes, Hans Balhorn, and Walther Albrecht, condensation products of cyclopentadiene, 1906, A., i, 639.

Thiele, Johannes, and Adolf Bühner, derivatives of fulvene. I. Condensation of indene with aldehydes, 1906, A., i, 569.

Thiele, Johannes, and Kaufman George Falk, condensation products of ophthalaldehyde, 1906, A., i, 750.

Thiele, Johannes, and Oscar Giese, condensation products of △1:4-dihydroterephthalic acid, 1903, A., i, 424.

Thiele, Johannes, and Fritz Günther, derivatives of dicyanoquinol, 1906,

A., i, 743.

Thiele, Johannes, Oskar Günther, and Richard Leopold, preparation of the three phthalaldehydes, 1906, A., i, 750.

Thiele, Johannes, and Hermann Haakh, aliphatic compounds of polyvalent iodine. III. Derivatives of ethylene with tri- and quinque-valent iodine, 1909, A., i, 865.

Thiele, Johannes, and Siegfried Haeckel, derivatives of phenylnitroethylene [βnitrostyrene], 1903, A., i, 160.

Thiele, Johannes, and Franz Henle, derivatives of fulvene. III. Condensation products of fluorene, 1906, A., i, 571.

Thiele, Johannes, and Hermann Landers, e-nitro-γ-ketohexoic acid and its transformation products, 1909, A., i,

Thiele, Johannes, and Willi Peter, aliphatic iodochlorides and iodosochlorides, 1905, A., i, 735.

aliphatic compounds of polyvalent iodine. V. Simple alkyl iodochlorides, 1909, A., i, 866.

aliphatic compounds of polyvalent iodine. I. Iodochlorides and iodosocompounds from chloroiodofumaric acid, 1909, A., i, 879.

Thiele, Johannes, and Max Rüdiger, derivatives of fulvene. II. Derivatives of indeneoxalic esters, 1906, A., i, 586.

Thiele, Johannes, and Paul Ruggli, reduction of Δα-ketones and formation of indene derivatives, 1912, A., i, 866.

Thiele, Johannes, and Josef Schneider, condensation products of o-phthalaldehyde. II., 1909, A., i, 929.

Thiele, Johannes, and Karl Sieglitz, constitution of nitrosophenylhydr-

azine, 1910, A., i, 777.

Thiele, Johannes, and Gerhard Steimmig, seven-membered rings from β-diketones and o-diamines, 1907, A., i, 352.

Thiele, Johannes, and Fritz Straus, the addition of hydrogen chloride to dibenzylideneacetone, 1903, A., i, 707.

Thiele, Johannes, and [Mlle.] Anna Ivanovna Umnova, aliphatic compounds of polyvalent iodine. IV. Decomposition of aliphatic and aliphatic-aromatic iodonium compounds, 1909, A., i, 866.

Thiele, Johannes, and Alexis Wanscheidt, derivatives of isonaphthafluorene (o-phenylene-ββ-naphthylene-

methane), 1910, A., i, 831.

Thiele, Johannes, and Wilhelm Wedemann, constitution of phenylangelicalactone and iso-octenelactone, 1906, A., i, 725.

Thiele, Johannes, and Ernst Weitz, condensation products of o-phthalaldehyde. III., 1910, A., i, 854.
Thiele, Karl. See Franz Fischer.

Thiele, Karl. See Franz Fischer. Thiele, Ottomar, uroferric acid, 1903, A.,

i, 452.

Thiele, R., utilisation of atmospheric nitrogen by micro-organisms, 1906, A., ii, 114.

Thiele, Reinhold. See Conrad Willgerodt.

Thielepape, E. See Ludwig Wolff.

Thieme, Bruno, deposits obtained from flames by electricity, 1912, A., ii, 122. electric deposition of carbon from flames, 1912, A., ii, 321.

Thieme, B. W. van Eldik, action of concentrated sulphuric acid on glycerol esters of saturated monobasic fatty acids, 1908, A., i, 498.

action of concentrated sulphuric acid on crilaurin, 1912, A., i, 333.

Thieme, Carl. See Carl Dietrich Harries.

Thien, Oskar. See Felix Kaufler.

Thierfelder, Hans, cerebron, 1905, A., i, 105, 621.

phrenosine and cerebron, 1906, A., ii, 183.

Thierfelder, Hans. See also F. Kitagawa, Hermann Loening, Otto Riesser, Max Stern, and Karl Thomas.

Thierry, Maurice de, new apparatus for the determination of melting points, 1905, A., ii, 627. Thiéry, detection of hydrocyanic acid by means of paper impregnated with phthalophenone, 1907, A., ii, 408.

reaction for distinguishing between a- and B-naphthol camphorides by means of piperonaldehyde, 1907, A., ii. 723.

Thies, Friedrich. See Emil Abderhalden.

Thies, F. H. See Hugo Simonis.

Thies, Johannes. See Georg Lockemann. Thiesen, Max, friction of gaseous mixtures, 1906, A., ii, 728.

equation of condition for metals, 1908,

A., ii, 659, 808.

specific heat of solid substances, 1909, A., ii, 117.

vapour pressure of ice, 1909, A., ii, 791.

Thiess, Karl Georg. See Hans Rupe. Thill, J., improvement of Drown and Shimer's method of estimating silicon in irons, 1905, A., ii, 62.

Thile, E., estimation of iodine in the presence of bromine and chlorine,

1904, A., ii, 771.

Thimme, K. See Franz Maria Litterscheid.

Thirode, G. See Henri Gault.

Thirot, A. J. M., electrolytic production of tin, 1909, A., ii, 320.

Thoday, D., vegetable assimilation and respiration. VI. Some experiments on assimilation in the open air, 1910, A., ii, 800.

Thode, Carlos, o-aminobenzoylhydrazide and its derivatives, 1904, A., i, 347.

Thode, Carlos. See also Carl Graebe. See Eduard Thoni, Johannes. Freudenreich.

Thörner, Wilhelm, rapid estimation of water in articles of food, etc., 1908,

A., ii, 222.

simple gas burner contrivance for showing various flame reactions, combustion phenomena, and flame colorations, 1908, A., ii, 341.

apparatus for estimating the expansion of oils and other liquids which boil above 100°, 1908, A., ii, 907.

Thole, Ferdinand Bernard, note on the anomalous viscosity of nitrobenzene, 1909, P., 198.

viscosity and association. Part I. Association of the phenols, 1910, T., 2596; P., 328.

viscosity of isodynamic and motoisomerides, 1910, A., ii, 1040.

note on the preparation of labile benzaldehydephenylhydrazone, 1911, P., 278.

Thole, Ferdinand Bernard, the preparation of conductivity water, 1912, T., 207; P., 3; discussion, P., 3.

viscosity and association. Part II. The viscosity of geometrical isomerides, 1912, T., 552; P., 51.

viscosity and association. Part III. The existence of racemic compounds in the liquid state, 1912, P., 286;

discussion, P., 287.

Thole, Ferdinand Bernard, and Jocelyn Field Thorpe, formation of a sixmembered ring through the agency of the imino-group; preliminary

note, 1910, P., 295.

the formation and reactions of iminocompounds. Part XV. The production of imino-derivatives of piperidine leading to the formation the BB-disubstituted glutaric acids, 1911, T., 422; P., 42.

the formation and reactions of iminocompounds. Part XVI. Reactions leading to the formation of tricarballylic acid, 1911, T., 1684; P., 219.

the probable cause of the elimination of a carbethoxyl group as ethyl carbonate by the action of sodium ethoxide, 1911, T., 2183; P., 252.

the chemistry of the glutaconic acids. Part I. Methods for the preparation of alkylglutaconic acids which prove the identity of the α - and γ - positions in the glutaconic acid molecule, 1911, T., 2187; P., 122.

chemistry of the glutaconic acids. Part II. The reactions of the alkylglutaconic acids having one mobile hydrogen atom, 1911, T., 2208; P.,

Thole, Ferdinand Bernard. See also Albert Ernest Dunstan, John Theodore Hewitt, and Albert George Mussell:

Thomae, Carl, compounds of ketones with ammonia; methyl ethyl ketone ammonia, 1905, A., i, 509. of p-aminotriphenylderivatives

methane, 1905, A., i, 586.

compounds of ketones with ammonia; diethyl ketone ammonia, 1905, A., i,

compounds of ketones with ammonia; benzophenone ammonia (iminobenzophenone), 1905, A., i, 718.

compounds of ketones with ammonia, 1907, A., i. 138.

compounds of ketones with ammonia: action of ammonia on acetophenone, 1907, A., i, 138.

action of ammonia on methyl ethyl

ketone, 1908, A., i, 762.

Thomae, Carl, gold hydrosols, 1910, A.,

ultra-microscopic observations, 1911.

A., ii, 866.

constitution of apples, 1911, A., ii, 920, Thomae, Carl, and Hermann Lehr, compounds of ketones with ammonia: methyl propyl ketone ammonia, 1907, A., i, 113. methyl p-tolyl ketone, 1907, A., i,

compounds of ketones with ammonia: action of ammonia on methyl ptolyl ketone, 1907, A., i, 139.

Thomae, Carl. See also Robert Stollé.
Thomann, E. See Alfred Werner.
Thomann, J., formation of hydrogen

sulphide in mineral waters, 1906, A., ii. 477.

Thomas, Adrian. See George Frederic White.

Thomas, C. See A. Christiaens.

Thomas, Ebenezer Rees, the influence of the constitution of tertiary bases on the rate of formation of quaternary ammonium salts; preliminary note, 1912, P., 188.

Thomas, Ebenezer Rees, and John Joseph Sudborough, the direct esterification of saturated and unsaturated acids. 1911, P., 314; 1912, T., 317.

Thomas, Ebenezer Rees. See also John

Joseph Sudborough.

Thomas, Fred. See Ivor Southwell Cardell.

Thomas, Frederick, William Pomlewell Bloxam, and Arthur George Perkin, indican. Part III., 1909, T., 824; P., 126.

Thomas, Frederick. See also William Henry Bentley, Rufus Gaunt, Arthur George Perkin, and William Henry Perkin, jun.

Thomas, Friedrich. See Friedrich Willy Hinrichsen.

Thomas, Herbert Henry, epidote from Inverness-shire, 1905, A., ii, 537.

Thomas, John, the isolation of the aromatic sulphinic acids, 1909, T., 342; P., 60.

the four stereoisomeric optically active 2:4-dimethyltetrahydroquinolines, 1912, T., 725; P., 108.

Thomas, John. See also John Joseph

Sudborough.

Thomas, J. B., action of various reagents on amœba cultures, 1906, A., ii, 478.

Thomas, John Smeath. See James Campbell Brown, and Frederick George Donnan.

Thomas, Karl, and Hans Thierfelder, cerebrone. VI., 1912, A., i, 373.

Thomas, Louis. See André Lancien.

Thomas, (Miss) Mary Beatrice, and Humphrey Owen Jones, optically active nitrogen compounds, 1905, A., i, 263.

the effect of constitution on the rotatory power of optically active nitrogen compounds. Part I., 1906, T., 280; P., 10.

Thomas, Noel Garrod. See Harold

Brewer Hartley.

Thomas, Pierre, production of formic acid in alcoholic fermentation, 1903. A., ii, 445.

substances accompanying oxyhemoglobin in its crystallisation, 1911, A., i, 590.

colour reaction of ammonia, 1912,

A., ii, 991.

Thomas, Pierre, and (Mlle.) Madeleine Lebert, increase in the number of red corpuscles in the blood under the action of certain cholesterol derivatives, 1912, A., ii, 852.

Thomas, Pierre. See also

Agulhon.

Thomas, Ruth. See James Flack Norris. Thomas, Victor [André], thallic chloride, 1903, A., ii, 147.

thallous nitrate and nitrite, 1904,

A., ii, 617.

halogen compounds of thallium, 1906, A., ii, 356.

chlorination in organic chemistry, in presence of thallous chloride, 1907, A., i, 117.

some molecular combinations of metallic haloids with organic compounds, 1907, A., i, 287.

thallium, 1907, A., ii, 547.

some derivatives of thiophen, 1908, A., i, 360.

reduction of the thiophen nucleus, 1909, A., i, 251, 600.

Thomas, Victor, and Pierre Dupuis, some reactions of liquid chlorine, 1906, A., ii, 662.

Thomas, Victor. See also Lucien Daniel. Thomas, W., a new test for lactic acid, 1907, A., ii, 311.

Walter. Thomas. See Ferdinand Henrich, Arthur Henry Salway, and John Joseph Sudborough.

Thomas, Wilhelm.

Michaelis. Thomas, William. See John Theodore

Hewitt. Thomas, William Thelwall. See William Wright Mackarell.

Thomaschewsky. Paul. See Ludwig

Thomason, the behaviour of lead compounds in the human stomach, 1911, A., ii, 60.

Thomé, Lars Gustaf, optically active forms of sec.-butylamine, 1903, A., i,

Thomlinson, John Clark, thermochemistry of nitrogen, 1907, A., ii, 153.

constitution of the carbon molecule, 1908, A., ii, 763.

thermochemical equivalence, and the thermochemistry of nitrogen, 1908, A., ii, 1016.

thermochemistry of phosphorus, 1909, A., ii, 212.

the metalloids arsenic and antimony; thermochemical point of view, 1909, A., ii, 380.

quadrivalency of oxygen, 1909, A., ii,

395.

affinities of the nitrogen atom, 1909, A., ii, 657.

thermochemistry of the halogens, 1909, A., ii, 862.

estimation of free ammonia and ammonium carbonate by titration, 1911, A., ii, 151.

Thommen, Hans. See Julius Schmidlin. Thompson, Albert, volumetric estimation of tannin and analysis of wood and tannin extracts, 1903, A., ii, 113.

Thompson, Firman, and H. H. Morgan, the estimation of calcium and potassium in the ash of cereals, 1912, A., ii, 205.

Thompson, Firman.
Preston Bassett. See also Harry

Thompson, Gustave W., estimation of acetic acid in white lead, 1905, A., ii, 556.

Thompson, Herbert Bryan. See Norman Leslie Gebhard, Alexander McKenzie. and Julius Tafel.

Thompson, Hugh Vernon, a copper derivative of quinol, 1911, P., 155. the interaction between di-iodoacetylene and organic sodio-derivatives,

1912, P., 146. Thompson, Hugh Vernon. Raphael Meldola. See also

Thompson, James, the chemical action of Bacillus cloacae (Jordan) on dextrose and mannitol, 1912, A., ii, 282.

Thompson, James. See also Theodor Curtius, and Arthur Harden.

Thompson, John F., and Edmund Howd Miller, platinum silver alloys, 1906, A., ii, 764.

Thompson, John Thomas. See Henry Stanley Raper.

Thompson, Kenworthy James. See Arthur Hantzsch. and John Joseph Sudborough.

Thompson, Maurice de Kay, free energy of some halogen and oxygen compounds computed from the results of potential measurements, 1906, A., ii, 517.

Thompson, Maurice de Kay, and M. W. Sage, free energy of nickel chloride,

1908, A., ii, 468.

Thompson, William Henry, metabolism of arginine, 1905, A., ii, 268, 839. effect of chloroform and ether on renal activity, 1905, A., ii, 273.

Thompson, William Henry, and Henry Mulrea Johnston, pituitary feeding,

1906, A., ii, 102. Thoms, Hermann [Friedrich Maria]. phenol ethers. I., 1903, A., i, 415,

hydrogen cyanide in cigar smoke, 1903, A., ii, 324.

phenol ethers. III. Constitution of myristicin, 1904, A., i, 47.

phenol ethers. IV. The phenol ether of the essential oil of French parsley seeds, 1904, A., i, 47.

behaviour of phenol ethers on distillation with zinc dust, 1904, A., i, 401. constitution of parsley-apiole and dillapiole, 1904, A., i, 742.

matico oil, 1904, A., i, 756.

matico oil and matico camphor, 1904, A., i, 1037.

evaluation of oil of cloves, 1904, A., ii,

a new heating oven for sealed tubes, which can be shaken, 1904, A., ii, 110. removal of poison from tobacco smoke, 1904, A., ii, 586.

use of potassium bismuth iodide for the estimation of alkaloids, 1905,

A., ii, 561.

II. Eutannin, 1906, A., i, tannins. 760.

tannins, 1906, A., ii, 504.

1904, A., i, 1038.

rottlerin, 1907, A., i, 545. essential oil of French parsley and the contained ether, 2:3:4:5-tetramethoxy-1-allylbenzene, 1908, A., i, 902. matico leaves and matico oils, 1910, A., i, 122.

Thoms, Hermann, and Rudolf Beckstroem, derivatives of asarone, 1904, A., i, 409.

Thoms, Hermann, and Arthur Biltz, derivatives of safrole, and its relations to the phenol ethers, engenol and asarone, 1904, A., i, 399. constituents of white Peru balsam,

1144

Thoms, Hermann, and W. Drauzburg, products of the action of nitric acid on dihydroanethole, 1911, A., i, 716.

Thoms, Hermann, and Carl Mannich, removal of water from secondary alcohols of high molecular weight, 1903, A., i, 673.

condensation of higher aliphatic ketones to compounds of the type of mesityl oxide, 1903, A., i, 679.

B-aminoundecane and β-aminononane, 1903, A., i, 680.

action of nitric acid on phloroglucinyl methyl ether, 1904, A., i, 1007.

Thoms, Hermann, and Bruno Molle, reduction of cincole, 1904, A., i, 599. essential oil of laurel leaves, 1904, A., i, 605.

Thoms, Hermann, and Hans Preis, the constitution of xanthotoxin and its relationship to bergaptene, 1912, A.,

Thoms, Hermann, and Adolf Schüler, action of nitric acid on phenol ethers, 1907, A., i, 696.

Thoms, Hermann, and Waldemar Siebeling, the elimination of methoxy-groups from phenolic ethers by means of nascent hydrogen, 1911, A., i, 717.

action of nitric acid on trimethylgallic [3:4:5-trimethoxybenzoic] acid and its methyl ester; constitution of antiarol, 1911, A., i, 724.

Thoms, Hermann, and F. Thümen, fagaramide, a new nitrogenous substance from the root-bark of Fagara wanthoxyloides, 1912, A., i, 115.

the physiological action of the four isomeric piperonylacrylbutylamides, 1912, A., ii, 279.

Thoms, Hermann, and J. Vogelsang, agaricic acid, 1908, A., i, 4.

Thomsen, Ernst, viscosity of gas mixtures, 1912, A., ii, 23.

Thomsen, [Hans Peter Jürgen] Julius, preparation of carbon monosulphide, CS, 1903, A., ii, 288.

F. W. Clarke's "new thermochemical law," 1903, A., ii, 410.

heat of combustion of organic compounds, 1904, A., ii, 605.

theory of the heat of combustion and the heat of formation of hydrocarbons in the gaseous state, 1905, A., ii, 231.

relative value of the calorimetric methods used in the determination of the heat of combustion of volatile organic substances, 1905, A., ii, 435. Thomsen, [Hans Peter Jürgen] Julius, numerical results of a systematic investigation of the heats of combustion and formation of volatile organic compounds, 1905, A., ii, 571.

relative value of calorimetric methods, 1905, A., ii, 801.

[thermochemical studies], 1905, A., ii,

gases in Greenland minerals, 1907, A., ii. 362.

memorial lecture on (Thorpe), 1910, T., 161.

Thomsen, Jorgen E., estimation of sodium and potassium in silicates,

1908, A., ii, 431.

Thomsen, Th. Sv., estimation of fat in milk deficient in fat, 1905, A., ii, 773.

double salts of antimony pentachloride with various alkaloid hydrochlorides, 1911, A., i, 484.

Thomson, David, a contribution to the study of tanacetone (β-thujone) and some of its derivatives, 1910, T., 1502; P., 177.

Thomson, David. See also Thomas Stewart Patterson.

Thomson, James Campbell. See Bertram
Lambert.

Thomson, John D., and Arthur Robertson Cushny, the action of antimony compounds in trypanosomiasis in rats, 1910, A., ii. 330.

Thomson, John D. See also Henry George Plimmer.

Thomson, (Sir) Joseph John, emission of negative corpuscles by the alkali metals, 1905, A., ii, 791.

rate of recombination and the size of gaseous ions, 1905, A., ii, 797.

number of corpuscles in an atom, 1906, A., ii, 431.

secondary Röntgen radiation, 1907, A., ii, 220. electrification produced by heating

salts, 1907, \mathbf{A} ., ii, 221. nature of the γ -rays, 1908, \mathbf{A} , ii, 751.

velocity of secondary cathode rays from gases, 1908, A., ii, 751.

carriers of the positive charges of electricity emitted by hot wires, 1909, A., ii, 290.

rays of positive electricity, 1911, A., ii, 457.

ionisation by moving electrified particles, 1912, A., ii, 410.

positive rays, 1912, A., ii, 885. multiply-charged atoms, 1912, A., ii

Thomson, Robert Tatlock. See Robert Rattray Tatlock.

Thomson, William, electrolytic methods for the detection and approximate estimation of minute quantities of arsenic in beer, malt, and foodstuffs, etc., 1904, A., ii, 777.

an allotropic form of arsenic, 1906,

A., ii, 745.

estimation of arsenic when in minute quantities, 1906, A., ii, 801.

reducing action of electrolytic hydrogen on arsenious and arsenic acids when liberated from the surface of different elements, 1909, A., ii, 292.

estimation of indigotin in the presence of starch, 1911, A., ii, 346.

the amount of metabolism produced by the breathing of town and country air, and of dry and damp air as measured by the carbon dioxide expired, 1911, A., ii, 408.

Thomssen, Edgar G. See John Living-

ston Rutgers Morgan.

Thonet, Richard. See Franz Sachs.

Thorburn, A. D., estimation of morphine by extraction with phenylethyl alcohol, 1912, A., ii, 610.

Thorin, E. See Hans von Euler, and

Gunnar Starck.

Thorkelsson, Thorkell, [radioactivity of] the hot springs of Iceland, 1911, A., ii, 9.

three forms of the equation of condition and the internal heat of vaporisation, 1911, A., ii, 855.

Thorne, Leonard Temple, and Ernest Haynes Jeffers, purification of zinc and hydrochloric acid from arsenic, 1906, A., ii, 394.

Thorne, Norman Campbell, precipitation of barium bromide by hydrobromic

acid, 1905, A., ii, 118.

Thornewell, A. R., estimation of zinc,

1908, A., ii, 68.

Thornley, Tom. See Martin Onslow Forster.

Thornton, William M., jun., enargite and covellite from Ouray Co., Colorado, 1910, A., ii, 418.

a felspar aggregate from Nelson Co., Virginia, 1911, A., ii, 406.

estimation of titanium in the presence of iron, 1912, A., ii, 1000.

Thorp, Arthur William, detection of cocoanut oil in butter, 1906, A., ii, 588

Thorpe, Jocelyn Field, the constitution of glutaconic acid, 1905, T., 1669; P., 239.

a reaction of certain colouring matters of the oxazine series, 1907, T., 324; P., 32. Thorpe, Jocelyn Field, the formation and reactions of imino-compounds. Part IV. The formation of 1:4-naphthylenediamine from ethyl γ-imino-acyanophenylbutyrate, 1907, T., 1004; P., 151.

the formation and reactions of iminocompounds. Part XI. The formation of 1-imino-2-cyanocyclopropane from adiponitrile, 1909, T., 1901; P., 243; discussion, P., 243.

the transformation of aliphatic nitriles into alicyclic imino-compounds; preliminary note, 1909, P., 17.

the preparation of methyl 1:1-dimethylcyclopentane-3;4-dione-2:5dicarboxylate, 1909, P., 94.

the nomenclature of imino-compounds and of compounds exhibiting iminoamino-isomerism, 1909, P., 309.

note on the preparation of \$\beta\$-hydr-

indone, 1911, P., 128.

the formation and reactions of iminocompounds. Part XVII. The alkylation of imino-compounds, 1912, T., 249; P., 4.

the chemistry of the glutaconic acids;

a correction, 1912, P., 51.

Thorpe, Jocelyn Field, and William John Young, the aß-dimethylglutaric acids, and the separation of cis- and trans-forms of substituted glutaric acids, 1903, T., 351; P., 247.

Thorpe, Jocelyn Field. See also Ernest Francis Joseph Atkinson, Harold Baron, Stanley Robert Best, Gustave Blanc, Norman Bland, Arthur Fred Campbell, Norman Allen Creeth, Francis Vernon Darbishire, Frank Bernhard Dehn, (Miss) Annie Higson, Norman Lees, Alec Duncan Mitchell, Charles Watson Moore, William Henry Perkin, jun., Frederick George Percy Remfry, Harold Rogerson, Arthur Richard Smith, James Lorrain Smith. and Ferdinard Bernard Thole.

Thorpe, Sir [Thomas] Edward, carbon monoxide as a product of combustion by the bunsen burner, 1903,

T., 318; P., 14.

the estimation of arsenic in fuel, 1903, T., 969; P., 182; discussion, P., 184.

the electrolytic estimation of minute quantities of arsenic, more especially in brewing materials, 1903, T., 974; P., 183; discussion, P., 184.

the interdependence of the physical and chemical criteria in the analysis of butter fat, 1904, T., 248; P., 12. Thorpe, Sir [Thomas] Edward, a simple thermostat for use in connexion with the refractometric examination of oils and fats, 1904, T., 257; P., 12.

the analysis of samples of milk referred to the Government Laboratory in connexion with the Sale of Food and Drugs Acts, 1905, T., 206;

P., 63.

note on the application of the electrolytic method to the estimation of arsenic in wall-papers, fabrics, etc., 1906, T., 408; P., 73.

Cleve memorial lecture, 1906, T.,

1301; P., 169.

atomic weight of radium, 1908, A., ii,

448.

note on the detection of white or orordinary phosphorus in the igniting composition of lucifer matches, 1909, T., 440; P., 73.

note on Dr. Scott's paper on the molecular weight of tetraethylammonium bromide and the atomic weight of

carbon, 1909, P., 285.
Thomsen memorial lecture, 1910, T.,

161.

Thorpe, (Sir) Edward, and Arthur Gordon Francis, atomic weight of strontium, 1910, A., ii, 209.

Thorpe, (Sir) Edward, and John Holmes, the estimation of ethyl alcohol in essences and medicinal preparations, 1903, T., 314; P., 13.

the estimation of methyl alcohol in presence of ethyl alcohol, 1903, P.,

285; 1904, T., 1.

Thorpe, (Sir) Edward, and Charles Simmonds, lead silicates in relation to pottery manufacture, 1910, T., 2282; P., 254.

Thorvaldson, Thorbergur. See Gregory Paul Baxter.

Thoulet, J., absorption of ammonia by

sea-water, 1903, A., ii, 360.

Thouvenot, M. See Paul Thiébaud

Muller.
Thovert, J., a consequence of the kinetic theory of diffusion, 1903, A., ii, 13. diffusion and the kinetic theory of solutions, 1910, A., ii, 191.

Threlfall, Richard, purification and testing of selenium, 1907, A., ii, 453.

apparatus for experiments at high temperatures and pressures, and its application to the study of carbon, 1908, T., 1333; P., 131; 1909, P., 153.

Thümen, F. See Hermann Thoms. Thümmel, Hermann. See Karl Elbs. Thuesen, Arthur. See Heinrich Goldschmidt.

Thugutt, Stanislaus Józef, origin of sodalite in syenites, 1905, A., ii, 175. reactions for distinguishing calcite and dolomite, 1905, A., ii, 421.

errors in the determination of water in zeolites, 1909, A., ii, 1027.

are allophane, halloysite, and montmorillonite simple minerals or mixtures of colloidal alumina and silica? 1911, A., ii, 210.

chemistry of cancrinite, 1911, A., ii,

298

colour reactions of calcite and aragonite, 1911, A., ii, 334.

allophane, halloysite, and montmorillonite, 1911, A., ii, 501.

metameric natrolite, 1911, A., ii, 736. an apophyllite-analcite bomb from Monte Somma, Vesuvius, 1912, A., ii, 176.

allophanoids, 1912, A., ii, 267.

Thum, John K., the so-called emulsion of silver iodide, 1910, A., ii, 1063. Thumann, Eugen. See Ernst Schmidt.

Thunberg, Torsten [Ludwig], microrespirometric investigations, 1905, A., ii, 44.

gas exchange in some lower animals and its dependence on partial pressure of hydrogen, 1905, A., ii, 728.

influence of different substances on the gaseous exchange of the surviving muscular tissue of frogs, 1910, A., ii, 54, 523; 1911, A., ii, 56, 627.

catalytic acceleration of the absorption of oxygen by muscle, 1910, A., ii, 323.

auto-oxidisable substances and systems of physiological interest. I. and II., 1911, A., ii, 33.

the function of the sulphhydryl group in the decomposition of iodoform in the animal organism, 1912, A., i, 406.

creatine, 1912, A., ii, 471. Thuringer, V. See Max Wunder.

Thurnauer, Gustav, estimation of sulphur in brass and bronze, 1911, A., ii,

Tian, A., ready means of comparing sodium carbonate and oxalic acid solutions, 1908, A., ii, 985.

nature of the decomposition of hydrogen peroxide by light, 1911, A., ii,

decomposition of water by ultra-violet light, 1911, A., ii, 452.

radiations decomposing water and the extreme ultra-violet spectrum of the mercury arc, 1911, A., ii, 564.

Tibaldi, Carlo. See Maurizio Padoa.

Tibbals. Charles Austin, jun., tellurides,

1909, A., ii, 728.

Tice, William G., and Henry Clapp Sherman, proteolysis in cows' milk preserved by means of formaldehyde, 1906, A., ii, 376.

Tichatschek, J. See Josef Herzig.

Tichborne, Charles Robert Clarke, a method in qualitative analysis for determining the presence of certain metallic oxides, 1905, A., ii, 556.

Tichomiroff, Nicolai P., action of alkalis in the protein-ferment of the gastric

juice, 1908, A., ii, 404.

Tichomiroff, Nicolai P. See also Boris

P. Babkin.

Tichomiroff, Vladimir, equilibrium in the system: water-mercuric chloridepotassium chloride, 1907, A., ii, 752. glycogen of ascomycetes, and its relation to trehalose, 1909, A., ii, 84.

Tichwinsky, Michael M[ichaelovitsch], interaction of zinc ethyl and benzenediazonium chloride, 1903, A., i,

441; 1905, A., i, 92.

benzidine isomerism, 1904, A., i, 267. interaction of zinc ethyl and benzenediazonium chloride. II. Ethylation of benzidine, 1904, A., i, 268.

action of zinc ethyl on phenylazo-

ethane, 1905, A., i, 93.

hydroazines, 1907, A., i, 353.

new dephlegmators: fractional distillation of substances of high boiling points, 1909, A., ii, 378. dephlegmator with heated jacket, 1909,

A., ii, 544.

apparatus for continuous fractional distillation, 1911, A., ii, 876.

Tichwinsky, Michael M., and Wolochowitsch, acetylation of hydrophenazine, 1905, A., i, 383.

Tichwinsky, Michael M. See also Eugen

Bamberger.

Tichwinsky, W. M. See Alexander E. Arbusoff.

Tickle, Thomas, assay of morphine; a method of extraction, 1907, A., ii,

Tiebackx, Franciscus Waltherus, simultaneous coagulation of two colloids, 1911, A., ii, 378.

the coagulum from gelatin-gum Arabic sols, and its analogy to casein, 1911, A., ii, 591.

the system: gum Arabic-gelatin, 1911, A., ii, 868.

Tiede, Erich, and Franz Fischer, distillation of tin in a vacuum, 1911, A., ii, 731.

Tiede, Erich. See also Franz Fischer. and Theodore William Richards.

Tiedtke, Hans, tetrahydroacridone, 1909. A., i, 255.

Tiedtke, Hans. See also Walther Borsche. Tiemann, Rudolf, chemical constituents of Globularia alypum, 1903, A., ii, 608.

Tiesenholt, Woldemar von, composition of bleaching powder. II., 1906, A., ii, 163.

Tietz, Heinrich. See Carl Dietrich Harries.

Tiffeneau, Marc, formation of trioxymethylene by direct oxidation of aromatic compounds containing a β-allyl side chain, 1903, A., i, 81.

methylethenylbenzene dibromide; [aßdibromoisopropylbenzenel, 1903, A.,

i, 241.

the migration of phenyl, 1904, A., i, 63. transformation of primary a-glycols into the corresponding aldehydes, 1904, A., i, 133.

two isomeric &-methylcinnamic acids,

1904, A., i, 499.

synthesis of estragol and of aromatic derivatives containing an unsaturated chain, 1904, A., i, 872.

methoethenylbenzene [phenylmethylethylene] oxide, 1905, A., i, 523.

migration of the phenyl group in the halohydrins and the a-glycols, 1906, A., i, 662.

migration of the phenyl group; mode of fixation of hypoiodous acid and the elimination of hydrogen iodide, 1906, A., i, 965.

migration of the phenyl group: "residual valency" structure of intermediate compounds, 1907, A.,

i, 39.

benzene hydrocarbons containing a ψ-allyl side-chain; methoethenylbenzene [B-allylbenzene] and its homologues; study of some mole-cular migrations. Part I. Benzene hydrocarbons containing a \u03c4-allyl side-chain, 1907, A., i, 304.

benzene hydrocarbons containing a ψ-allyl side-chain; methoethenylbenzene and its homologues; studies in molecular migration. II. Molecular transpositions accompanying the transformation of a-glycols and their derivatives into aldehydes and ketones, 1907, A., i, 404.

migration of the phenyl group of aromatic iodohydrins by elimination of hydrogen and iodine from

the same carbon atom, 1907, A., i, 922.

Tiffeneau, Mare, iodohydrins and alkyliodohydrins derived from styrene,

1908, A., i, 19.

mechanism of chemical reactions; intermediate products and intermediate structures, 1908, A., i, 117.

mechanism of transposition of phenyl in aromatic iodohydrins, 1908, A.,

i, 165.

mechanism of the transposition of phenyl in iodohydrins and aromatic glycols, 1908, A., i, 166.

supposed molecular transposition in azo-o-carboxylic acids, 1908, A., i,

227.

structural changes in organic chemistry,

1908, A., i, 305.

mechanism of the ring formations in the geranic series; synthesis and structure of dihydromyrcene, 1908, A., i, 500.

action of dehydrating agents on α-glycols, 1910, A., i, 379.

p-hydroxybenzyl-methylamine and dimethylamine, 1911, A., i, 778.
p-hydroxybenzylamine, 1911, A., i,

810. 3:4-dihydroxybenzyl-methyl

-dimethyl-amines, 1911, A., i, 972.
Tiffeneau, Marc, and H. Busquet, the rôle of caffeine in the diuretic action of coffee, 1912, A., ii, 1197.

Tiffeneau, Marc, and Daudel, transposition of phenyl; migration of the naphthyl group in iodohydrins of the naphthalene series, 1908, A., i, 972.

Tiffeneau, Marc, and Maurice Daufresne, dibromides of allyl phenolic ethers; formation of cyclopropanols, 1907, A., i, 515.

transformation of anethole glycol into anisylacetone, 1907, A., i, 701.

a vinyl alcohol of the type CArR: CH'OH, 1907, A., i, 1035.

Tiffeneau, Marc, and Raymond Delange, abnormal condensation of trioxymethylene and certain aromatic organomagnesium compounds, 1904, A., i, 48

Tiffeneau, Marc, and H. Dorlencourt, transformation of secondary-tertiary a-glycols into ketones and the transposition of hydrobenzoin, 1906, A., i, 724.

transposition of hydrobenzoin; study of alkylhydrobenzoins and some trisubstituted aromatic glycols,

1907, A., i, 130.

Tiffeneau, Marc, and Ernest Fourneau, styrene oxide, 1908, A., i, 337.

Tiffeneau, Marc. See also Auguste Béhal, H. Busquet, and Ernest Fourneau.

Tigerstedt, Carl, phosphorus metabolism in man, 1905, A., ii, 332.

action of digitalis and strophanthus on the circulation, 1908, A., ii, 612.

Tigerstedt, Robert, ash constituents in ordinary diets of human beings, 1911, A., ii, 412.

Tighe, Arthur, estimation of tantalum by Marignac's method, 1906, A., ii,

Tijmstra. See Tymstra.

Tilden, (Sir) William Augustus, specific heats of metals and the relation of specific heat to atomic weight. II. and III., 1903, A., ii, 265; 1904, A., ii, 381.

presidential address, 1904, T., 493; P., 72; 1905, T., 546; P., 104.

the action of nitrosyl chloride on pinene, 1904, T., 759; P., 122; discussion, 123.

the relation of specific heat to atomic weight in elements and compounds, 1905, T., 551; P., 104.

the rusting of iron, 1908, T., 1356, P., 169; discussion, P., 169.

Mendeléeff memorial lecture, 1909, T., 2077.

Cannizzaro memorial lecture, 1912, T., 1677.

Tilden, (Sir) William Augustus, and Donald Francis Blyther, the aminodicarboxylic acid derived from pinene, 1906, T., 1563; P., 255.

Tilden, (Sir) William Augustus, and Harry Burrows, pinene isonitrosocyanide and its derivatives, 1905, T.,

344; P., 94.

Tilden, (Sir) William Augustus, and Frederick Peacock Leach, limonene nitrosocyanides, 1904, T., 931; P., 163.

Tilden, (Sir) William Augustus, and Frederick George Shepheard, the action of magnesium methyl iodide on d-limonene nitrosochlorides, 1906, T., 920; P., 162.

the preparation and properties of dihydropinylamine (pinocamphylamine), 1906, T., 1560; P., 255.

Tilden, (Sir) William Augustus, and Joseph Arthur Stokes, the action of magnesium methyl iodide on pinene nitrosochloride, 1905, T., 836; P., 183.

Tilgner, M. See Paul Pfeiffer.

Tilley, George Stephen. See Gregory Paul Baxter. Tillmans, Josef, detection and estimation of nitric acid in milk by means of the diphenylamine-sulphuric acid test, 1911, A., ii, 151.

the quantity of nitric acid present in

wines, 1911, A., ii, 930.

detection of added water in milk (detection of nitrates), 1912, A., ii, 306.

Tillmans, Josef, and O. Heublein, estimation of free carbon dioxide in

water, 1911, A., ii, 70.

the titration of alkali carbonates in the presence of alkali hydroxides and of bicarbonates, 1911, A., ii, 658.

estimation of free carbon dioxide in water by titration with alkalis in the presence of phenolphthalein,

1912, A., ii, 1211.

Tillmans, Josef, and Arthur Splittgerber, estimation of nitric acid in milk by means of diphenylamine-sulphuric

acid, 1911, A., ii, 1132.

Tillmans, Josef, and Wilhelm Sutthoff, detection and estimation of nitric and nitrous acid in waters, 1911, A., ii, 767.

Tillmans, Josef. See also Josef König,

and A. Olig.

Tillotson, Edwin Ward, jun., density of silicate mixtures, 1912, A., ii, 643.

Ward, jun. Tillotson, Edwin See also Isaac King Phelps.

Tilmant, A. See H. Gaehlinger.

Tilt, Jennie. See Percy Norton Evans. Timby, T. George, separation of silica and alumina in iron ores, 1908, A., ii, 533.

Timmermans, Jean, iodine as a cryoscopic solvent, 1906, A., ii, 429.

relationship of the dissociation of dissolved substances to their reactivity, 1907, A., ii, 75.

critical solution temperature of ternary mixtures, 1907, A., ii, 229.

the density of liquids below zero, 1908, A., ii, 85; 1909, A., ii, 121; 1912, A., ii, 738.

theory of concentrated solutions, 1909, A., ii, 388.

purification and the physical constants of some organic liquids, 1910, A., i, 533.

critical phenomena of solution, 1910, A., ii, 19.

the critical phenomena of dissolution of mixtures with normal components examined under variable pressure, 1911, A., ii, 193.

Timmermans, Jean, solidification point of some organic liquids, 1911, A., ii, 854.

Timmermans, Jean, and Philipp Kohnstamm, influence of pressure on the miscibility of two liquids, 1909, A., ii, 981.

Timmermans, Jean. See also Philipp Kohnstamm.

Timoféeff, Gabriel, application of Nernst's formula for a mixture of two solvents, 1904, A., ii, 162.

isotonic coefficients of various salts.

1904, A., ii, 162.

molecular weight of sulphur in solution, 1904, A., ii, 165.

piezo-chemical studies. fluence of pressure on affinity. 1912, A., ii, 15.

hammer-hardening and annealing of

zinc, 1912, A., ii, 1054. offeeff, Wladimir F[e Timoféeff. F[edorovitsch]. heats of formation of mixtures and of non-aqueous solutions, 1905, A., ii. 678.

Timoféeff, Wladimir F., and L. Kobozeff, decomposition of trichloroacetic acid and some of its salts aqueous solution, 1904, A., 470.

Timtschenko. See Michael I. Konowaloff.

Alfred, phenyliso-oxazolone, Tingle, 1905, A., i, 930.

action of coke on ferric chloride and auric chloride in solution, 1909, A., ii. 405.

action of coke on solutions of ferric

chloride, 1910, A., ii, 416.

Tingle, John Bishop, behaviour of diazonium compounds towards keto-enolic desmotropic compounds, 1907, A., i, 882.

oxidation of arsenious and antimonious

oxides, 1911, A., ii, 1086.

Tingle, John Bishop, and Stuart J. Bates, amic acids. V. Action of anines on dibasic aliphatic acids, 1909, A., i, 909.

action of amines on phthalic acid. VII., 1910, A., i, 849.

derivatives of camphoroxalic acid. XIII., 1911, A., i, 54.

Tingle, John Bishop, and Frederick Conrad Blanck, nitration of aniline and of certain of its derivatives, 1907, A., i, 120.

studies in nitration. III. Nitration of aniline and of certain of its N-alkyl, N-aryl, and N-acyl derivatives,

1908, A., i, 778.

Tingle, John Bishop, and Frederick Conrad Blanck, studies in nitration. IV. Nitration of N-acyl compounds of aniline derived from certain polybasic, aliphatic, and aromatic acids, 1908, A., i. 893.

Tingle, John Bishop, and B. F. Parlett Brenton, intramolecular rearrangement of phthalamic acids.

1909, A., i, 789.

action of amines on phthalic acid.

VI., 1910, A., i, 263.

Tingle, John Bishop, and Charles E. Burke, nitration. VI. Nitroaniline derivatives of organic acids, 1910, A.,

Tingle, John Bishop, and Marshall Perley Cram, preparation of the aniline derivatives of succinic acid and of phthalic acid, 1907, A., i, 692.

Tingle, John Bishop, and Ernest E. Gorsline, influence of solvents in the Claisen condensation; catalytic action of ether and of tertiary bases in this reaction, and also in the formation of the Grignard reagent, 1907, A., i, 498.

the Claisen condensation; mechanism of the reaction, 1908, A., i, 732;

1909, A., i, 8.

John Bishop, and William Edwin Hoffmann, jun., condensation compounds of camphoroxalic acid and

amines, 1905, A., i, 799.

Tingle, John Bishop, and Benjamin Franklin Lovelace, intramolecular condensation of phthalanilic acid and of certain allied compounds. II., 1907, A., i, 1044.

Tingle, John Bishop, and Charles J. Robinson, action of amines on camphor-

oxalic acid, 1903, A., i, 902.

Tingle, John Bishop, and H. F. Rolker. studies in nitration. II. Meltingpoint curves of binary mixtures of o-, m-, and p-nitroanilines; a new method for determining the composition of such mixtures, 1908, A.,

studies in nitration. V. Meltingpoints of mixtures of o- and p-nitro-

anilines, 1908, A., i, 974.

intramolecular rearrangement phthalamic acids. III., 1909, A., i,

Tingle, John Bishop, and Leon Franklin Williams, acyl derivatives of o- and p-aminophenol, 1907, A., i, 209.

camphoroxalic acid derivatives. Action of certain secondary amines on camphoroxalic acid, 1908, A., i, 125.

Tingle, John Bishop, and Leon Franklin Williams, camphoroxalic acid derivatives. XII. Action of primary and tertiary amines on camphoroxalic acid, 1908, A., i, 126.

Tinkler, Charles Kenneth, the constitution of the hydroxides and cyanides obtained from acridine, methylacridine, and phenanthridine methiodides, 1906, T., 856; P., 135.

studies of the perhalogen salts. Parts I. and II., 1907, T., 996; P., 137; 1908, T., 1611; P., 191.

the colour and constitution of the alkyl iodides of cyclic bases, 1909, T., 921; P., 128.

the constitution of berberine, 1911,

T., 1340; P., 162.

the spectroscopic investigation of the carbinol-ammonium base isomerism; benziminazole and isoquinoline de-

rivatives, 1912, T., 1245; P., 161. Tinkler, Charles Kenneth. See als James Johnston Dobbie. See also

Tintemann. See Richard Waldvogel. Tipper, George Howlett, samarskite, etc., from Madras, 1911, A., ii, 1105.

Tir, L. See Carl Neuberg.

Tischkoff, P., See Paul Nikolaivitsch Raikow.

Tischner, Walter. See Gustav Heller. See Leo Tischtschenko, Iv. Tschugaeff.

Tischtschenko, Johann, simple distilling apparatus for the estimation of pentosans by Tollens' method, 1910, A., ii, 81.

Tischtschenko. Vetscheslav vitsch], the action of aluminium alkyloxides on aldehydes: complex ethereal condensations considered as a new form of aldehyde condensation, 1907, A., i. 182.

Tischtschenko, Vetscheslav E., A. Alexandroff, A. A. Grigoréeff, M. Gushoff, N. N. Sum, and M. N. Wischniakoff, action of aluminium alkyloxides on aldehydes; ester-condensation as a new form of aldehyde-condensation, 1907, A., i, 282.

Tischtschenko, Vetscheslav E., and G. N. Grigoréeff, action of magnesium amalgam on isobutaldehyde, 1907, A., i, 284.

Tischtschenko, Vetscheslav E., I. F. Veltsa, and I. L. Rabtsevitsch-Zubkovsky, mechanism of Cannizzaro's reaction, 1912, A., i, 267.

Tissier, Henry, and Pascal Gasching, fermentation of milk, 1903, A., ii, 743. Tissot, J., effects of breathing rarefied

air, 1904, A., ii, 495.

Tissot, J., intra-organic combustion, 1904, A., ii, 576.

proportion of chloroform in the organism during anæsthesia, 1906, A., ii, 244.

Tisza, Eduard. See Otto A. Oesterle.

Titherley, Arthur Walsh, the acylation of amides, 1904, T., 1673; P., 187. benzovl derivatives of salievlamide,

1905, P., 288.

phenylbenzometoxazone and related derivatives, 1907, T., 1419; P., 203.

labile isomerism among acylsalicylamides and acylhydroxyamines, 1908, P., 78.

2-phenyl-1:3-benzoxazine-4-one, 1910.

T., 200; P., 9.

Titherley, Arthur Walsh, and Noël Guilbert Stevenson Coppin, allantoin, a constituent of comfrey rhizome (Symphytum officinale), 1912, A., ii, 289.

Titherley, Arthur Walsh, and William Longton Hicks, labile isomerism among benzoyl derivatives of salicylamide, 1905, T., 1207; P., 219.

acetyl and benzoyl derivatives of phthalimide and phthalamic acid,

1906, T., 708; P., 106.

labile isomerism among the acylsalicylamide, acylhydroxyamine, and phenylbenzometoxazine groups, 1909, T., 908; P., 95.

the condensation of acetyl chloride and salicylamide, 1911, T., 866;

P., 102.

Titherley, Arthur Walsh, and Thomas Halstead Holden, the action of acyl chlorides on primary amides, 1912, T., 1871; P., 227. the action of benzotrichloride on

primary amides, 1912, T., 1881;

P., 227.

Titherley, Arthur Walsh, and Ernest Chislett Hughes, 6-chloro-2-phenyl-1:3-benzoxazine-4-one and related derivatives, 1910, T., 1368; P., 175.

the action of ammonia and amines on 2-phenyl-1:3-benzoxazine-4-one.

1911, T., 1493; P., 190.

Titherley, Arthur Walsh, and Morris Edgar Marples, the condensation of salicylaldehyde and benzamide, 1908, T., 1933; P., 229.

Titherley, Arthur Walsh, and James Frederick Spencer, the condensation of furfuraldehyde with sodium succin-

ate, 1904, T., 183; P., 13.
Titherley, Arthur Walsh, and (Miss) Elizabeth Worrall, the action of phosphorus pentachloride on benzamide, 1909, T., 1143; P., 150.

Titherley, Arthur Walsh, and (Miss) Elizabeth Worrall, the action of phosphorus pentachloride on dibenzamide, 1910, T., 839; P., 93.

Titherley, Arthur Walsh. Gerald Eyre Kirkwood Branch, Ernest Chislett Hughes, and James McConnan.

Titlestad, Nicolay, photo-galvanic cells formed with uranous and uranvl sulphate, 1910, A., ii, 379,

Titoff, Alexander, negative catalysis in a homogeneous system, 1904, A., ii, 113. adsorption of gases by charcoal, 1910,

A., ii, 1041.

Titoff, W. S., the estimation of radium emanation by the ionisation current, 1911, A., ii, 685.

Titsingh. Jan Camper. See Walther Borsche.

Titus, Winifred. See Victor Lenher. Tizard, Henry Thomas, the changes of methyl orange and methyl red in acid solution, 1910,

T., 2477; P., 225. the hydrolysis of aniline salts measured colorimetrically, 1910, T., 2490; P.,

225; discussion, P., 225.

the mechanism of tautomeric change, 1910, P., 125; discussion, P., 127. the sensitiveness of indicators, 1912,

A., ii, 598.

Tizard. Henry Thomas. See also Robert Tabor Lattey, and Nevil Vincent Sidgwick.

See Max Lehmann. Tobata, S.

Tobilewitsch, Nasar. See Carl Adam Bischoff.

Tobler, Alfred. See Stanislaus von Kostanecki.

Tobler, Friedrich, Mangin's rutheniumred as a reagent for pectins, 1906, A., ii, 906.

Tobler, Ludwig, digestion of proteins in the stomach, 1905, A., ii, 642.

chemistry of acute falls in weight; relationships between water and salts in the organism, 1910, A., ii, 632.

Tobler, Oscar, and R. Caramelli, the analysis of tartrates, 1911, A., ii, 447.

Toborffy, Zoltán, janosite, 1907, A., ii, 629.

crystallography of the fulgides, 1908, A., i, 735.

Toch, Maximilian, permanent protection of iron and steel, 1903, A., 1i, 650.

Tocher, James Fowler, detection of citrates and tartrates [and malates], 1906, A., ii, 813.

periodicity of the properties of the elements; new arrangement, 1910,

A., ii, 773.

Tochtermann, Leon, action of thionyl chloride on thiobenzamide, 1905. A., i, 595.

Todd. Charles, dysentery toxin and anti-

toxin, 1904, A., ii, 760.
Todd, George W., thermal conductivity of air and other gases, 1909, A., ii,

the mobility of the positive ion in gases at low pressure, 1911, A., ii, 245. mobility of positive ions produced

from heated aluminium phosphate in gases at low pressures, 1911, A., ii, 1050.

mobility of the negative ion at low pressures, 1912, A., ii, 1122.

Todd, John Lancelot. See Benjamin Moore.

Todd, Martillus H. See Charles David

Snyder.

Todeschini, Giustiniano, [detection of minute traces of arsenic], 1904, A., ii, 639.

Todo, Yoshinori. See Mitsuru Kuhara. Todtenhaupt, Friedrich, new reaction of formaldehyde, 1908, A., i, 940.

Toeche-Mittler. Siegfried. See Otto Nikolaus Witt.

Tögel, Karl. See Richard Meyer.

Togami, K., influence of certain foodadjuncts on the action of the digestive enzymes, 1908, A., ii, 513.

influence of bromine on gastric secretion, 1908, A., ii, 872. action of peroxides on the digestive

organs, 1909, A., ii, 161. Toggenburg, Friedrich. See Carl

Hartwich.

Tokarski, J. See Stanislaw Tołloczko. Tollens, Bernhard [Christian Gottfried], ash constituents of plants; their estimation and their importance for agricultural chemistry and agriculture, 1903, A., ii, 37.

estimation of pentoses and pentosans,

1903, A., ii, 46, 247.

[action of formaldehyde and lime on cinnamaldehydel, 1904, A., i, 507. estimation of glycuronic acid, 1905, A., ii, 559.

behaviour of starch on hydrolysis with moderately concentrated sulphuric acid, 1906, A., i, 560.

simple method of detecting glycuronic acid and its derivatives in presence of pentoses and in urine, 1908, A., ii, 639.

supposed permeability of glass for iodine vapour, 1909, A., ii, 654. specific rotatory power of lævulose,

1912, A., i, 336.

Tollens, Bernhard, and August Daniel Maurenbrecher, the diphenvlhydrazones of l-arabinose and of xylose, 1905, A., i, 262.

Bernhard, and F. Rorive. colour and spectral reactions of sugars with naphtharesorcinol and hydrochloric acid, 1908, A., ii, 638.

fucose, 1909, A., i, 555.

Tollens, Bernhard. See also K. H. Böddener, William Ernest Cross, Roman Dmochowski, Walter Beal William Goodwin, Rudolf Ellett. Hauers, Migaku Ishida, Karl Ulrich Lefèvre, Cornelis Marius van Marle. August Daniel Maurenbrecher, Willy Mayer, Aloys Müther, F. Rorive, Johannes Sack, Hermann Schäfer, A. Friedrich Wagener, Ulander, (Jonkheer) Louis Wichers.

Tollens, Carl, action of cresol in comparison with phenol, 1905, A., ii, 339. gout and contracted kidney, 1907,

A., ii, 901.

detection of glycuronic acid by B. Tollens' method in human urine,

1908, A., ii, 740.

quantitative estimation of glycuronic acid in urine by the furfuraldehydehydrochloric acid distillation method, 1909, A., ii, 836.

glycuronic acid and ethereal sulphates in human urine, 1910, A., ii, 732.

Tollens, Carl, and Felix Stern, the quantity of glycuronic acid excreted in normal and pathological human urine, 1910, A., ii, 328.

Tołłoczko, Stanislaw, the rate of dissolution of selenite at different crystal-

line surfaces, 1911, A., ii, 24.
Tołłoczko, Stanislaw, and M. Meyer, the latent heat of fusion of antimony trichloride and tribromide, arsenic trichloride, and stannic bromide in relation to the molecular depression of their freezing points, 1911, A., ii, 187.

Tolloczko, Stanislaw, and J. Tokarski, the rates of growth and dissolution of crystals in relation to the reversibility of these processes, 1911, A., ii, 25.

Tołłoczko, Stanislaw. See also Ludwik Bruner, Fritz Haber, and W. Jakob.

Tolmacz, Bernhard, tap pipettes, 1909, A., ii, 90.

Tolman, Lucius Moody, comparison of the halogen absorption of oils by the Hübl, Wijs, Hanus, and McIlhiney methods, 1904, A., ii, 789.

detection of archil, cudbear, and other lichen colours, 1905, A., ii, 215.

Tolman, Lucius Moody, and Lewis Storms Munson, iodine absorption of oils and fats, 1903, A., ii, 458.

Tolman, Lucius Moody, and William B. Smith, estimation of sugars by means of the refractometer, 1906, A., ii, 904.

Tolman, Lucius Moody, and T. Trescot, methods of determining esters, aldehydes, and furfuraldehyde in whisky, 1907, A., ii, 57.

Tolman, Richard C., electromotive force produced in solutions by centrifugal

action, 1911, A., ii, 248

Tolman, Richard C., and Alfred L. Ferguson, free energy of dilution of hydrochloric acid, 1912, A., ii, 322.

Tolman, Richard C., and Lucien H. Greathouse, concentration of hydrogen ion in sulphuric acid, 1912, A., ii,

Tolstopjatoff, Vadim [Michaelovitsch].

See Alexei E. Faworsky.

Tomasczewski. Alfred. See Emil Knoevenagel.

Tomaszewski, Zdzislaus, oxalic acid metabolism, 1910, A., ii, 425.
 Tombrock, W. See Ernst Cohen.

Tomei. Bertani, analyses of fresh chestnuts, their food value and manurial requirements, 1904, A., ii, 766.

Tomi, Walter. See Josef Tambor. Tommasi, Donato, electrolytic reduction of potassium chlorate, 1903, A., ii,

dissociation of copper sulphate and decomposition of copper anodes, 1904, A., ii, 734.

new isomeric modification aluminium hydroxide, 1905, A., ii,

electrolytic preparation of spongy tin, 1906, A., ii, 172.

Tommasi, Giuseppi. See Nicola Parravano.

Tommasina, Thomas, scintillation of phosphorescent zinc sulphide in the presence of radium, revived by electric discharges, 1904, A., ii, 7.

pyroradioactivity, 1904, A., ii, 530. the kinetic theory of the electron as the basis of the electron theory of

radiation, 1906, A., ii, 419. constitution of the atom, 1907, A., ii,

Tommasina, Thomas. See also Edouard Sarasin.

Tompkins, Harry K., preparation of acetylene di- and tetra-chlorides from acetylene and antimony pentachloride, 1908, A., i, 750.

Tonazzi, Umberto. See Luigi Balbiano. Tonegutti, Mario, Filippi's method for separating the acids of arsenic from urine, 1907, A., ii, 908.

is arsenious anhydride, introduced into the animal organism, eliminated unchanged or as arsenic acid? 1908,

A., ii, 214.

disappearance of arsenic in the form of gaseous or volatile compounds during putrefaction, 1909, A., ii,

a lipolytic enzyme in sweet almonds. 1911, A., ii, 525.

Tonegutti, Mario. See also Ravenna.

Toninelli, A. See Luigi Marino. Topi, M. See L. Danesi.

Topler, L. See Otto Cohnheim. Topp, Ernst. See Heinrich Biltz.

Tornani, E., lecithin and other components of egg-yolks, 1909, A., ii, 818. Tornani, Ercole. See Giuseppe Bruni.

Torquati, Torquato, the formation of hordenine during the germination of

barley, 1911, A., ii, 523.

Torrese, Rodolfo, reactions for distinguishing between nicotine and cicutine, 1905, A., ii, 778.

invertive power of certain pseudo-acids having complex functions, 1908, A.,

i. 531.

Henry Augustus, action of Torrey. ethylene dibromide on p-nitroso-dialkylanilines. II., 1906, A., i, 79.

Torrey, Henry Augustus, and Roger Adams, phenols insoluble in alkalis,

1911, A., i, 39.

Torrey, Henry Augustus, and Carl Milton Brewster, action of phthalic anhydride on resacetophenone, 1908, A., i, 427.

phenylhydrazones of 2-acetyl-1-naphthol [1-hydroxy-B-naphthyl methyl ketone]: alkali-insoluble naphthols,

1910, A., i, 47.

Torrey, Henry Augustus, and Eugene James Cardarelli, some derivatives of 2-acetyl-a-naphthol, 1911, A., i, 67.

Torrey, Henry Augustus, and Elisha Davis Clarke, vanillidene- and piperonylidene-benzidines, 1909, A., i, 421.

Torrey, Henry Augustus, and James Andrew Gibson, additive compounds p-nitrosodimethylaniline with certain phenols, 1906, A., i, 242.

Torrey, Henry Augustus, and Henry Hardenbergh, dissociation of phenoquinone and quinhydrone, 1905, A.,

i, 218.

Torrey, Henry Augustus, and William Hammett Hunter, action of potassium iodide on bromoanil and chloroanil, 1905, A., i, 217.

red and white silver salts of 2:4:6tribromophenol, 1907, A., i, 1030;

1911, A., i, 283.

action of iodides on bromoanil; iodoanil and some of its deriva-

tives, 1912, A., i, 475.

Torrey, Henry Augustus, and Herman Brunswick Kipper, hydrazones of aromatic hydroxy-ketones; alkaliinsoluble phenols, 1907, A., i, 325; 1908, A., i, 460.

Torrey, Henry Augustus, and Warren MacPherson, some azo-dyes from paminoacetophenone, 1909, A., i,

Torrey, Henry Augustus, and Charles Walter Porter, some derivatives of p-aminobenzhydrol, 1911, 340.

Torrey, Henry Augustus, and H. Rafsky, 1-benzoylphenyl-3-methyl-5pyrazolone, 1911, A., i, 84.

Torrey, Henry Augustus, and J. B. Sumner, some properties of piper-onyloin, 1911, A., i, 66.

Torrey, Henry Augustus, and Joaquin Enrique Zanetti, ethyl pyromucylacetate [furfuroylacetate], 1907, A.,

ethyl pyromucylacetate [furfuroylacetatel. II. 3-Furyl-5-pyrazolone,

1908, A., i, 840.

furoylacetic ester and the furylpyrazol-

ones, 1910, A., i, 892.

Torricelli, Andrea. See Mario Betti. Tortelli, Massimo, the thermoleometer; an apparatus for the detection of falsifications in olive oil and other vegetable and animal oils, 1904, A., ii, 598.

Tortelli, Massimo, and Valentino Fortini, identification of colza oil: its detection in olive oil and in other food oils,

1911, A., ii, 549.

Tortelli, Massimo, and Evaristo Piazza, detection and estimation of "sac-charin" in foods containing fats, starch, and proteins, 1910, A., ii,

Toschi, Baldassarre. See Luigi Mas-

carelli.

Totani, Ginzaburo, presence of adenine in bamboo shoots, 1909, A., ii, 925. occurrence of choline in testicles of oxen, 1910, A., ii, 879.

behaviour of phenylacetic acid in

fowls, 1910, A., ii, 880.

Totani, Ginzaburo, basic components of bamboo shoots, 1911, A., ii, 222.

Ginzaburo, and Zin-nosuke Totani. Hoshiai, methylpyridonium picrate. 1910, A., i, 696.

behaviour of pyridine in the organisms of goats and pigs, 1910, A., ii, 881.

Totani, Ginzaburo, and K. Katsuyama, the occurrence of arginine in the bull's testis, 1910, A., ii, 325.

Eduard, modification of the platinum vessel of the Berthelot-Mahler bomb, 1908, A., ii, 664.

Toth, Julius, apparatus for determining the differences shown by tobaccos when burnt [smoked], 1905, A., ii,

estimation of carbon monoxide in tobacco smoke, 1907, A., ii, 197.

estimation of non-volatile organic acids in tobacco, 1907, A., ii, 513; 1908, A., ii, 238.

estimation of volatile organic acids in

tobacco, 1908, A., ii, 330.

estimation of the relative amounts of the organic acids occurring in tobacco before and after fermentation, 1909, A., ii, 446.

free nicotine in tobacco smoke, 1909,

A., ii, 839.

thiocyanates in tobacco smoke, 1910. A., ii, 165.

cyanogen compounds in tobacco smoke, 1910, A., ii, 443; 1911, A., ii, 143, 1127.

estimation of nicotine in concentrated tobacco juice, 1911, A., ii, 345.

the methods employed for the estimation of nicotine in tobacco and tobacco extracts, 1912, A., ii, 1010.

Toth, Julius, and J. Krampera, comparative studies on the nicotine estimations in tobacco extracts, 1911, A., ii, 943.

Tottingham, William E. See Edwin Bret Hart.

Totze, M., localisation of morphine in the animal organism, 1904, A., ii, 220.

Touplain, F. See Fréd. Bordas. Tourpaïan, M. See Adrien Jaquerod. Tousley, Nelson Elbridge, and Moses Gomberg, certain tri-p-tolylmethane derivatives, 1905, A., i, 43.

Toussaint, E. See E. Guerry. Tower, Olin Freeman, constitution of certain organic salts of nickel and cobalt as they exist in aqueous solution, 1903, A., ii, 134; 1905, A., i, 410.

transport number of sulphuric acid,

1904, A., ii, 802.

Tower, Olin Freeman, action of nitrogen on water-vapour at high temperatures, 1905, A., ii, 814.

solubility of nitric oxide and of air in sulphuric acid, 1906, A., ii, 743.

determination of vapour pressures of solutions with the Morley gauge, 1908, A., ii, 811.

precipitation of the iron group and the composition of certain ferric formates, 1910, A., ii, 900.

Tower, Ralph Winfred. See Frederic Poole Gorham.

Towle, Elizabeth W., effects of certain stimuli on Parameecium, 1904, A., ii, 756.

Towles, Caroline, and Carl Voegtlin, creatine and creatinine metabolism in dogs during feeding and inanition, with special reference to the function of the liver, 1912, A., ii, 270.

Towles, Caroline. See also Carl Voegt-

Townsend, John Sealy Edward, the charges on ions in gases and some effects that influence the motion of negative ions, 1911, A., ii, 355.

charges on ions in gases, 1911, A., ii, 686.

the charges on ions, 1912, A., ii, 412. theory of ionisation by collision, 1912, A., ii, 516.

Townsend, John Seaty Edward, and H. E. Hurst, genesis of ions by the motion of positive ions and a theory of the sparking potential, 1905, A., ii. 7.

Toyonaga, Masato, distribution of calcium in animal organisms, 1903, A., ii. 164.

amount of calcium in various animal organs, 1904, A., ii, 751; 1905, A., ii, 335.

behaviour of sodium fluoride towards blood, 1905, A., ii, 332.

can small amounts of copper induce chronic poisoning? 1906, A., ii, 879.

Toyosumi, H., the action of cells of different organs on bacterial extracts, 1909, A., ii, 912.

Trachoniotowsky, P. See Leo Pissarjewsky.

Traetta Mosca, Filippo, use of silver salts in sterilising water, 1909, A., ii, 256.

fermentation of tyrosine, 1910, A., ii,

Tractta-Mosca, Filippo, and F. Apolloni, probable function of cholesterol in the production of uric acid in the animal organism, 1911, A., ii, 58.

Traetta-Mosca, Filippo, and Golda Mizzenmacher, importance of α-hydroxyisobutyric acid in the formation of uric acid from cholesterol by means of calf's liver, 1911, Λ., ii, 53.

Traetta-Mosca, Filippo. See also Emanuele Paternò.

Trannoy, René. See Camille Matignon. Traphagen, Frank Weiss, and Edmund Burke, occurrence of salicylic acid in fruits, 1903, A.. ii, 388.

Trapp, Hans, method of analysis without the use of hydrogen sulphide,

1912, A., ii, 685.

Trappe, Paul. See Ludwig Wolff.

Traquair, John. See Charles Frederick Cross.

Traube, Hermann, artificial production of minerals by sublimation, 1903, A., ii, 553.

Traube, Isidor, modern theories of solution; the osmotic theory and the theory of electrolytic dissociation, 1908, A., ii, 63.

physical properties of the elements from the standpoint of van der Waals' equation of condition, 1903, A., ii, 355.

critical density, 1903, A., ii, 637.

theory of the critical state; difference between gasogenic and liquidogenic substances, 1904, A., ii, 110, 237.

volume of atoms and molecules, 1904, A., ii, 384.

properties of substances regarded as functions of the space occupied by atoms and molecules; systematic classification of the elements, 1904, A., ii, 643.

a theory of solutions, 1904, A., ii, 707.

theories on osmosis, solubility, and narcosis, 1905, A., ii, 13.

valency, molecular refractions, and volumes; refraction steres. I., 1907, A., ii, 145.

volume, valency, and refraction; the refraction and the volume stere. II., 1907, A., ii, 205.

associated substances. III., 1907, A., ii, 207.

behaviour of certain substances at their critical temperatures, 1907, A., ii, 227.

osmotic pressure, 1908, A., ii, 565.

the action of lipoid-soluble substances on red blood-corpuseles, 1908, A., ii, 708.

cohesion pressure (haftdruck); the theory of solutions, 1909, A., ii, 216. Traube, Isidor, parthenogenesis, 1909, A., ii, 325.

cohesive and electrical forces: contact electricity, 1909, A., ii, 467.

van der Waals' equation of condition and the solid state, 1909, A., ii,

diminution of the cohesion pressures and of the solubility of salts by non-electrolytes, 1909, A., ii, 647.

square root of the atomic weights, 1909, A., ii, 874.

connexion of surface tension with the internal pressure and van der Waals' constants a and b, 1910, A., ii, 20.

the theory of cohesion pressure (surface pressure) and the processes of resorption, especially in the alimentary tract, 1910, A., ii, 397.

attraction pressure, 1910, A.,

capillary analysis, 1911, A., ii, 328.

cohesion pressure. V., 1911, A., ii,

surface tension and coagulation of colloidal systems; theory of the action of poisons, drugs, and dyes, 1912, A., ii, 740.

the viscostagmometer; method for estimation of surface tension, viscosity, and adsorption, 1912, A., ii,

the action of bases and basic salts on alkaloid salts, 1912, A., ii, 858.

the influence of sodium carbonate on the toxicity of basic dyes, 1912, A., ii, 858.

Wilhelm, Traube, βy-diaminoadipic acid, 1903, A., i, 76.

synthesis of xanthine bases from cyanoacetic acid; synthesis hypoxanthine and adenine, 1904, A., i, 632.

γδ-dihydroxypropylmalonic acid, 1905, A., i, 13.

2-aminoadeuine (2:6-diaminopurine), 1905, A., i, 101.

preparation of 5:5-dialkylbarbituric

acids, 1906, A., i, 894. preparation of diurethane derivatives of dialkylmalonic acids, 1907, A., i, 396.

[carbalkyloxy-5:5-dialkylbarbituric acids], 1907, A., i, 557.

the reduction of ethyl oxalate, 1908, A., i, 75.

preparation of basic compounds from methyl ethyl ketone, 1908, A., i, 362, 1010.

action of ammonia on methyl ethyl ketone, 1909, A., i, 12.

Traube, Wilhelm, evolution of hydrogen occurring when glyoxylic acid is warmed with barium hydroxide, 1909, A., i, 761.

action of ammonia on the homologues of acetone, 1909, A., i. 773.

autoxidation of aliphatic amino- and polyhydroxy-derivatives, 1910, A., i, 294; 1911, A., i, 940.

acyl derivatives of guanidine, 1911,

A., i, 115.

oxidation of amino-acids by alloxan, isatin, and p-benzoquinone, 1911, A., i, 960.

the behaviour of certain hydroxides towards solutions of alkylenediamines, 1912, A., i, 9; ii, 257.

action of ozone on alkali hydroxides,

1912, A., ii, 844.

Traube, Wilhelm, and Arthur Biltz, production of nitrites and nitrates by the electrolytic oxidation of ammonia in the presence of cupric hydroxide. II., 1904, A., ii, 727; 1906, A., ii, 159.

Traube, Wilhelm, Max Braumann, Felix Heinemann, C. Hoepner, and W. Sander, behaviour of cyanogen towards methylene compounds, 1904, A., i, 708.

Traube, Wilhelm, and Alfred Engelhardt, alkylation of commercial cvanamide salts, 1911, A., i, 955.

Tranbe, Wilhelm, and Ludwig Herrmann, 2-phenylhypoxanthine and 2-phenyladenine, 1904, A., i, 633.

Traube, Wilhelm, and Walther Nithack. action of aldehydes on o-diamines of the pyrimidine series, 1906, A., i, 214.

Traube, Wilhelm, and Albert Schöneelectrolytic oxidation of wald, ammonia, 1905, A., ii, 242.

action of oxygen on aliphatic amines in presence of copper, 1906, A., i, 143.

Traube, Wilhelm, and Friedrich Winter, 3-methylhypoxanthine, 1906, A., i, 390.

Traube-Mengarini, Margherita, Alberto Scala, the chemical permeability of living algæ and protozoa to inorganic salts and the specific action of the latter, 1909, A., ii,

colloidal silver solutions obtained by the action of pure distilled water on silver, 1909, A., ii, 731.

solutions of colloidal metals obtained by the action of boiling distilled water. II., 1909, A., ii, 809.

colloidal solubility of metals in distilled water in presence of air and in a vacuum, 1911, A., ii, 116.

Traube-Mengarini, Margherita, and Alberto Scala, action of distilled water and of distilled water containing electrolytes on metallic lead, 1912, A., ii, 161.

Tranbenberg, Heinrich (Freiherr) Rausch von. Hall effect of bismuth at high temperatures, 1905, A., ii,

certain phenomena in gases subjected to the action of spark discharge or arc light, 1908, A., ii, 1012.

occurrence of curved spectral lines in the spark spectrum of bismuth,

1910, A., ii, 246.

Traubenberg, K., betulin. A., i, 260, 972. L. 1912,

Traumann, Karl. See Theodor Curtius. Traumann, Viktor. See Hermann Pauly.

Woldemar, analysis of Trautmann. molybdenite, 1909, A., ii, 942;

1911, A., ii, 230.

estimation of sulphur in metallic molybdenum and tungsten and their iron alloys, 1910, A., ii, 543.

estimation of the amount of molybdenum in calcium molybdate, 1910,

A., ii, 1114.

the analysis of ferro-uranium, 1911, A., ii, 157; 1912, A., ii, 207.

the analysis of ferro-zirconium, 1911,

A., ii, 157.

estimation of silicon in vanadium and molybdenum and in their iron alloys, 1911, A., ii, 538.

analysis of ferro-vanadium and estimation of vanadium in the presence of

arsenic, 1911, A., ii, 544.

analysis of ferro-titanium alloys rich in silicon, 1911, A., ii, 661.

estimation of tungsten in wolframite in the presence of molybdenite, 1911, A., ii, 1139.

Trautmann, Woldemar. See also Ludwig Weiss.

Trautz, Max [Theodor], physical chemistry of the lead chamber process, 1904, A., ii, 328.

chemiluminescence, 1905, A., ii, 662. photochemistry, 1908, A., ii, 339.

triboluminescence, 1909, ii. 454.

temperature-coefficient of chemical reaction velocities. II. The physical meaning of the chemical reaction velocity in gases and its calculation from purely thermal data pertaining to the reacting substances, 1909, A., ii, 557.

Trautz, Max [Theodor], temperaturecoefficient of chemical reaction velocities. III. Physical meaning of the velocity constant, and its replacement by thermal data and the time unit for dilute solutions. 1909, A., ii, 651.

temperature-coefficient of chemical reaction velocities. IV. The velocity isochore of gas reactions, its connexion with that of the reactions of free atoms, with applications,

1910, A., ii, 24, 114, 1051. temperature-coefficient of chemical reaction velocities. V. Reaction path and nascent state; the upper limit of chemical reaction velocity and the temperatures at which it is reached, 1911, A., ii, 381.

preparation of alkaline earth metals by the electrolysis of fused salts,

1912, A., ii, 349.

velocity of gas reactions, 1912, A., ii, 746.

Trautz, Max, and Arnold Anschütz, influence of light on the crystallisation of supersaturated solutions, 1906, A., ii, 411.

solubility of the chlorates, bromates, and iodates of the alkaline earth metals. I. Barium chlorate, bromand iodate, 1906, A., ii,

656.

Trautz, Max, E. Baisch, and Alfred von Dechend, thermodynamics of the sulphuryl chloride equilibrium $SO_2 + Cl_2 = SO_2Cl_2$, 1908, A., ii,

Trautz, Max, and H. Henning, relation between viscosity and absorption coefficient for liquids, 1906, A., ii, 73. Trautz, Max, and P. Schorigin, crystal-

loluminescence and triboluminescence,

1905, A., ii, 494.

Trautz, Max, and Karl Theodor Volkmann, temperature-coefficient of the velocity of chemical reactions. 1908, A., ii, 824.

Travers, Morris William, formation of solids at low temperatures, particularly with regard to solid hydro-

gen, 1904, A., ii, 328.

law of distribution in the case in which one of the phases possesses mechanical rigidity: absorption and occlusion, 1906, A., ii, 730.

ammonium amalgam, 1907, A., ii,

adsorption and occlusion; nature of the so-called solid phase, 1908, A., ii, 18.

See

Travers, Morris William, and Charles James John Fox, vapour pressures of liquid oxygen on the scale of the constant volume oxygen thermometer filled at different initial pressures. 1904, A., ii, 13.

Travers, Morris William, and Alfred George Cooper Gwyer, comparison of the platinum scale of temperature with the normal scale at temperatures between 444° and - 190°, with notes on constant temperatures below the melting point of ice, 1905, A., ii, 372.

Travers, Morris William, and Rames C. Ray, borohydrates. I., 1912, A.,

ii, 938.

Travers, Morris William, George Senter, and Adrien Jaquerod, measurement of temperature. Part I. Pressure coefficients of hydrogen and helium at constant volume and at different initial pressures. Part II. Vapour pressures of liquid oxygen at temperatures below its boiling point on the constant volume hydrogen and helium scales. Part III. Vapour pressures of liquid hydrogen at temperatures below its boiling point on the constant volume hydrogen and helium scales, 1903, A., ii, 9.

Travers, Morris William, and Francis Lawry Usher, behaviour of certain substances at their critical tempera-

tures, 1907, A., ii, 8. Travers, Morris William. See also (Miss) Elizabeth Mary Rich, Francis Lawry Usher.

Traverso, G. B., scheelite from Sardinia,

1903, A., ii, 435.

Trawitz, Paul. See Alphonse Seyewetz. Traxl, Walter, deaminoedestin, 1908, A., i, 231.

Treacher, Henry Clarke. See Lafayette

Benedict Mendel.

Treadwell, Frederick Pearson, the nonprecipitability of magnesium by ammonia in the presence of ammonium salts, 1904, A., ii, 124.

Frederick Treadwell, Pearson, E. Anneler, estimation of ozone, 1906,

A., ii, 123

Treadwell, Frederick Pearson, and William Alexander Kynoch Christie, the density of chlorine gas, 1906, A., ii, 15, 79.

analysis of electrolytic chlorine, 1906,

A., ii, 122.

Treadwell, Frederick Pearson, and Conway von Girsewald, complex cyanocopper-ammonia compounds, 1904, A., i. 479.

Treadwell, Frederick Pearson, and Conway von Girsewald, non-precipitation of copper by hydrogen sulphide in the presence of potassium cyanide, 1904. A., ii, 172.

Frederick Pearson, and Treadwell, Arthur Alexander Koch, estimation of coal in pyrites, 1903, A., ii.

391.

estimation of fluorine in wine and beer, 1904, A., ii, 841.

Treadwell, Frederick Pearson. also Erich Müller.

Treadwell, W. See Erich Müller.

Treadwell, W., jun. See Foerster.

Treadwell, W. D., the titration of potassium cyanide in presence of potassium ferrocyanide, 1911, A., ii, 827.

the electrolytic estimation of copper in pyrites, 1912, A., ii, 998.

Treboux, Octave, nutrition of green plants with nitrogen, 1905, A., ii,

organic acids as a source of carbon for

algæ, 1906, A., ii, 478. starch formation from adonitol in the leaves of Adonis vernalis, 1909, A., ii, 922.

formation of starch from sorbitol in Rosaceæ, 1910, A., ii, 61.

Trechmann, Charles Otto. See Heinrich

Baumhauer. Trechzinsky, R. M., electrolytic prepara-

tion of chloroform, 1907, A., i, 270. Trechzinsky, R. M. See also Nicolai Antonovitsch Pushin.

Treff, Walter. " See Hugo von Soden.

Trefilieff, Ippolit Alexejevitsch, synthesis of ethyl tetrahydroquinonedicarboxylate, 1906, A., i, 511.

constitution of methronic acid, 1906,

A., i, 528; 1908, A., i, 735. bromo-derivatives of dimethyl- and trimethyl-furandicarboxylic acids, 1907, A., i, 1063.

position of bromine atoms in derivatives of methronic acid, 1908, A., i,

735.

Trefilieff, Ippolit Alexejevitsch, and B. V. Mangubi, peculiarities in the decomposition of furan derivatives, 1909, A., i, 821.

Trefilieff, Ippolit Alexejevitsch. See also Georgi Vasiljevitsch Korschun.

Treibich, Adolf. See Wilhelm Lossen. Treidel, Oskar. See Robert Pschorr, and

Otto Ruff.

Treitschke, Wilhelm, antimony-cadmium alloys, 1906, A., ii, 763.

Treitschke, Wilhelm, and Gustav Tammann, the system: iron and sulphur, 1906, A., ii, 547.

alloys of iron and chromium, 1907, A.,

ii, 958.

Treitschke, Wilhelm. See also Karl Beck.

Trendelenburg, Paul, estimation of adrenaline in normal blood and after its injection by means of physiological methods, 1910, A., ii, 971.

a proof of the presence of toxic substances in the blood of animals after thyroidectomy, 1911, A., ii, 50

Trenkner, estimation of gold, silver, and platinum, 1912, A., ii, 392.

Trenkner, Carl. See Alexander Gutbier. Trescot, T. C. See Frank C. Cook, and Lucius Moody Tolman.

Tretjakoff, J. See Petr S. Kossowitsch. Tretjakoff, R., dependence of the amount of nitrogen as nitrates on the state of cultivation of the soil, 1903, A., ii, 749.

Tretzel, Friedrich, a sensitive reagent for ammonia, 1909, A., ii, 757.

Treub, J. P. See Frans Eppo Cornelis Scheffer, and Andreas Smits.

Treutlein, Adolf. See Karl Bernhard Lehmann.

Treves, (Sir) Frederick. See Augustus Désiré Waller.

Treves, Zaccaria, and Arturo Pellizza, diazo-derivatives of proteins, 1904, A., i, 538.

Treves, Zaccaria, and Giovanni Salomone, action of nitrous acid on proteins, 1908, A., i, 114.

Trevor, Joseph Ellis, the slope of the vaporisation neutral curve, 1904, A., ii, 538.

certain heats of dilution, 1905, A., ii,

dependence of free energy on temperature, 1905, A., ii, 372.

solubility curves, 1906, A., ii, 341. general equations of the theory of

solutions, 1906, A., ii, 526. electromotive forces of concentration

cells, 1907, A., ii, 426.

osmotic pressure, 1908, A., ii, 359. thermodynamic equilibrium and stability, 1909, A., ii, 296.

Trevor, Joseph Ellis. See also James Munsie Bell.

Trey, Heinrich [Peter Friedrich], phenomena of rotation of lactose, 1904, A., i, 292.

Tribondeau, L., exerction of ammonium urate and sodium indigotinsulphonate by the serpent's kidney, 1903, A., ii, 672.

Tribot, J., heat value of nervous and muscular tissues in guinea pigs of different age, 1905, A., ii, 542.

heat of combustion and composition of guinea-pigs in relation to their age,

1906, A., ii, 375.

accelerating influence of magnesium on sugar inversion, 1909, A., i, 73.

the influence of magnesia on the inversion of sucrose [by invertase] at different temperatures, 1909, A., i, 346.

Tribot, J., and H. Chrétien, a colloidal iron hydroxide obtained by electrodialysis, and some of its properties, 1905, A., ii, 166.

Triepel, Wilhelm. See Friedrich Willy

Hinrichsen.

Trier, Georg, conversion of stachydrine into the isomeric methyl hygrate, 1910, A., i, 697.

β-aminoethyl alcohol, a product of the hydrolysis of the lecithin of bean

meal, 1911, A., i, 771.

preparation of aminoethyl alcohol from egg lecithin, 1912, A., i, 233. conversion of aminoethyl alcohol (col-

amine) into choline, 1912, A., i, 836.

Trier, Georg. See also N. T. Deleano, Ernst Schulze, and Kiyohisa Yoshimura.

Trieschmann, Armin. See Paul Pfeiffer. Trillat, [J.] Auguste, catalytic oxidation of alcohols, 1903, A., i, 222.

estimation of glycerol in wine, 1903,

A., ii, 187.

oxidation of ammonia and amines by catalytic action, 1903, A., ii, 201. acetaldehyde in the ageing and altera-

tions of wine, 1903, A., ii, 231.

detection of lead and manganese, 1903, A., ii, 512.

various catalytic reactions brought about by metals; activating and paralysing influences, 1903, A., ii, 589.

stimulating influence of protein matter on the oxidation induced by manganese, 1904, A., i, 274.

manganese salts as oxydases in the presence of a colloid, 1904, A., i, 359.

normal presence of formaldehyde in the products of combustion and smoke, 1904, A., i, 713.

stimulating or paralysing influences acting on manganese regarded as a metallic enzyme, 1904, A., ii, 38. action of formaldehyde on milk, 1904,

A., ii, 424.

Trillat, [J.] Auguste, the formation of formaldehyde in the combustion of tobacco, 1905, A., ii, 53.

presence and formation of formaldehyde in various combustions, 1905,

A., i, 325.

presence of formaldehyde in the atmosphere of towns, 1905, A., i,

formation of formaldehyde during the destruction of sugar by heating, • 1906, A., i, 234.
presence of formaldehyde in caramel-

ised substances, 1906, A., i, 235.

part played by formaldehyde in the caramelisation of sugar, 1906, A., i, 401.

influence of oxidation of ethyl alcohol on the maturing of brandy and wine, 1906, A., i, 476.

antiseptic properties of the gases produced by burning sugar, 1906, A.,

formation of formaldehyde in the combustion of sugar, 1907, A., i,

bitterness of wines, 1907, A., ii, 125. origin of the deposits of colouring matters in red wines, 1907, A., ii, 716.

formation of acetaldehyde in alcoholic fermentation, 1908, A., i, 317.

the action of iron on wine, 1909, A.,

various destinations of acetaldehyde in red wine, 1909, A., ii, 606.

influence of the aldehyde of red wine on the formation of deposits, 1909, A., ii, 607.

mechanism of the fixation of the aldehyde residue on the colouring matter of wine, 1909, A., ii, 607.

causes favouring the formation of acetaldehyde in wine, 1910, A., ii,

disinfection by the incomplete combustion of straw, 1910, A., ii, 232.

Trillat, Auguste, and Benjamin Sauton, [occurrence of ammonia in contaminated milk], 1905, A., ii, 490. estimation of proteins in milk, 1906,

A., ii, 591.

new process for estimating the casein in cheese, 1906, A., ii, 639.

presence of aldehydes in cheese and their rôle in the production of bitterness, 1907, A., ii, 294.

origin of aldehydes in cheeses, 1907,

A., ii, 388.

bitter milk, 1907, A., ii, 492.

Trillat, Auguste, and Benjamin Sauton, formation and disappearance of acetaldehyde under the influence of yeasts, 1908, A., ii, 615.

part played by yeasts in the aldehydification of alcohol, 1908, A., ii, 722. circumstances favouring the formation and destruction of acetaldehyde in alcoholic media, 1910, A., ii, 438.

Trillat, Auguste, and Turchet, new process for detecting ammonia; application for characterising the purity of

waters, 1905, A., ii, 282.

Trillat. Auguste. See also Achille Müntz. Trimbach, R., action of methyl and ethyl chloro-oxalates on cyanoacetic

esters, 1905, A., i, 323. action of methyl and ethyl chlorooxalates on acetylacetone, 1905, A.,

i. 565.

Tritsch, Walter. See Roland Scholl. Triulzi. S. See Stanislaus von Kosta-

Trivelli, Adriaan Peter Herman, silver sub-haloids, 1908, A., ii, 1036.

Warnerke's modification of the Herschel effect and the preparation of the substance of the latent image, 1909, A., ii, 141.

photochemistry of silver (sub-)haloids, 1909, A., ii, 455.

theory of the ripening process of the silver haloids, 1910, A., ii, 90.

action of hydrogen peroxide on silver (sub-)-bromides, 1910, A., ii, 502.

Ostwald's law of step-by-step transformation and the photochemical decomposition of silver haloids, 1910, A., ii, 502.

nature of Schaum's substance B, 1910, A., ii, 611.

constitution of photo-haloids, 1911, A., ii, 281; 1912, A., ii, 158, 450.

Trivelli, Adriaan Peter Herman. See also Willem Paulinus Jorissen.

Trnka, Adolf E. J. See Julius Stoklasa. Trnka, Rud., estimation of potassium as potassium platinichloride, 1912, A., ii, 298.

Trobridge, Frederick George, gases enclosed in coal and certain coal dusts, 1907, A., ii, 100.

bases contained in the tar from Otto-Hilgenstock coke-ovens, 1909, A., i, 324.

Tröger, [Karl] Julius [Ludwig], H. Berlin, and Max Franke, probable constitutional formula of the sulphonic acid, C₁₂H₁₂O₃N₅S, formed by the action of SO₂ on a diazobenzene salt, 1906, A., i, 994.

Julius, and Alfred Beutin, Tröger. oleum Pini sylvestris and oleum Pini strobi, 1904, A., i, 1037.

Tröger, Julius, and H. Bremer, some condensation products from arysulphonated acetonitriles and aromatic aldehydes, 1910, A., i, 113.

Tröger, Julius, and Max Franke, action of sulphurous acid on diazobenzene

sulphate, 1906, A., i, 993. Tröger, Julius, and Waldemar Hille, xylylallylsulphone, 1903, A., 807.

a new sensitive indicator from mtoluidine, 1904, A., i, 118.

amides, nitriles, and thioamides of arylsulphonacetic acids, 1905, A., i. 336.

Tröger, Julius, Waldemar Hille, and Paul Vasterling, action of sulphur dioxide on m-toluenediazonium chloride and benzenediazonium sulphate, 1906, A., i, 120.

Tröger, Julius, and Victor Hornung, action of phthalic chloride on arylsulphinates, arylthiosulphonates, and

arylmercaptides, 1903, Å., i, 95. Tröger, Julius, and W. Kroseberg, angostura alkaloids, 1912, A., i, 895.

Tröger, Julius, and Bernhard Lindner, arylsulphonated acetonitriles; action of alkyl haloids on arylsulphonethenylamidoximes and -thioacetamides, 1908, A., i, 633.

Tröger Julius, and Otto Lüning, chlorinated acetonitriles, 1904, A., i, 562.

Tröger, Julius, and Emil Lux, mobility of the hydrogen atoms of the methylene group in compounds of the general formulæ R·SO₂·CH₂·CN, R·SO₂·CH₂·-CO'NH₂, R·SO₂·CH₂·CO₂Et, 1910, A., i, 161.

Tröger, Julius, and Wilhelm Meine, aromatic disulphinic acids, 1904, A.,

i, 29.

Tröger, Julius, and Otto Müller, azobenzene-p-hydrazinesulphonic acid resulting from the action of sulphur dioxide on diazobenzene sulphate and its condensation with aldehydes and ketones, 1908, A., i, 1025.

angostura alkaloids, 1910, A., i, 414.

Tröger, Julius, and Adolf Prochnow, arylsulphonated acetonitriles. II. Condensation of the nitriles with aromatic aldehydes and with amyl nitrite and sodium ethoxide, 1908, A., i, 798.

Tröger, Julius, and Georg Puttkammer, coloured hydrazinesulphonic acids,

1907, A., i, 263.

Tröger, Julius, and Georg Puttkammer, condensation of 2:3'-dimethylazobenzene-4-hydrazinesulphonic acid. formed by the action of sulphurous acid on diazo-m-toluene sulphate, with aldehydes and ketones, 1909, A., i, 68.

additive products of 2:3'-dimethylazobenzene-4-hydrazones with acids,

1909, A., i, 69.

Tröger, Julius, and H. Runne, angostura alkaloids, 1911, A., i, 482.

Tröger, Julius, and F. Schaub, action of sulphurous acid on diazo-m-toluene chloride and sulphate, 1906, A., i, 993.

Tröger, Julius, and Paul Vasterling. action of alkyl haloids on the sodium derivatives of arylsulphonacetonitriles,

1905, A., i, 870.

Tröger, Julius, and Franz Volkmer, action of potassium ethyl xanthate on monohalogen substituted fatty acids and their derivatives, 1905, A., i, 15.

action of phenylhydrazine on arylthiosulphonated ethyl acetoacetate,

1905, A., i, 89.

formation of additive compounds from hydroxylamine and arylsulphonacetonitriles, 1905, A., i, 356.
Tröger, Julius, Georg Warnecke, and

F. Schaub, probable constitutional formula of the sulphonic C14H16O3N4S, formed by the action of SO₂ on diazo-m-toluene, 1906, A.,

Tröger, Julius, and Arthur Westerkamp, azoarylhydrazinesulphonic acids, 1910,

A., i, 207.

Troitzki. M. See Alexander E. Porai-Koschitz.

Trommsdorff. H., preparation of a di-iodophenolmercurous salt of p-sulphonic acid, 1912,

Trommsdorff, Richard, the reducing properties of milk; Schardinger's reaction, 1909, A., ii, 330.

Tromp de Haas, Willem Ryk. See Anne Willem Karel de Jong.

Troost, Louis Joseph, obituary notice of, 1912, T., 703. Tropp, Willi. See Theodor Zincke.

Trosianz, G., the excretion of subcutaneous injections of sodium chloride, and their effect on nitrogen metabolism, 1911, A., ii, 134.

Trotman, Samuel Russell, electrolytic estimation of arsenic, 1904, A., ii,

291.

Trotman, Samuel Russell, and John Edward Hackford, estimation of tannin by means of strychnine, 1906, A., ii, 134. Trotter. John Robert. See Martin

Onslow Forster.

See Fernand Arloing. Troude, Marc. Trouton, Frederick Thomas, mechanism of the semi-permeable membrane and a new method of determining osmotic pressure, 1912, A., ii, 237.

Trouton, Frederick Thomas, and (Miss) B. Pool, vapour pressure in equilibrium with substances holding varying amounts of moisture, 1906, A., ii, 333.

Trovanelli, Arturo. See Giuseppe Bruni. Trowbridge, John, spectra of hydrogen and reversed lines in the spectra of gases, 1903, A., ii, 253.

phosphorescence produced by canal rays, 1908, A., ii, 246. Trowbridge, Perry Fox, the estimation of phosphorus in meat, 1910, A., ii,546.

Trowbridge, Perry Fox, and Harry Sands Grindley, chemistry of flesh. IV. Proteins of beef flesh, 1906, A.,

Trowbridge, Perry Fox. See also C. K.

Francis.

Trozki, Saul. See Carl Adam Bischoff. Truchot, P., test for molybdenum, 1905, A., ii, 614.

estimation of titanic acid in minerals, 1905, A., ii, 614.

ignition of barium sulphate, 1907, A., ii. 719.

Truchsäss, Hans. See Carl Liebermann. Trueblood, B. C. See Samuel Colville Lind.

Trümpler, A. See Julius von Braun. Truffaut, Georges. See Alexandre Hé-

Truffi, Marco, the action of mercury salts on autolysis, 1910, A., ii, 142.

Trumbull, Robert S. See Frederick Jacob Alway.

Trummer, Josef, estimation of lactic acid; comparison of methods, 1908, A., ii, 905.

Trunkel, Hans, simple method for the preparation of large quantities of ellagic acid, 1910, A., i, 389.

the optical rotation of gelatin, 1910, A., i, 648.

gelatin and tannin, 1910, A., i, 704. Trunz, August, variation in cow's milk in the course of lactation, 1903, A., ii, 742.

mineral constituents of cow's milk and their variations in the course of a lactation period, 1904, A., ii, 191. Truskier, P. See Paul Pfeiffer.

Truthe, Wilhelm, the binary systems of potassium and sodium cyanides with the corresponding salts of silver, copper, and zinc, and with potassium and sodium chlorides. 1912, A., i, 612.

the behaviour of lead, cuprous and silver sulphides, and of cuprous oxide in the corresponding fused chlorides, 1912, A., ii, 763.

Trutzer, Emil. See Julius Mever.

Tsakalotos, Demetrius E., melting points of hydrocarbons homologous with methane, 1907, A., i, 105.

application of Trouton's law to the determination of the molecular elevations of the boiling points of solutions, 1907, A., ii, 531.

the passage of hydrogen through a palladium septum, and the pressure which it produces, 1908, P., 208.

hydrates of the fatty acids, according to measurements of the viscosity of their solutions, 1908, A., i, 498.

hydrates of the fatty acids, 1908, A., i, 598.

viscosities of binary mixtures of organic compounds: formation of molecular compounds in the liquid state. I. Mixtures of (a) acetone and chloroform, and (b) m-cresol with (1) aniline and (2) o-toluidine. II. Mixtures of pyridine with (1) acetic acid and (2) butyric acid, 1908, A., ii, 260.

the binary system: nicotine and water,

1909, A., i, 412.

theory of organic bases based on the viscosity of their solutions, 1909, A., ii, 553.

internal friction in the critical zone,

1909, A., ii, 975.

mixed compounds of salts and anhydrides of fatty acids, 1910, A., i, 457.

do negative vapour-pressure curves of [binary] mixtures of liquids necessarily imply the existence of molecular compounds? 1910, A., ii, 266.

vapour pressure curves, 1910, A., ii, 1036.

basic properties of the oxygen of ethers, 1911, A., i, 514.

molecular compounds of aromatic amines with nitro-derivatives, 1912, A., i, 344.

Tsakalotos, Demetrius E., and Philippe Auguste Guye, application of thermal analysis to several binary organic systems, 1910, A., ii, 826.

Tsakalotos, Demetrius E. See also Georges Baume, and Philippe Auguste

Guye.

Tsalapatini, L., detection of methylamines in the presence of ammonia, 1908, A., ii, 440.

Tschaplowitz, F., rapid estimation of fat in cocoas, 1906, A., ii, 404.

a shortened burette, 1908, A., ii, 981.

Tscharno, Jonasch-Scholom. See Theodor
Posner.

Tschebull, Erich. See Gustav Mossler.
Tschechowitsch, Vasili Julianovitsch,
β-methylcyclohexanylhydrogenphthalate, 1907, A., i, 420.

Tschegoleff, S. See Wojciech Sventoslavsky.

Tscheishwili, P. A., catalytic properties of asbestos, 1911, A., ii, 43.

reduction of neutral potassium permanganate solutions in presence of normal sulphates in various concentrations, 1912, A., ii, 164.

Tscheishwili, P. A. See also T.

Warynski.

Tschelinzeff, Wladimir [Vasilevitsch], analogy between organic oxygen and nitrogen compounds, 1904, A., i, 559.

action of the simplest secondary iodide on magnesium, 1904, A., i, 641.

theory of the Grignard reaction and a new method for the preparation of organo-magnesium compounds, 1905, A., i, 40.

conversion of organo-magnesium compounds into Grignard-Baeyer oxonium compounds and the thermochemical investigation of this reaction, 1905, A., ii, 802.

a new series of organo-magnesium compounds containing ethyl ether,

1906, A., i, 241.

preparation and properties of individual organo-magnesium compounds, 1906. A., i. 489.

pounds, 1906, A., i, 489. thermochemical investigation of the decomposition of organo-magnesium ether complexes by water, 1906, A., ii, 334.

thermochemical investigation of the decomposition of organo-magnesium compounds by water, 1906, A., ii, 334.

heats of formation of magnesium alkyl haloids from their elements; heat evolved in the preparation of magnesium alkyl haloids, 1906, A., ii, 335.

influence of radicles on the character of the residual valencies of oxygen,

1907, A., i, 106.

study of a case of isomerism among the oxonium compounds of Grignard and Baeyer, 1907, A., i, 199. Tschelinzeff, Wladimir, conversion of individual organo-magnesium compounds into amine complexes and the thermochemical investigation of the reaction, 1907, A., i, 499.

reciprocal transformations of magnesium ammonium and magnesium oxonium compounds, 1908, A., i.

254.

principal properties of exenium dibromides of simple ethers, 1911, A., i, 415.

velocity of formation of oxonium dibromides in different organic solvents; rôle of the medium in chemical kinetics, 1912, A., ii, 926.

Tschelinzeff, Wladimir, and W. K.
Konowaloff, oxonium dibromides of
simple ethers and their constitution,
1909, A., i, 353.

influence of the medium on the formation of oxonium dibromides of simple

ethers, 1911, A., i, 256.

influence of the masses of the reacting substances on the formation of oxonium dibromides in different organic solvents, 1911, A., ii, 706.

influence of the concentration of the reacting substances on the formation of oxonium dibromides in different organic solvents, 1911, A., ii, 706.

Tschermak, Armin von, the adaptative capacity of the alimentary tract to ferment formation, 1912, A., ii, 1066.

Tschermak, Gustav, preparation of silicic acids by the decomposition of natural silicates, 1905, A., ii, 816.

metasilicates and trisilicates, 1906, A., ii, 771.

preparation of silicic acids, 1908, A., ii, 490.

the silicic acids, 1909, A., ii, 884.

vapour pressure and velocity of dehydration of powdered silicic acids, 1910, A., ii, 407.

the behaviour of hydrates and hydrogels in dry air, 1912, A., ii, 1140.

Tschermak, Gustav. See also Ernst Ludwig.

Tscherne, Rudolf. See Josef Herzig.

Tscherniac, Joseph, new reagent for inducing the Hofmann reaction, 1903, A., i, 262.

preparation of benzylphthalimides, 1903, A., i, 490.

Tscherniac, Joseph. See also Arsène

Tscherniachowski, E., duodenal diabetes, 1910, A., ii, 431.

Tscherniack, Jacob. See Alexis Bach, and Fritz Ullmann.

Tschernik, Georgei Prokofevitsch, two rare minerals found on the Caucasus in the Batoum province, 1903, A., ii, 157.

chemical composition of an American modification of gadolinite and inclusions in it, 1904, A., ii, 419.

compositions of a Scandinavian form of pyrochlore and of the minerals accompanying it, 1904, A., ii, 620.

minerals [allied to pyrochlore and euxenite] from Batum, Caucasus,

1904, A., ii, 667. fergusonite from the Caucasus, 1904,

A., ii, 667.

analyses of yttrocerite and topaz from Colorado, 1907, A., ii, 362. analyses of monazite and xenotime.

1907, A., ii, 363.

chemical constitution of a North American monazite sand, 1908, A., ii, 302.

chemical constitution of a specimen of aeschynite, 1908, A., ii, 399.

composition of parisite and malacone, 1908, A., ii, 862.

chemical investigation of a Caucasian pyrochlore, 1909, A., ii, 411.

chemical investigation of mosandrite and wöhlerite, occurring together, and of certain minerals of the matrix, 1909, A., ii, 1028.

chemical investigation of a uranium mineral from Borneo, 1910, A., ii, 136.

Tschernobéeff, D., estimation of perchlorates and chlorates in saltpetre, 1905, A., ii, 416.

heat of formation of silicates, 1905, A., ii, 678.

Tschernobéeff, D., and L. Wologdine, heats of formation of certain silicates, 1912, A., ii, 235

Tschernorutzky, Helene, the relation of certain nucleic acids to enzymes which split glucosides, 1912, A., i,

the occurrence of nucleic acid in ripe

herring eggs, 1912, A., ii, 958. the action of sodium carbonate on certain alkaloid salts and dyes, 1912, A., ii, 1198.

Tschernorutzky, M., the enzymes of leucocytes, 1911, A., ii, 1108.

the action of nucleic acid on the fermentative processes in the animal body, 1911, A., ii, 1119.

the decomposition of pyruvic acid by animal organs, 1912, A., ii, 956.

Tschernorutzky, M., the antagonistic action in the animal organism of nucleic acid and the nucleic acidsplitting ferments, 1912, A., ii, 1081.

Tschilikin, Michael [Michailovitsch], estimation of tungsten, 1909, A., ii, 522. assay of sodium sulphide, 1909, A., ii,

761.

Turkey red oil: new derivatives of ricinoleic acid, 1912, A., i, 604.

Thiele's theory and indigotin, 1912, A., i, 654.

Tschilikin, Michael, and W. Milanindigotindisulphonic acid, owsky, atmospheric oxygen and hydroxyl ions, 1912, A., i, 397.

Tschirch [Wilhelm Oswald] Alexander, the alban of gutta-percha, 1904.

A., i, 76.

the exudation of resins, 1905, A., ii,

easy way of distinguishing English from Chinese rhubarb, 1905, A., ii, 659.

Tschirch, Alexander, and W. Bergmann, heerabol myrrh, 1906, A., i, 197.

Tschirch, Alexander, and H. Bromberger, Rhamnus cathartica bark, 1911. A., ii, 52.

Tschirch, Alexander, and H. Cederberg, glycyrrhizin, 1907, A., i, 545.

Tschirch, Alexander, and U. Cristofoletti, root of Rheum rhaponticum, 1905, A., ii, 851.

Tschirch, Alexander, and J. Edner, English and French rhubarb, 1907, A., ii, 501.

evaluation of rhubarb, 1907, A., ii,

Tschirch, Alexander, and Peter Anton August Frederik Eyken, rhizomes of Rheum palmatum and Rheum officinale cultivated in Berne, 1905, A., ii, 605.

Tschirch, Alexander, and S. Gauchmann, glycyrrhizic acid, 1908, A., i, 898. glycyrrhizin, 1909, A., i, 318.

occurrence of glycyrrhizic acid in plants, 1909, A., ii, 85.

Tschirch, Alexander, and K. Heuberger, Chinese rhubarb, 1903, A., i, 107.

Tschirch, Alexander, and O. Hoffbauer, aloes, 1905, A., i, 913.

Tschirch, Alexander, and Franz Koritschoner, the resin of Pinus palustris, 1903, A., i, 105.

Russian "white pitch," 1903, A., i, 106.

Tschirch, Alexander, and A. K. Gustav von Küylenstjerna, does capaloin contain methoxyl? 1904, A., i, 178. galbanic acid, 1904, A., i, 1038.

Tschirch, Alexander, and Carl Leuchtenberger, a false euphorbium resin, 1908, A., i, 196.

resin of Pinus jeffreyi, 1908, A., i, 196.

Tschirch, Alexander, and L. Monikowski, "peristaltin," 1912, A., i, 375.

Tschirch, Alexander, and Otto Müller, gutta-percha from German New Guinea, 1905, A., i, 452.

the albans and fluavil of Sumatra gutta-percha, 1905, A., i, 453.

albans of Mikindani-caoutchoue from German East Africa, 1905, A., i, 453.

Tschirch, Alexander, and Walter Paul, euphorbium, 1905, A., i, 538.

Tschirch, Alexander, and Johan F. A.
Pool, barks of Rhamnus frangula and
Rhamnus purshiana, 1908, A., ii, 886.
Tschirch, Alexander, and H. Rackwitz,

Tschirch, Alexander, and H. Rackwitz, West African copals, especially Angola and Cameroon copals, 1908, A., i, 96.

Tschirch, Alexander, and Louis Reutter, caricari elemi, 1904, A., i, 332.

mastic, 1904, A., i, 333.

resins employed in embalming in Egypt and Carthage during the first millenium B.C., 1912, A., i, 639.

Tschirch, Alexander, and Otto Saal, carana elemi from Protium carana, 1903, A., i, 430.

colophonia elemi from Colophonia mauritiana, 1904, A., i, 758.

Tacamahaca elemi, 1904, A., i, 758. genuine tacamahac of commerce, 1904, A., i, 759.

resins of the elemi group, 1904, A., i, 759.

Tschirch, Alexander, and Emil Schereschewski, chicle gum, 1905, A., i, 685.

balata, 1905, A., i, 713.

Tschirch, Alexander, and Georg Schmidt, resin-balsam of Pinus laricio (Poiret) (Austrian turpentine), 1904, A., i, 76.

Tschirch, Alexander, and H. Schulz, resin-balsam of Pinus halepensis, 1907, A., i, 544.

Tschirch, Alexander, and Alviso Burdett Stevens, Japan lacquer (ki-urushi), 1906, A., i, 31.

Tschirch, Alexander, and Bernhard Studer, American colophony, 1904, A., i, 79.

constitution of abietic acids, 1904, A., i, 80.

Tschirch, Alexander, and F. Weil, Rumex obtusifolis roots, 1912, A., ii, 196.

Tschirch, Alexander, and Ludwig Weil, gurjun balsam, 1903, A., i, 771.

Tschirch, Alexander, and J. O. Werdmüller, Honduras balsam, 1910, A., i, 688.

cabureiba balsam, 1910, A., i, 689. Tschirch, Alexander, and Max Wolff, sandarac, 1907, A., i, 145.

occurrence of abietic acid in resin oil, 1907, A., i, 418.

Tschirwinsky, Peter, anapaite and other minerals from South Russia, 1907, A., ii, 364.

crocidolite from Siberia, 1907, A., ii, 705.

artificial and natural hydrated calcium carbonates, 1909, A., ii, 492.

crystalline form of Δ¹-cyclohexene-1-aisobutyric acid, 1912, A., i, 973.

Tschirwinsky, Wladimir, podolite, a new mineral, 1907, A., ii, 481. mineralogical nature of Russian' phos-

mineralogical nature of Russian phos phorites, 1912, A., ii, 173.

Tschischikoff, A. See Oscar Lutz.
Tschitscherin, B. N., laws of formation of the chemical elements, 1904, A., ii, 475.

Tschitschibabin, Alexei E[vgenievitsch], compounds of triphenylcarbinol with organic bases, 1903. A., i. 88.

organic bases, 1903, A., i, 88. formation of 3-pyridine derivatives by Ladenburg's reaction, 1903, A., i, 853.

3-benzylpyridine and its derivatives, 1903, A., i, 853.

general method for the preparation of aldehydes, 1904, A., i, 221.

hexahydro-m-tolualdehyde, 1904, A., i, 421.

α- and γ-phenylpyridylcarbinols, 1904, A. i. 523

A., i, 523. oxidation of benzylated and phenylated

pyridines, 1904, A., i, 524. condensation of 2- and 4-benzylpyridines with formaldehyde, 1904, A., i, 524.

Ullmann and Borsum's "hexaphenylethane"; tervalency of carbon, 1905, A., i, 125.

structural formula for triphenylmethyl, 1905, A., i, 270; 1907, A., i,

new syntheses [of esters] with magnesium organo-compounds, 1905, A., i, 283.

formation of incompletely hydrogenated pyridines by the Wyschnegradsky-Ladenburg reaction, 1906, A., i, 36.

capacity of ethoxy-groups for substitution by radicles; synthesis of acetal-esters and of homologous ethyl ethoxyacrylates, 1906, A., i, 397.

- Tschitschibabin, Alexei E., synthesis of pyridine bases from saturated aldehydes and ammonia, 1906, A., i, 451.
 - ethyl propenyl ether, 1907, A., i, 8. "triphenylmethyl" and its haloid

derivatives, 1907, A., i, 27. pentaphenvlethane and hexaphenvl-

ethane, 1907, A., i, 204. crystalline compound of acetic acid with hydrogen bromide, 1907, A.,

diphenyl-4-pyridylcarbinol, 1907, A.,

the substitution of ethoxy-groups by radicles, 1907, A., i, 378.

phenylated derivatives of 4:4'-ditolyl, 1907, A., i, 503.

triphenylmethyl, 1907, A., i, 691.

p-benzhydryltetraphenylmethane, 1908, A., i, 624.

preparation of hydrocarbons of the quinodimethane series and their derivatives, 1908, A., i, 872.

existence of two isomeric magnesium triphenylmethyl chlorides, 1909, A., i, 778.

phenyl-o-tolylcarbinol, 1909, A., i, 919. a convenient method for the reduction of alcohols of the diphenyl- and triphenyl-methane series, 1911, A., i, 277.

dinaphthylmethanes and some of their derivatives, 1911, A., i, 277.

halogen derivatives of triphenylmethane, 1911, A., i, 278.

tri-a-naphthylmethane, 1911, A., i, 436.

trinaphthylmethane compounds, 1911, A., i, 969.

valency of carbon in so-called unsaturated compounds, 1912, A., i, 149.

Tschitschibabin, Alexei E., and I. V. Nikitin, 7-methoxy-3:4-dihydro-1:4benzopyrone, 1911, A., i, 1007.

Tschudin, Ernst. See Fritz Fichter. Tschugaeff, Leo A[lexandrovitsch], magnesium organic compounds as a test for the hydroxyl group, 1903, A., i, 79.

optical rotation of organic compounds,

1903, A., ii, 1.

derivatives of menthylxanthic acid and menthenes from different sources, 1904, A., i, 327.

complex compounds of succinimide, 1904, A., i, 478.

derivatives of thujone, 1904, A., i, 515. xanthogen reaction and its application to the terpene and camphor series. II., 1905, A., i, 71.

Tschugaeff, Leo A., preparation of xanthogen compounds, 1905, A., i.

complex compounds of a-dioximes. 1905, A., i, 743.

complex compounds of organic imides: succinimide copper derivatives. 1905, A., i, 865.

triboluminescence. II., 1905, A., ii. 132

a new delicate reagent for nickel. 1905, A., ii, 613.

complex compounds of organic imides: succinimide nickel derivatives, 1906, A., i, 814.

cobalt dioximines, 1906, A., i, 814; 1907, A., i, 904.

dioximes and similar compounds,

1906, A., i, 984. connexion between the chemical nature of the amines and their power to form complex compounds, 1907, A.,

new synthesis of a-diketones, 1907, A., i. 185.

influence of cyclic linkings on the degree of stability of complex compounds, 1907, A., i, 392.

complex compounds of organic imides. IV. The biuret reaction, 1907, A.,

i. 595.

sensitive method for the detection of nickel in the presence of cobalt, 1907, A., ii, 989.

investigations in the terpene and camphor series, 1908, A., i, 93.

method for the determination of the configuration of a-dioximes, 1908. A., i, 554.

complex compounds of organic disulphides, 1908, A., i, 615.

cobalt dioximines. III. New complex acid, 1908, A., i, 615.

theory of mordant dyes, 1908, A., i,

selenomercaptans and their derivatives. 1909, A., i, 129.

complex compounds. II. Compounds showing the biuret reaction, 1909, A., i, 369.

anomalous rotatory dispersion, 1909, A., ii, 631.

 $\Delta^{1:5}$ -dihydrophenol [Δ^{2} -cyclohexenone], 1910, A., i, 245.

derivatives of the dextro-antipode of natural l-menthol, 1910, A., i, 862.

rotation dispersion. III. Colourless compounds, 1911, A., ii, 450.

new type of abnormal rotation dispersion; contribution to optical superposition, 1911, A., ii, 787.

Tschugaeff, Leo A., the rotatory dispersion of some camphor derivatives,

1912, A., ii, 822.

Tschugaeff, Leo A., B. P. Afanaséeff, I. Kiréeff, A. Postnikoff, and Iv. Tischtschenko, investigations on complex compounds. VII. Complexes of the dioxime series, 1911, A., i, 261.

Tschugaeff, Leo A., and W. Budrick, bornylene, 1912, A., i, 480.

Tschugaeff, Leo A., and W. Fomin, derivatives of cholesterol, 1910, A., i, 479.

cholesterol. II., 1910, A., i, 734.

hydrogenation of isomeric thujenes and of sabinene thujane, 1911, A.,

isomeric tanacetyl alcohols and thu-

jenes, 1912, A., i, 479.

Tschugaeff, Leo A., and (Mlle.) D. complex compounds Fraenkel, platinous bromide with organic sulphides, 1912, A., i, 70.

Tschugaeff, Leo A., and A. Gasteff, cholesterol. I. The xanthogen re-

action, 1910, A., i, 31.

Tschugaeff, Leo A., and S. Glinin, specific rotation of certain optically active esters of triphenylacetic acid, 1912, A., ii, 1020.

Tschugaeff, Leo A., and Karasseff, ring formation of complex compounds,

1907, A., î, 830.

Tschugaeff, Leo A., and P. Koch, anomalous molecular refraction in the series of substituted glyoximes, 1911, A., ii, 829.

cholesterol. III., 1912, A., i, 30.

Tschugaeff, Leo A., and A. Ogorodnikoff, anomalous rotatory dispersion. II., 1910, A., ii, 812

rotation dispersion. IV. Influence of the solvent on the light absorption and rotation dispersion of coloured compounds, 1912, A., ii, 407.

Tschugaeff, Leo A., and G. Pigulewsky, dithiocamphorearboxylic acid, 1911,

A., i, 797

Tschugaeff, Leo A., and N. A. Schlæsinger, attempt to synthesise hæmopyrrole, 1905, A., i, 231.

Tschugaeff, Leo A., and E. Serbin, complex salts of certain amino-acids,

1911, A., i, 115.
Tschugaeff, Leo A., and W. Sokoloff, complex derivatives of optically active l-propylenediamine, 1907, A., i, 896.

d-propylenediamine and derivatives of the optically active propylenediamines, 1909, A., i, 137.

Tschugaeff, Leo A., and Luser Spiro, isomeric modifications of p-tolildioxime and their behaviour as to formation of complexes, 1908, A., i, 686.

Tschugaeff, Leo A., and W. Subbotin, isomeric platinum compounds of organic sulphides, 1910, A., i, 354.

Tschugaeff, Leo A., and Jac. Surenjanz, relative stability of some metalammine compounds, 1907, A., i, 187. complex compounds of oxalenedi-

amino-oxime, 1907, A., i, 198. Tschumanoff, S. See Chumanoff.

Tschunke, Reinhold, See Karl Löffler, Tschuprowa, Marie. See A. N. Schü-

Tsiwidis, A., the action of thorium-X on intravenous injection in the rabbit.

1912, A., ii, 1080.

Tsoneff, N., action of ammonia on derivatives of piperidone, pyridone, and hydropyrone, 1912, A., i, 580.

Tsuchiya, Iwaho, urobilin excretion,

1910, A., ii, 430.

Tsuda, Shigemasa, different forms of phosphoric acid in organic manures, 1909, A., ii, 930.

Tsujimoto, Mitsumaru, composition of chrysalis oil (from silk-worms), 1908, A., ii, 517.

Tsukerman, D. See N. Tananaeff. Tsurasaki, H., the complex hæmolysius.

II., 1908, A., ii, 708. Tsvett, Michail, colouring matters of Phæophyceæ, 1906, A., i, 873. chlorophyll absorption, 1906, A., i,

973. the chemistry of chlorophyll, phylloxanthin, phyllocyanin, and the

chlorophyllans, 1907, A., i, 787. spectrophotometry of the chloro-phyllins and the energetics of chlorophyll, 1907, A., i, 948. phylloxanthin, 1907, A., i, 948.

adsorption analysis and chromatographic methods; employment for chlorophyll, 1907, A., ii, 144.

pigment of yellow autumn leaves, 1908, A., i, 279.

is phosphorus an essential constituent of chlorophyllin? 1908, A., i, 440. acid derivatives of chlorophyllin, 1908, A., i, 440.

pheophytin and chlorophyllan with some concluding remarks on phylloxanthin, 1908, A., i, 668.

the nature of the so-called crystallisable chlorophyll ("metachlorophyllin"), 1908, A., i, 669; 1911, A., i, 74.

Tsvett, Michail, a new system of the so-called chlorophyll derivatives, 1908, A., i, 669.

the existence of two chlorophyllans,

1911, A., i, 395.

a new vegetable colouring matter: thujorhodin, 1911, A., i, 395.

the solubility of the chlorophyllins and a new method for isolating them, 1911, A., i, 553.

mechanism of photosynthetic transformation of energy, 1911, A., ii,

a new colour reagent for callose, 1911, A., ii, 946.

micro- and macro-chemical detection

of carrotene, 1912, A., ii, 194. Tubandt, Carl, estimation of sodium ethoxide with menthone, 1905, A., ii, 424.

nickelic salts, 1905, A., ii, 459.

alkaline cobaltous solutions, 1905, A., ii, 591.

Tubandt, Carl, and Erich Lorenz, electrical conductivity of solid and molten silver and thallous haloids, 1912, A., ii, 1124.

Tubandt, Carl, and Karl Mohs, kinetics of reactions in non-aqueous solutions,

1907, A., ii, 670.

Tubandt, Carl, Karl Mohs, W. Tubandt, and Hugo Weinhausen, inversion of menthone, 1911, A., ii. 28.

Tubandt, Carl, and W. Riedel, peroxides, 1911, A., ii, 987. nickel peroxide and its behaviour in

salt formation, 1911, A., ii, 987. Tubandt, Carl. See also Daniel

Vorländer. See Carl Tubandt. Tubandt, W.

Tucaković, R. See Jacques Pollak. Tučan, Fran., analyses of minerals from

Croatia, 1910, A., ii, 966. chalybite from Croatia, 1910, A., ii,

gajite, a new mineral, 1911, A., ii, 498. a floury silicon dioxide, 1912, A., ii,

Tuck, William Bradshaw, the constitution of hydroxyazo-compounds, 1907, T., 449; P., 58; discussion, P., 59; 1909, T., 1809; P., 230.

Tuck, William Bradshaw. See also Edward Charles Cyril Baly.

Tucker, Percy Alexander. See Walter Rosenhain.

Tucker, Samuel Auchmuty, platinum resistance furnace for melting points and combustions, 1907, A., ii, 842. preparation of a boron carbide, 1909, A., ii, 398.

Tucker, Samuel Auchmuty, and H. J. W. Bliss, preparation of boron carbide in the electric furnace, 1906, A., ii, 439.

Tucker, Samuel Auchmuty, and Alexander Lampen, measurement of temperature in the formation of carborundum, 1906,

A., ii, 610.

Tucker, Samuel Auchmuty, and Herbert Raymond Moody, the action of nitrogen on lithium carbide, 1911, A., ii, 883.

Tucker, Samuel Auchmuty, and J. B. Whitney, preparation of metallic calcium by electrolysis, 1906, A., ii, 162.

Tuckett, Ivor J., the production of glycosuria in relation to the activity of the pancreas, 1910, A., ii, 981.

Türk. Friedrich. See Leopold Rosenthaler.

Türk, Hans O. See Carl Dietrich Harries.

Türk, Wilhelm. See Zdenko Hanns Skraup.

Türkel, Rudolf, sugar-yielding substances in liver, 1906, A., ii, 872.

lactic acid formation in the body. I., 1909, A., ii, 908.

Tufts, Charles G. See Augustus Herman Gill.

Tulleken, J. E. See Bouwe Sjollema. Tullo, F. W., influence of different sugar solutions on the temperatures at which various yeasts are killed, 1905, A., ii, 412.

Tulloch, Forbes Mason Grantt. William Boog Leishman.

Tunmann, Otto, crystals in Herba conii, 1906, A., ii, 482.

carotin crystals [in Herba conii], 1906, A., ii, 482.

glucosides of Frangula bark, 1907, A., ii, 193.

bearberry leaves and the microscopic detection of arbutin, 1907, A., ii,

occurrence of calcium oxalate in Radix columbo, 1907, A., ii, 386.

micro-chemical detection of alkaloids. particularly in the leaves of Pilocarpus pennatifolius, 1909, A., ii, 711.

cause of the vanillin hydrochloric acid reaction for camphor, 1910, A., ii, 84.

the alkaloids in strychnos nux vomica during germinations, 1911, A., ii,

the micro-chemistry of inulin, 1911. A., ii, 159.

improvement of the micro-sublimation process and the detection of arbutin in plants, 1911, A., ii, 669.

1169

Tunmann, Otto, micro-chemistry of plants. I. The micro-chemistry of birch camphor, 1911, A., ii, 1022.

micro-chemistry of plants. II. Detection and localisation of andromedotoxin in Ericaceæ, 1911, A., ii,

microchemical analysis of plants. III. Detection of esculin by microsublimation in the examination of Rhizoma gelsemii, 1912, A., ii, 104.

microchemical detection of juglone in walnuts (Juglans regia), 1912, A.,

ii, 1110.

plant micro-chemistry, 1912, A., ii, 1204.

Tunnicliffe, Francis Whittaker, and Otto Rosenheim, action of chloroform, ether, alcohol, and acetone on the excised mammalian heart, 1903, A., ii, 437.

Tuomikoski, Y., absorption of the γ-rays of radium by lead, 1909, A., ii, 533.

Tuomikoski, Y. See also Ernest Rutherford.

See Auguste Trillat. Turchet.

Turnau, Richard, abnormal salts of betaines and pyridinecarboxylic acids, 1905, A., i, 546.

action of methyl iodide on 2:6-substituted pyridinecarboxylic acids, 1908,

A., i, 912.

Turnau, Richard. See also Hans Meyer. Turner, Benjamin Bernard, limiting conductivity and degree of ionisation of alcoholic solutions, 1909, A., ii, 13.

Turner, Dawson, experiments in radioactivity; the production of the thorium emanation and its use in therapeutics, 1912, A., ii, 1195.

Turner, (Miss) Emily Gertrude.

James Kenner.

Turner, Harold John, dry method for the generation of oxygen from sodium peroxide, 1907, A., ii, 162.

Turner, Harold John. See also Arthur Michael.

Turner, (Miss) Margaret Kathleen. See John Joseph Sudborough.

Turner, Maurice Russell. See William Henry Perkin, jun.

Turner, Thomas, physical and chemical properties of slags, 1906, A., ii,

transparent silver and other metallic films, 1908, A., ii, 1034.

Thomas. Turner, See also Clarence Richard Groves.

Turner, William Ernest Stephen, a possible intramolecular change in the inactive phenylalkyloxyacetic acids; preliminary note, 1909, P., 201.

Turner, William Ernest Stephen, a study of the Landsberger-Sakurai boilingpoint method of determining molecular weights, 1910, T., 1184; P.,

134.

molecular association and its relationship to electrolytic dissociation: the molecular complexity of halogencontaining compounds, 1911, T., 880; P., 40.

the molecular condition of some organic ammonium salts in bromoform,

1912, T., 1923; P., 234.

Turner, William Ernest Stephen, and Ernest Wyndham Merry, the molecular complexity, in the liquid state, of tervalent nitrogen compounds, 1910, T., 2069; P., 220.

the molecular complexity, in the liquid state, of amines, nitriles, amides; preliminary note, 1910, P.,

Turner, William Ernest Stephen. also Alexander Findlay, Andrew Norman Meldrum, and Cyril James

Turney, Horace George, and Leonard Stanley Dudgeon, lipemia and diabetes,

1906, A., ii, 109.

Turpaud, E. See Léon Grimbert. Turrentine, John William. cathodes in nitric acid, 1907, A., ii,

action of ammonium persulphate on

metals, 1908, A., ii, 104.

reversed electrolysis, 1908, A., ii, 804. modified oxy-hydrogen gas coulometer, 1909, A., ii, 537.

graphite cathode dish, 1909, A., ii, 641. hydrazine oxalates, 1910, A., i, 358.

electrochemistry of hydronitric acid [azoimide] and its salts. I. Corrosion of some metals in sodium trinitride solution, 1911, A., ii, 693.

reduction of hydronitric acid [azoimide]. I. Structure of hydronitric

acid, 1912, A., ii, 448.

estimation of iodides by direct titration, 1912, A., ii, 1091.

Turrentine, John William, and Willis A. Gibbons, electrochemical oxidation of some hydrazine salts, 1912, A., ii,

Turrentine, John William, and Raymond L. Moore, electrochemistry of hydronitric acid [azoimide] and its salts. II. Reduction of hydronitric acid by cuprous oxide, 1912, A., ii, 449.

action of hydronitric acid [azoimide] on cuprous chloride and metallic copper,

1912, A., ii, 449.

Turrentine, John William, See also Charles Baskerville.

Tusini, Francesco, detection of fluorine

in wine, 1903, A., ii, 178.

Tuteur, R., sodium chloride metabolism and sodium chloride action in healthy men, 1910, A., ii, 424.

Tutin, Frank, the constitution of umbellulone, 1906, T., 1104; P., 195; discussion, P., 196; 1908, T., 252; P., 23.

the constitution of umbellulone. Part II. The reduction of umbellulonic acid, 1907, T., 271; P., 28.

the reduction of hydroxylaminodihydroumbelluloneoxime, 1907, T.,

275: P., 29.

the interaction of methylene chloride and the sodium derivative of ethyl malonate, 1907, T., 1141; P., 158, 245.

the melting point of d-phenylglucos-

azone, 1907, P., 250.

isoamygdalin and the resolution of its hepta-acetyl derivative, 1909, T., 663; P., 118.

the resolution of benzoyloscine, 1910,

T., 1793; P., 215.

the constitution of eriodictyol, of homoeriodictyol, and of hesperitin,

1910, T., 2054; P., 222.

syntheses in the epinephrine series. Part. II. The formation and properties of some 2:5- and 2:6-substituted pyrazines and their conversion into amino-ketones and imino-diketones, 1910, T., 2495; P., 244.

the tests for purity of quinine salts,

1910, A., ii, 1124.

the constituents of the bulb of Buphane disticha, 1911, T., 1240; P., 149.

chemical examination of Enanthe crocata, 1911, A., ii, 921.

the constituents of Buphane disticha,

1912, A., i, 797.

the proposed method of micro-sublimation for the detection of æsculin and the identification of gelsemium,

1912, A., ii, 307.
Tutin, Frank, and Frederic William the synthesis of 2:4:6-Caton. trimethoxyphenyl 3:4-dimethoxystyryl ketone; a methyl derivative of eriodictyol, homoeriodictyol, and hesperitin, 1910, T., 2062; P., 223.

the absorption spectra of some substituted pyrazines and their salts,

1910, T., 2524; P., 245.

Tutin, Frank, Frederic William Caton, and Archie Cecil Osborn Hann, syntheses in the epinephrine series, 1909, T., 2113; P., 289.

Tutin. Frank, and Hubert William Bentley Clewer, chemical examination of eriodictyon. Part II., 1909. T., 81; P., 12.

the constitution of chrysophanic acid and of emodin; preliminary note,

1909, P., 200.

the constituents of Rumex ecklonianus, 1909, P., 302; 1910, T., 1.

the constituents of rhubarb, 1911, T., 946; P., 89; 1912, P., 96.

the constituents of commercial chrysarobin, 1912, T., 290; P., 13.

the constituents of Cluytia similis, 1912, T., 2221; P., 265.

the formulæ of ipuranol and some related compounds, 1912, P., 317.

Tutin, Frank, and Archie Cecil Osborn Hann, the relation between natural and synthetical glycerylphosphoric acids. Part II., 1906, T., 1749; P., 273. Tutin, Frank, and Frederic Stanley

Kipping, the four optically isomeric 1-menthylamines and their salts, 1903,

P., 289; 1904, T., 65. tin, Frank. See also Marmaduke Tutin, Frank. See also Marmaduke Barrowcliff, Thomas Callan, Frederic Herbert Lees, Charles Watson Moore, and Frederick Belding Power.

Tutorski, N. See W. Zaleski.

Tutton, Alfred Edwin Howard, crystallised ammonium sulphate, and the position of ammonium in the alkali series, 1903, T., 1049; P., 185.

the elasmometer, a new interferential form of elasticity apparatus, 1904,

A., ii, 14.

the relation of ammonium to the alkali metals; a study of ammonium magnesium and ammonium zinc sulphates and selenates, 1905, T., 1123; P., 177.

topic axes, and the topic parameters of the alkali sulphates and selenates,

1905, T., 1183; P., 217.

ammonium selenate and the question of isodimorphism in the series, 1906, T., 1059; P., 153.

relation of thallium to the alkali metals; thallium sulphate and selenate, 1907, A., ii, 688.

relation of thallium to the alkali metals; a study of thallium zinc sulphate and selenate, 1910, A., ii,

127.

Tutton, Alfred Edwin Howard, and (Miss) Mary Winearls Porter, crystallographic constants and isomorphous relations of the double chromates of the alkalis and magnesium, 1912, A., ii, 560.

Tuveri, S., the action of thorium on the normal and on the fatty-degenerated

heart, 1909, A., ii, 1041. Tweeden, M. E. See Richard Fischer. Tweedy, (Miss) May. See John Sydney

Twelvetrees, William H., petterdite, a new lead oxychloride, 1904, A., ii, 48.

Twieg, W. C. See James Flack Norris. Twiss, Douglas Frank. See Percy Faraday Frankland, Thomas Slater Price. and Arthur Slator.

Twitchell. Ernest, reagent in chemistry of fats, 1906, A., i, 331;

1907, A., i, 465.

Twort, Frederick William, fermentation of glucosides by bacteria of the typhoid-coli group and the acquisition of new fermenting powers by the Bacillus dysenteriæ and other micro-organisms, 1907, A., ii, 643.

the influence of glucosides on the growth of acid-fast bacilli, with a new method of isolating human tubercle bacilli directly from tuberculous material contaminated with other micro-organisms, 1909, A., ii, 600.

Twort, Frederick William, and Edward Mellanby, creatine-destroying bacilli in the intestine, 1912, A., ii, 466.

Twort, Frederick William. See also

Edward Mellanby.

Twort, John F., and Leonard Erskine Hill, compressed-air illness. I. Solubility of compressed air in water and oil, 1910, A., ii, 1079. Twort, John F. See

See also Leonard

Erskine Hill.

Tymstra, Sybe, jun., electrolytic conductivity of solutions of sodium in mixtures of ethyl or methyl alcohol and water, 1903, A., ii, 628.

conductivity of solutions of sodium in absolute alcohols, in alcohols diluted with water, and in mixtures of two alcohols, 1904, A., ii, 699.

Marckwald's asymmetric synthesis of optically active valeric acid, 1905,

A., i, 257.

introduction of carboxyl groups into phenol by the action of carbon dioxide. I. Salicylic acid, 1905, A.,i, 439. ionic velocities, 1905, A., ii, 499.

intramolecular rearrangement effected by fusion with potassium hydroxide; behaviour of chlorophenols and bromophenols with potassium hydroxide, zinc chloride, bromide, sulphuric acid, potassium carbonate, and potassium acetate, 1908, A., i, 262.

Tymstra, Sybe, jun., sodium phenyl carbonate as an intermediate product in Kolbe's synthesis of salicylic acid, 1912, A., i, 859.

Tymstra, Sybe, jun., and Berend Gerhardus Eggink, carboxylation of phenols by means of carbon dioxide. II. B-Naphthol-1-carboxylic 1906, A., i, 179.

Tymstra, Sybe, jun. See also Cornelis

Adriaan Lobry de Bruyn.

Tyndall. Arthur Mannering. Arthur Prince Chattock.

Tyrer, Daniel, solubilities below and above the critical temperature, 1910, T., 621; P., 62.

solubilities of organic substances in organic solvents; a contribution to the theory of solubility, 1910, T., 1778; P., 205.

the volume of a solute in solution,

1910, T., 2620; P., 326.

relations between the properties of liquids at the boiling point, 1910, A., ii, 827.

the volume of a solute in solution. Part II. The influence of molecular association, solvate formation, and ionisation, 1911, T., 871; P., 96.

latent heats of vaporisation of mixed liquids, 1911, T., 1633; P., 215, 319; 1912, T., 81.

a method for the accurate estimation of traces of water in ether, 1911, P.,

latent heats of vaporisation of mixed Part III. Mixtures liquids. associated with non-associated liquids; new criteria for the detection of solvates in mixtures of liquids, 1912, T., 1104; P., 128.

law of molecular attraction, 1912, A., ii, 136.

theory of solubility, 1912, A., ii, 238. methods of determining the association factors of liquids, 1912, A., ii,

Tyrer, Daniel. See also James Fletcher. Tydens, H. See Foeke Hendrik van der

Laan.

U.

Ubaghs, Maurice. See Eugène Prost. Ubbelohde, Leo, the true dropping point and an apparatus for determining it, 1905, A., ii, 658.

for vacuum distillations receiver rendered air-tight by mercury, 1906,

A., ii, 432.

Ubbelohde, Leo, new shortened barometer with reproducible vacuum, combined with two forms of the compact pressure gauge, 1906, A., ii, 432.

automatic shortened mercury pump combined with a compact apparatus for measuring high vacua, 1906, A.,

ii, 432.

shortened manometer with reproducible vacuum, 1906, A., ii, 739.

optical activity of mineral oils in an optically transparent state; paraffin content of mineral oils as criterion for judging their relative geological age, 1909, A., ii, 899.

the need of a systematic study of optically active petroleums, 1910,

A., ii, 306.

an electrical laboratory furnace wound with a non-noble metal, 1912, A., ii,

Ubbelohde, Leo, and de Castro, fractional burning of the constituents in the analysis of coal gas, 1912, A., ii,

Ubbelohde, Leo. See also David Holde.

Ubber, Jean. See Carl Paal. Ubeda y Correal, J., new leucomaine,

1911, A., i, 396. Uchiyama, S., stimulating action of potassium iodide on sesamum and spinach, 1906, A., ii, 388.

influence of stimulating compounds on crops under different conditions,

1908, A., ii, 126.

manurial effect of calcium cyanamide under different conditions, A., ii, 128.

manuring with bone dust, 1908, A., ii,

128.

Ucke, Alexis. See Conrad Willgerodt. Udby, Olaf. See Heinrich Goldschmidt.

Udranszky, Laszló von, the a-naphtholsulphuric reaction for dextrose, 1910, A., ii, 905.

Ubel, Max, apparatus for preparing hydrogen or carbon dioxide, 1905, A., ii. 239.

Verdingen Lienau & Co. See Chemische Fabrik Uerdingen Lienau & Co.

Urkewitsch, (Frl.) E. See Paul Nikolaivitsch Raikow.

Ürményi, Dezsö. See Fritz Ullmann. Uexküll, J. von. See Otto Cohnheim. Ugglas, Beth af. See Hans von Euler.

Uhlenhuth, Paul, and P. Manteufel, chemo-therapeutic experiments with some new atoxyl preparations in diseases, with special spirochaete reference to experimental syphilis, 1909, A., if, 421.

Uhlenhuth, Rudolf, new reaction for copper, 1910, A., ii, 898.

Uhler, Horace Scudder. See Harry Clary Jones.

Uhlfelder, Emil, action of phosphorus pentachloride on anthranilic acid, 1903, A., i, 671.

Uhlfelder, Emil, and Ludwig Vanino, new compound of acetylsalicylic acid, 1903, A., i, 174.

Uhlfelder, Emil. See also Alfred Ein-

horn, and Ludwig Vanino.

Uhlig, E. C., the Elliott gas analysis apparatus, 1910, A., ii, 354.

oil-gas analysis apparatus, 1910, A., ii,

Uhlig, Johannes, prismatine and kryptotile from Waldheim, Saxony, 1910, A., ii, 311.

nephrite from the Harz, 1911, A., ii,

Uhlik, M., heteromorphism of horse's hæmoglobin, 1904, A., ii, 672.

Uhlmann, Armin. See Hans Theodor Bucherer.

Uhlmann, Wilhelm. See Carl Hartwich.

Ujedinoff, M. N. See Nicolai D. Zelin-

Ujhelyi, Imre, [the amount of fat in] goats' milk, 1905, A., ii, 772.
Ulander, A., and Bernhard Tollens,

carbohydrates from lichens, 1906, A., ii, 193.

Ulbricht, J. See Otto Fischer.

Ulbricht, Richard, effect of lime and marl, on the yield of potatoes and on the amount of nitrogen and mineral substances, 1904, A., ii, 76.

pot experiments on the effect of liming and marling on the yield of serra-

della, 1904, A., ii, 284.
influence of lime and marl on the
yield of vetches, 1904, A., ii, 509.

pot experiments [on the action of lime and magnesia] on barley, 1905, A.,

action of calcium and magnesium in burnt lime, marl, and limestone meal on the assimilating of mineral substances by different crops, 1906, A., ii, 304.

Ulex, H., estimation of nicotine in concentrated tobacco juice, 1911, A.,

ii, 334.

Ulffers, Fritz, mode of combination of trihydroxy-bases with dibasic acids in general and of some aluminium silicates in particular, 1907, A., ii,

aluminium silicates, 1908, A., ii, 592.

Uljanin, W. von, determination of the optical constants of metals polarisation measurements, 1910, A., ii, 812.

Ullmann, Fritz, methyl sulphate as an alkylating agent, 1903, A., i, 394. formation of diphenylamine

derivatives, 1903, A., i, 692.

preparation of p-nitrodiphenylamine and its derivatives, 1908, A., i, 457. preparation of p-aminodiphenylamine and its derivatives, 1908, A., i, 457. preparation of aromatic o-nitroamino-

derivatives, 1908, A., i, 626.

preparation benzenesulphonyl of chloride, 1909, A., i, 465.

the anthraquinone series, 1910, A., i,

preparation of anthraquinoneacridones], 1910, A., i, 696.

preparation of arylsulphonaminoanthraquinones, 1910, A., i, 751.

preparation of N-alkyl- and N-arylarylsulphaminoanthraquinones, 1911, A., i, 136.

preparation of nitrogen derivatives of anthraquinones, 1911, A., i, 504. preparation of halogenated 2-anthra-

quinonylaminobenzoic acids, 1912, A., i. 114.

[preparation of anthraquinonethioxanthones], 1912, A., i, 126.

[preparation of anthracene derivatives], 1912, A., i, 996.

preparation of anthraquinone deriva-

tives, 1912, A., i, 1028.

Ullmann, Fritz, and J. S. Ankersmit, new naphthazine syntheses from oaminoazo-compounds, 1905, A., i,

Ullmann, Fritz, Walter Bader, and Hans P. Labhardt, conversion of acridone into phenylacridine derivatives, 1908, A., i, 52.

Ullmann, Fritz, and Gerhard Billig, anthraquinone series. V. Dichloroanthraquinones, 1911, A., i, 490.

Ullmann, Fritz, and Hugo Bleier, preparation of o-aminobenzophenone de-

rivatives, 1903, A., i, 176.
Ullmann, Fritz, and Karl Brittner,
preparation of hydroxyuvitaldehyde from p-cresol, 1909, A., i, 590.

Ullmann, Fritz, and Joseph Broido, chlorodinitrobenzophenone and conversion into dinitrophenylacridine derivatives, 1906, A., i, 188.

Ullmann, Fritz, and Walter Bruck, 2:4-dinitro-a-naphthol, 1909, A., i,

styphnic acid, 1909, A., i, 23.

Ullmann, Fritz, and Emil Bühler, syntheses of aminophenonaphthacridines, 1906, A., i, 44.

Ullmann, Fritz, and Erwin Cassirer, acenaphthene series, 1910, A., i,

Ullmann, Fritz, and Reiner Dahmen, diphenylamine derivatives, 1908, A.,

Ullmann, Fritz, Ernst Delétra, and D. Kogan, carbazoles, 1904, A., i, 776.

Ullmann, Fritz, and Walter Denzler, o-aminobenzophenone derivatives, 1907, A., i, 142.

Ullmann, Fritz, and Paul Dieterle, diphenyleneazone series, 1904, A., i, 269.

Ullmann, Fritz, Paul Dieterle, Walter Bader, Ernst Tedesco, Hermann Kipper, Georges Rasetti, and Heinrich Hoz, arylanthranilic acids, 1907, A., i, 842.

Ullmann, Fritz, and Gadient Engi, 9diphenylxanthene, 1904, A., i, 682.

Ullmann, Fritz, Gadient Engi, Erich Herre, Emil Kuhn, and Nicolas Wosnessensky, aromatic compounds with labile halogen, 1909, A., i,

Ullmann, Fritz, and Hans W. Ernst. new synthesis of phenylacridine de-

rivatives, 1906, A., i, 205. Ullmann, Fritz, Aram Fetvadjian, and Nicolas Racovitza, naphthacridines, 1903, A., i, 520.

Ullmann, Fritz, and Robert Fitzenkam, hydroxyacridines, 1906, A., i, 45.

Ullmann, Fritz, Otto Fodor, and Masuo Sone, anthraquinone series, 1911, A., i. 466.

Ullmann, Fritz, and Ludwik Frentzel, action of cuprous chloride on aryldiazonium salts, 1905, A., i, 308.

Ullmann, Fritz, and Burkhard Frey, preparation of p-alkylaminobenzaldehydes, 1904, A., i, 423.

Ullmann, Fritz, and Matsuo Fukui, o-amino-p-hydroxydiphenylamine,

1908, A., i, 298.

Ullmann, Fritz, Emilio Gilli, Oscar Loewenthal, and Gustave M. Meyer, symmetric diphenyl derivatives, 1904, A., i, 725.

Ullmann, Fritz, and Ernst Grether, diaminophenylphenonaphthacridine, 1903, A., i, 447.

Ullmann, Fritz, and Christian Gross, diphenylene-sultam, 1910, A., i, 886.

Ullmann, Fritz, and Meinrad Gschwind, the stilbene series, 1908, A., i, 622.

Ullmann, Fritz, and Robert Heisler, preparation of azines from nitroso-βnaphthols and o-phenylenediamine, 1910, A., i, 74.

Ullmann, Fritz, and Karl Jüngel, aminohydroxydiphenylamine, 1909, A., i, 375.

- Ullmann, Fritz, and Hermann Kipper, chloromethoxybenzoic acid, 1905, A., i. 596.
- Ullmann, Fritz, and Ernst Knecht, anthraquinone-thioxanthone, 1911, A., i, 1010.
- Ullmann, Fritz, and Eduard Kopetschni, 3:5-dibromoanthranilie acid, 1911, A., i. 292.
- Ullmann, Fritz, and Johannes Korselt, dichlorodiphenylsulphone, 1907, A., i, 306.
- Ullmann, Fritz, and Antonio La Torre, a new formation of naphthacridines; [phenonaphthacridines], 1904, A., i, 929.
- Ullmann, Fritz, and Alfred Lehner, new preparation of o-phenoxybenzoic acid (salicylic acid phenyl ether), 1904, A., i, 417.

benzophenonesulphone, 1905, A., i, 289.

Ullmann, Fritz, and Rudolf Maag, quinacridone, 1906, A., i, 459.

10-phenylacridinium compounds, 1907, A., i, 638.

Ullmann, Fritz, and Ferdinand Mauthner, oxidation of o-phenylenediamine, 1903, A., i, 199.

oxidation of substituted o-phenylenediamines, 1904, A., i, 192.

Ullmann, Fritz, and Wassily Minafeff, action of copper on chloroanthraquinones, 1912, A., i, 366.

anthraquinone series. VIII. 4-Chloroanthraquinone-1-carboxylic acid, 1912, A., i, 388.

Ullmann, Fritz, and Anna Mourawiew-Winigradoff, phenylchrysofluorene,

1905, A., i, 642.

Ullmann, Fritz, Benno Mühlhauser,
Moses Waitz, and Naum Weintraub,
acridine syntheses from aldehydes and
aromatic bases, 1903, A., i, 519.

Ullmann, Fritz, and Alfons Munzhuber, preparation of tetraphenylmethane,

1903, A., i, 245.

Ullmann, Fritz, and Géza Nádai, preparation of o-nitroamines from the corresponding phenol derivatives, 1908, A., i, 525.

Ullmann, Fritz, and Paul Ochsner, anthraquinone series. IV. Anthraquinone-1:2-acridone and anthraquinonediacridone, 1911, A., i, 489.

- Ullmann, Fritz, and Léon Panchaud, synthesis of euxanthone, 1907, A., i, 63.
- Ullmann, Fritz, and Shrirang M. Sané, dinitrophenols, 1912, A., i, 104.
- Ullmann, Fritz, and Willem van der Schalk, anthraquinone-1-carboxylic acid, 1911, A., i, 165.
 - anthraquinone series. VII. Anthraquinone-1-carboxylic acid, 1912, A., i, 387.
- Ullmann, Fritz, and Carl Schlaepfer, derivatives of hexaphenyl-p-xylene, 1904, A., i, 570.
- Ullmann, Fritz, and Alfred Schmid, action of bornyl chloride on aromatic amines, 1911, A., i, 70.
- Ullmann, Fritz, and Masuo Sone, newsynthesis of trihydroxythioxanthones, 1911, A., i, 739.
- Ullmann, Fritz, and Paul Sponagel, phenylation of phenols, 1907, A., i, 38.
- Ullmann, Fritz, Paul Sponagel, and Albert Stein, phenylation of phenols,
- 1905, A., i, 644. Ullmann, Fritz, and Albert Stein, diphenylene dioxide, 1906, A., i, 258.
- Ullmann, Fritz, and Jacob Tscherniak, diphenyl-o-phenoxylenedihydroanthracene, 1906, A., i, 102.
- Ullmann, Fritz, and Dezsö Ürményi, anthraquinonexanthones, 1912, A., i, 716.
- Ullmann, Fritz, and Jean Bex Uzbachian, permanganates as oxidising agents, 1903, A., i, 626.
- Ullmann, Fritz, and Carl Wagner, transformations of substituted o-chlorobenzoic acids in the presence of copper, 1907, A., i, 846.
 - [dichlorobenzoic acids and substances derived therefrom], 1910, A., i, 264.
 Ullmann, Fritz, and Paul Wenner, the esters of p-toluenesulphonic acid as
 - alkylating agents, 1903, A., i, 407.
 Ullmann, Fritz, and Rodolphe von
 Wurstemberger, derivatives of diphenyldiphenylenemethane, 1904,
 A., i, 154.
- fluorene compounds, 1906, A., i, 76. Ullmann, Fritz, and Marguerite Zlokasoff, arylsalicylic [aryloxybenzoic] acids and their conversion into xanthones, 1905, A., i, 597.
- Ullmann, Fritz. See also Ernst Delétra, Irma Goldberg, and Irma Ullmann. Ullmann, Gustav. See Karl Drucker.
- Ullmann, Irma, and Fritz Ullmann, thiodiphenylamines of the anthraquinone group, 1912, A., i, 389.

Ullmann, Martin, to what extent is potassium perchlorate a plant poison ?

1903, A., ii, 571.

Ulmann, Paul. See Carl Adam Bischoff. Ulpiani, Celso, protein base from the sperm of the tunny fish, 1903, A., i, 215.

synthesis of a-nitro-esters, 1903, A.,

i. 791.

uric acid bacterium, 1904, A., ii, 138. synthesis of nitro-esters, 1905, A., i. 9. constitution of the fulminuric acids, 1905, A., i, 750; 1912, A., i, 340.

supposed ammoniacal fermentation of cyanamide, 1908, A., ii, 859.

preparation of guanidine, 1909, A., i,

· transformation of calcium cyanamide in soil. III., 1910, A., ii, 890.

the constitution of the fulminuric V. Breaking down of furacids. oxandicarboxylamide, 1912, A., i,

Ulpiani, Celso, and Luigi Bernardini, action of nitric acid on ethyl acetonedicarboxylate, 1904, A., i, 971.

the constitution of the fulminuric acids. VI. Liebig's fulminuric acid,

1912, A., i, 611.

Ulpiani, Celso, and Generoso Chieffi. action of ammonium sulphide on aadichloroamides and on a-ketoamides, 1907, A., i, 54.

Ulpiani, Celso, and Ugo Ciancarelli, preparation of aromatic thio-acids and their amides, 1904, A., i, 162.

Ulpiani, Celso, and Masaniello Cingolani, biochemical mechanism of the fermentation of uric acid, 1905, A., ii, 190.

fermentation of guanine, 1906, A., ii, 189.

Ulpiani, Celso, Angelo de Dominicis, and Nunzio Sciacca, constitution of the fulminuric acids. IV., 1912, A., i, 340.

Ulpiani, Celso, and Oreste Gasparini, electrosynthesis in the group of the nitro-derivatives, 1903, A., i, 150.

Ulpiani, Celso, and Ernesto Pannain, action of formaldehyde on ethyl nitromalonate and on nitromalonamide, 1903, A., i, 863.

Ulpiani, Celso, and Alfredo Parrozzani, rapid method for estimating citric acid in lemon juice, 1907, A., ii, 57.

Ulpiani, Celso, and Giuseppi Rodano, electro-synthesis among the cyanoderivatives, 1905, A., i, 260. electro-synthesis in the oximo-ether

group, 1906, A., i, 144.

Ulpiani, Celso, and Luigi Sarcoli, alcoholic fermentation of the must of Indian figs with yeast acclimatised to sodium fluoride, 1903, A., ii, 93.

Ulpiani, Celso. See also Gaspare Ampola. Ulrich, new laboratory apparatus, 1904,

A., ii, 554.

Ulrich, Arthur, 4-hydroxyisocarbostyril, 1904, A., i, 529.

Ulrich, Christoph, fish, 1911, A., ii,

Ulrich, Christoph. See also Siegmund Küttner.

Ulrich, Gustav, and Theodor Schmidt. reducing action of animal fibres, 1908. A., i, 377.

Ulrich, Harry. See Karl Auwers, and Ernst Mohr.

Ulrich, Hermann, phosphorus compounds soluble in water and alcohol from plants, 1912, A., ii, 591.

Ulrich, Karl. See Ludwig Haitinger. Ulrich, Max. See Heinrich Ley.

Ulrich, Th., columbin. I., 1907, A., i, 331. Ultée, Arnoldus Johannes, action of hydrogen cyanide on ketones, 1906. A., i, 5, 479.

cyanohydrins, 1909, A., i, 293, 704. action of hydrogen chloride on acetone cyanohydrin, 1910, A., i, 14.

caffeine, 1910, A., i, 132.

erols from castilloa- and caoutchouc, 1912, A., i, 883. sterols ficus-

Ulzer, Ferdinand, and Jaroslav Batik, preparation of phosphoric esters from phosphoric oxide and the diglycerides of fatty acids and their bromo- and iodo- derivatives, 1908, A., i, 599.

Ulzer, Ferdinand, Jaroslav Batik, and Rudolf Sommer, preparation of diacyl glycerides of the higher fatty acids,

1908, A., i, 310.

Ulzer, Ferdinand. See also Peter Pastrovich.

Umbach, Theodor. See Conrad Willgerodt.

Umney, John Charles, and Charles Thomas Bennett, South American orange oil, 1904, A., i, 331.

Umnova, [Mlle.] Anna Ivanovna, action of hypochlorous acid on ethylene hydrocarbons, 1911, A., i, 249.

Umnova, [Mlle.] Anna Ivanovna. also Johannes Thiele.

Umoff, Nicolai A., a spectro-polariscopic method for the investigation of the absorption of light and of the nature of dyes, 1912, A., ii, 1019.

Unanoff. See Michael Saytzeff.

Underhill, Frank Pell, physiological action of the proteoses, 1903, A., ii, 661. Underhill, Frank Pell, origin and precursors of urinary indican, 1904. A., ii, 193, 754.

experimental diabetes, 1905, A., ii, 187,

844.

lactic acid in the urine of pernicious vomiting of pregnancy, 1907, A., ii,

production of glycosuria by adrenaline in thyroidectomised dogs. 1911, A., ii, 137.

the metabolism of dogs with functionally-resected small intestine,

1911, A., ii, 214.

influence of urethane in the production of glycosuria in rabbits after the intravenous injection of adrenaline,

1911, A., ii, 312.

carbohydrate metabolism. T. The influence of hydrazine on organism with special reference to the blood sugar content, 1911, A., ii, 910.

the action of intravenous injections of concentrated solutions of salt and

sugar, 1912, A., ii, 188.

the influence of sodium tartrate on the elimination of certain urinary constituents during phloridzin diabetes, 1912, A., ii, 787.

mechanism of phloridzin diabetes, 1912, A., ii, 1195.

Underhill, Frank Pell, and Clarence L. Black, the influence of cocaine on metabolism, with especial reference to the elimination of lactic acid, 1912, A., ii, 472.

Underhill, Frank Pell, and Oliver Eugene Closson, physiological behaviour of methylenemethylene-blue and azure, 1905, A., ii, 471.

salt glycosuria, 1906, A., ii, 186, 243. influence of subcutaneous injections of dextrose on nitrogenous metabolism, 1906, A., ii, 778.

adrenaline glycosuria, 1906, A., ii,

Underhill, Frank Pell, and Morris Seide Fine, carbohydrate metabolism. The prevention and inhibition of pancreatic diabetes, 1911, A., ii, 1001.

Underhill, Frank Pell, and Warren Witherell Hilditch, thyroidectomy and carbohydrate metabolism, 1909,

Underhill, Frank Pell, and Israel Simon Kleiner, the influence of hydrazine on the intermediary metabolism of the dog, 1908, A., ii, 214.

mechanism of salt glycosuria, 1908,

A., ii, 409.

Underhill, Frank Pell, and Saiki, influence of thyroidectomy and thyroid feeding on intermediary metabolism, 1908, A., ii, 962.

Underhill, Frank Pell. See also Yundell Henderson, and Lafayette Benedict

Ungemach, Henri L., metalliferous veins of the Val de Villé, Vosges, Alsace, 1906, A., ii, 765.

Mexican minerals, 1911, A., ii, 614.

atacamite, 1911, A., ii, 1100.

Unger, Ernst, and Richard Jäger, pentose estimations, 1903, A., ii, 456.

Unger, Ernst. See also Richard Jäger. Unkel, Walter. See Hans Meerwein. Unna, Paul G., and L. Golodetz, the

cutaneous fats, 1909, A., ii, 910. the cholesterol ester of the horny

layer, 1910, A., ii, 630.

Unruh, Max von, some constants of carbon disulphide, 1903, A., ii, 74.

Unruh, Max von. See also Hugo Erdmann. Unverdorben, Otto, See Theodor Posner, Upson, Fred W., action of normal barium hydroxide on dextrose and galactose,

1911, A., i, 423.

Upson, Fred W. See also Samuel Avery. and Waldemar Koch.

Upson. Henry T., molecular rearrangement of aminophenyl alkyl carbonates, 1904, A., i, 734.

Upson, Henry T. See also Julius Stieglitz.

Upton, George Burr, the iron-carbon equilibrium, 1908, A., ii, 1042.

nature of the cast irons, 1909, A., ii, 581. Upton, George Burr. See also Earnest Stanley Shepherd.

Urano, Fumichiko, action of acid anhydrides on creatine and creatinine, 1907, A., i, 192.

method of combination of creatine in muscle, 1907, A., ii, 111.

salts of muscle, 1907, A., ii, 978; 1909, A., ii, 163.

Urazoff, Georgei G regorevitsch], alloys of copper and magnesium, 1908, A., ii,

magnesium aurides, 1910, A., ii, 43. electrical conductivity and hardness of magnesium-cadmium alloys, 1911, A., ii, 887.

Urazoff, Georgei G., and Rudolf Vogel, the equilibrium diagram of the gold-magnesium alloys, 1910, A.. ii, 872.
Urazoff, Georgei G. See also Sergius F.

Schemtschuschny.

Urbain, Edouard, origin of carbon dioxide in seeds during germination, 1904, A., ii, 835.

Urbain, Edouard, L. Perruchon, and J. Lancon, influence of decomposition products of protein matter on the saponification of oils by cytoplasm, 1904, A., ii, 835.

Urbain, Edouard, and Louis Saugon, hydrolysing properties of ricinus seed,

1904, A. ii, 635.

Urbain, Edouard, Louis Saugon, and André Feige, saponification of cocoanut oil by cytoplasm, 1905, A., i, 108.

Urbain, Edouard. See also Albert

Verley.

Urbain, Georges, yttrium earth related gadolinium, 1905, A., ii, 35.

purification of gadolinium; atomic weight of gadolinium, 1905, A., ii,

new spectrum of gadolinium, 1905,

A., ii, 458.

isolation of terbium, 1905, A., ii, 711. victorium, and the ultra-violet phosphorescence of gadolinium, 1906, A., ii, 28.

cathodic phosphorescence of europium,

1906, A., ii, 138.

researches on the rare earths, 1906,

A., ii, 359, 449, 855.

isolation and some atomic characteristics of dysprosium, 1906, A., ii, 359. atomic weight and spark spectrum of

terbium, 1906, A., ii, 361.

cathodic phosphorescence of europium diluted with lime; study of the phosphorescent ternary system: lime-gadolinia-europia, 1906, A., ii,

cathodic phosphorescence spectra of terbium and dysprosium diluted with lime, 1906, A., ii, 674.

the elements which produce phosphorescence in minerals: case of chlorophane a variety of fluorspar, 1907, A., ii, 3.

a new element: lutecium, resulting from the decomposition of Marignac's ytterbium, 1907, A., ii, 956.

the nature of the phosphorescent elements and meta-elements of Sir W. Crookes, 1908, A., ii, 108.

lutecium and neo-ytterbium, 1908, A.,

ii, 283.

ultra-violet spark spectrum of dysprosium and some remarkable magnetic properties of this element, 1908, A., ii, 446.

resolution of ytterbium into its com-

ponents, 1908, A., ii, 849.

law of the optimum of cathodic phosphorescence in binary systems, 1909, A., ii, 112.

Urbain, Georges, revision of the atomic weights of the rare earths, 1909. A., ii, 316.

new method of isolating terbium, 1909. A., ii, 671.

spectrographic analysis of blende. 1909, A., ii, 1026.

magneto-chemical analysis of rare earths, 1910, A., ii, 505.

phosphorescence, 1910, A., ii, 765. lutecium and neoytterbium or cassiopeium and aldebaranium, 1910. A., ii, 957.

a new element accompanying lutecium and scandium in gadolinite earths;

celtium, 1911, A., ii, 115.

certain objections recently raised by A. Colson against the ionic theory, 1911, A., ii, 861.

a laboratory balance with electromagnetic compensation for the study of systems liberating gases at an appreciable rate, 1912, A., ii, 341.

Urbain, Georges, Maurice Blondel, and Obiedoff, extraction of germanium from blendes, 1910, A., ii, 717. Urbain, Georges, and François Bourion,

europous chloride, 1912, 162.

Urbain, Georges, François Bourion, and Maillard, extraction of lutecium from gadolinite earths, 1909, A., ii,

Urbain, Georges, and M. Demenitroux, atomic weight of dysprosium, 1906, A., ii, 855.

Urbain, Georges, and Gustav Jantsch, some compounds of terbium and of dysprosium, 1908, A., ii, 189.

magnetism of the rare earths, 1909,

A., ii, 116.

Urbain, Georges, and Henri Lacombe, complete separation in the series of the rare earths, 1904, A., ii, 37.

a series of compounds of bismuth, 1904, A., ii, 43.

use of bismuth as a separating agent in the series of the rare earths, 1904, A., ii, 173.

europium, 1904, A., ii, 340.

preparation of samarium oxide and the atomic weight of samarium, 1904, A., ii, 486.

Urbain, Georges, and Clair Scal, the ultra-violet phosphorescence spectrum of fluorspar; variations in the phosphorescence spectrum of the same element in the same diluent, 1907, A., ii, 61.

Urbain, Georges, and Clair Scal, cathodic phosphorescence of complex systems; paralysing action of certain exciting agents of the rare earth series on other exciting agents of the same series, 1907, A., ii, 594.

monovariant systems admitting of a gaseous phase, 1911, A., ii, 370.

Urbain, Georges. See also G. Griner. Urban, Gustav, mixed quinhydrones,

1907, A., i, 539.

Urban, Josef, substitution of potassium by sodium in sugar-beet, 1906, A., ii, 576.

manurial action of sodium nitrate, calcium nitrate, and calcium cyanamide with sugar-beet, 1909, A., ii, 609.

the estimation of invert sugar in sugar-beets, 1910, A., ii, 357.

Urban, Josef. See also Karl Andrlík.
Urban, Wilhelm, alkylated d-butyl-thiocarbamides and -carbamides, 1904,
A., i, 375.

Urbasch, Stefan, new hydrogen sulphide apparatus, 1910, A., ii, 949.

Urech, Walter. See Friedrich Kehr-

Ury, Hans, occurrence of bile acids in fæces under normal and pathological conditions, 1907, A., ii, 188.

the estimation of ferments in the fæces, 1910, A., ii, 145.

Uschakoff, A., action of hydrogen peroxide on sulphuric acid solutions of diphenylamine, 1906, A., i, 159.

diphenylamine nitrates, 1906, A., i, 160.

reaction between hydrogen peroxide and diphenylamine in sulphuric acid solution, 1907, A., i, 361.

Usher, Francis Lawry, solubility of nitrie oxide in aqueous solutions of ferrous sulphate, nickel sulphate, cobalt sulphate, and manganese chloride, 1908, A., ii, 487.

the influence of non-electrolytes on the solubility of carbon dioxide in water, 1909, P., 303; discussion,

P., 303; 1910, T., 66.

the influence of radium emanation on equilibrium in a gaseous system, 1910, T., 389; P., 20; T., 1193; P., 133.

the chemical action of the α- and βrays, individually and jointly, 1912, A., ii, 6.

Usher, Francis Lawry, and Joseph Hubert Priestley, mechanism of carbon assimilation in green plants, 1906, A., ii, 299. Usher, Francis Lawry, and Joseph Hubert Priestley, mechanism of carbon assimilation in green plants; photolytic decomposition of carbon dioxide in vitro, 1906, A., ii, 881.

mechanism of carbon assimilation.

III., 1911, A., ii, 817.

Usher, Francis Lawry, and Morris William Travers, the interaction of sulphuretted hydrogen and arsenic pentoxide in presence of hydrochloric acid, 1905, T., 1370; P., 223.

Usher, Francis Lawry. See also Frank Playfair Burt, (Sir) William Ramsay, and Morris William Travers.

Ussing, N. V., cryolithionite, a new mineral, 1904, A., ii, 347.

Ussow, A., solidification and transformations of mixtures of silver nitrate and potassium nitrate, 1904, A., ii, 256.

Ustjanzeff, W., the cæcum of herbivora,

1907, A., ii, 564.

Ustjanzeff, W., and G. Bogajewsky, the utilisation of the energy of provender as influenced by the temperature of the surroundings, and the nutritional condition of rabbits, 1908, A., ii, 962.

Usui, Ryuta, measurement of tissue oxidation in vitro (liver, central nervous system), 1912, A., ii, 853. the union of thymol in red-blood

corpuscles, 1912, A., ii, 1066.

Usuki, digestion of fat in the stomach and small intestine, and the effect of leeithin on it, 1910, A., ii, 972.

Utermann, Alfred. See Leopold Spiegel, and Otto Nikolaus Witt.

Utescher, Kurt. See Wilhelm Biltz.
Utz, Franz, detection of boiled and unboiled milk, 1903, A., ii, 114, 767.

detection of heated milk, 1903, A., ii, 394.

presence of hydrogen sulphide in boiled milk, 1903, A., ii, 561.

Halphen's reaction with coloured butters, 1903, A., ii, 579.

detection of raw milk in heated milk, 1903, A., ii, 767.

natural occurrence of salicylic acid in berries, 1904, A., ii, 72.

use of phenolphthalin for the detection of heated milk, 1904, A., ii, 97.

poppy-seed oil, 1904, A., ii, 98. forensic detection of blood, 1904, A., ii, 152.

reactions of the oxidising enzymes of cow's and human milk, 1904, A., ii, 848.

decomposition of gallotanic acid, 1905, A., i, 135. Utz, Franz, estimation of nitric acid in waters, 1905, A., ii, 283.

volatility of lactic acid with water vapours, 1905, A., ii, 361.

detection of hydrogen peroxide in milk, 1905, A., ii, 415.

new test for formalin in milk, 1905, A., ii, 560.

detection of methyl alcohol in liquids containing ethyl alcohol, 1906, A.,

use of Schiff's reagent for the detection of formaldehyde in milk, 1906, A.,

estimation of organic matters in water, 1906, A., ii, 310.

copaiba balsam, 1906, A., ii, 504. examination of oil of turpentine, 1906,

A., ii, 584.

simple process for the estimation of corrosive sublimate in dressing materials, 1907, A., ii, 400.

application of benzidine in the forensic detection of blood, 1907, A., ii,

evaluation of pieric acid, 1908, A., ii,

estimation of alkaloids: bitter principles and glucosides with the Zeiss immersion refractometer, 1909, A., ii, 193.

the detection of mineral acids in vinegar, 1909, A., ii, 443.

Utz, K., the detection of hydrocarbons in turpentine, 1912, A., ii, 1002.

estimation of caoutchouc as tetrabromide, 1912, A., ii, 1002.

Utzinger, Max. See Richard Willstätter.

Uyeda, Kenjiro, the equilibrium of the reciprocal salt pairs: KCl + NaNO3 ⇒ KNO₃ + NaCl, 1910, A., ii, 836.

Uzbachian, Jean Bex. See Fritz Ullmann.

Vaccari, Mario. See Giovanni Pellini. Vaccarino, A. See Giorgio Errera. Vacek, J. P. See Anton Skrabal. Vageler, Hans, phosphatides in animal

and vegetable materials, 1909, A., ii, 504. Vageler, Paul, morphological effect of

manures on potatoes, 1907, A., ii,

Vahlen, Ernst, chemical constitution and physiological action of physiological morphine, 1903, A., ii, 676.

clavine, a new constituent of ergot, 1906, A., i, 876.

Vahlen, Ernst, preparation of a soluble, crystalline, nitrogenous constituent of ergot (Secale cornutum), 1907, A., i, 331.

ergot of rye, 1909, A., i, 118.

action of certain hitherto unknown constituents of the pancreas on sugar. I., 1909, A., ii, 414. lant, Pierre, spectrophotometric

Vaillant, study of some electrolytes in solution, 1903, A., ii, 253.

theory of coloured indicators, 1903, A., ii, 473.

colour of aqueous solutions of methylorange and the change which acids produce in it, 1904, A., i, 119.

density of aqueous salt solutions considered as additive properties of the ions, the existence of hydrated ions, 1904, A., ii, 469.

influence of concentration on the magnetic properties of solutions of

cobalt, 1905, A., ii, 503.

the specific heat of copper sulphate solutions, 1906, A., ii, 7.

evaporation of water and solutions of sulphuric acid, 1908, A., ii, 460. evaporation of aqueous solutions, 1909,

A., ii, 544.

laws of evaporation, 1910, A., ii, 186.

a special case of evaporation, 1910, A., ii, 390.

influence of temperature and light on the conductivity of a phosphorescent substance (calcium sulphide), 1912, A., ii, 419.

Vaillant, Victor, thiobenzoylacetone, 1903, A., i, 639.

action of carbonyl chloride on the copper derivative of benzoylacetone and on dithiobenzoylacetone, 1905, A., i, 460.

Valenta, Eduard, rosin spirit, pine wood oils, and turpentines, 1905,

A., ii, 657.

use of methyl sulphate in the estimation of tar oils in admixture with resin oils or mineral oils, 1906, A., ii. 310.

See also Josef Maria Valenta, Eduard. Eder.

Valenta, Paul. See Robert Kremann. Valente, E. See Giacomo Ponzio.

Adriano, physiological be-Valenti. haviour of certain organic arsenic derivatives (salvarsan and sodium cacodylate) in the organism, 1912, A., ii, 968.

Valenti, L., meconic acid, 1905, A., i,

Valentiner & Schwarz, preparation of aromatic fluoro-compounds by decomposing diazo- and bisdiazo-compounds with concentrated hydrofluoric acid, 1907, A., i, 1021.

Valentiner, [Richard Wilhelm] Siegfried, influence of pressure on the ratio c_v/c_v for nitrogen at the temperature of liquid air, 1904, A., ii, 396.

absorption of hydrogen by palladium at small pressures and low tempera-

tures, 1912, A., ii, 169.

Siegfried, and Rudolf Schmidt, new method of preparation of neon, krypton, and xenon, 1905, A., ii, 704.

Valentiner, Siegfried. See also Adolf

Bestelmeyer, and Ernst Dorn. Valeton, Josué Jean Philippe, detection of pentathionic acid in aqueous solution, 1907, A., ii, 811.

Valeur, Amand [Charles], tetraphenylbutanediol and the products of its dehydration, 1903, A., i, 416.

benzopinacone and benzopinacolin, 1904, A., i, 901.

sparteine; transformation of isosparteine into a-methylsparteine, 1908, A., i, 736.

sparteine: new method of ring-formation of a-methylsparteine by the action of iodine, 1908, A., i, 1006.

action of acids on di-iodo-a-methyl-

sparteine, 1909, A., i, 119.

relation between a-methylaparteine and isosparteine; reciprocal transformation of these bases. II. iso-Sparteine methosulphate and some salts of this base. III. Action of alkalis on isosparteine methomethylisosparteinium sulphate; hydroxide, 1909, A., i, 119.

See also Charles Valeur, Amand.

Moureu.

Valla, Elena, absorption spectra of complex inorganic salts, 1912, A.,

ii, 2.

Valla, Elena. See also Fernando Ageno. Vallée, Cyrille, presence of sucrose in almonds and its rôle in the formation of the oil, 1903, A., ii, 234.

action of phenylcarbimide on sulphonic acids, 1905, A., i, 771.

phenyl-, naphthyl-, and menthylcarbimides, 1908, A., i, 976.

Vallery, Lucien, coagulation of albumin by heat; consequences in connexion with the estimation of urinary albumin, 1912, A., ii, 212.

Vallery, Lucien, coagulation of albumin by heat and its precipitation by potassium mercuric iodide; consequences in connexion with its gravimetric and volumetric estimation, 1912, A., ii. 1011.

Vallet, Gabriel, relation between penetrative and bactericidal power of ultraviolet light and the chemical constitution of the media, 1910, A., ii, 332.

Vallette, F. See Alfred Guyot.

Vallette, Louis G. See Adolf Kauf-

Vallety, estimation of copper and free matte in dross, 1905, A., ii, 483. Valori, Bruno. See Angelo Angeli.

Vâmossy, Zoltán de, use of platinum and copper as "accelerators" in Marsh's apparatus, 1906, A., ii, 196.

Vámossy, Zoltán de. See also Gabriel

Bertrand.

Vamvakas, Jean, Nessler's reagent as a test for saponin, 1906, A., ii, 504. Nessler's reagent as a test for gums, 1907, A., ii, 137.

Nessler solution as a test for gelatin,

1907, A., ii, 415.

Vandam, L., detection of fluorine compounds in wines, 1908, A., ii, 63,775. estimation of essences in liqueurs, 1909, A., ii, 623.

Vandenberghe, Ad., contribution to the study of dissolved substances. III.,

1904, A., ii, 111.

Vandernotte, L., rocks from the eastern border of the Armorican Massif, 1909, A., ii, 591.

Albert Jacques Vandevelde, Joseph, action of hydrogen peroxide enzymes, 1904, A., i, 958.

influence of strong salt solutions on the force and energy of fermentation,

1904, A., ii, 279.

resistance of the corpuscles of feetal blood, 1905, A., ii, 836.

influence of concentration of bloodcorpuscles and the form of the reagent vessel on hæmolysis by chemical reagents, 1905, A., ii, 836.

toxicity of chemical compounds estimated by their hæmolytic effects, 1906, A., ii, 379.

diffusion of enzymes through cellulose membranes, 1907, A., i, 168.

the use of antiseptics in investigations on enzymes, 1907, A., i, 372.

metallic substitution. IV., 1907,

A., ii, 350.

influence of salt solutions on the velocity of chemical reaction, 1907, A., ii, 609.

Vandevelde, Albert Jacques Joseph, quantitative estimations by hæmolysis, 1907, A., ii, 632.

the chemical hæmolysins, 1907, A., ii,

792; 1908, A., ii, 49, 512. the hæmolytic action of isomeric com-

pounds, 1907, A., ii, 890. the protein hydrolysis of cow's milk,

1908, A., ii, 211.

constitution of aqueous solutions, and the influence of salts on alcohol fermentation, 1908, A., ii, 216.

reactions in solutions of different salts, but with the same ions, 1908, A., ii, 571.

the ferment which destroys lactose in milk, 1908, A., ii, 714.

the amount of chlorine in leaves, 1909, A., ii, 337.

the invertase of malt extracts, 1910, A., i, 798.

the sugar destructions in animal organisms which are measurable by the polarimeter, 1910, A., ii, 141.

do malt infusions contain antidiastase? 1910, A., ii, 645.

the fractional precipitation of the milk proteins, 1911, A., i, 91. the systems: fat-alcohol, 1911, A., i, 515.

the precipitation of proteins, 1911, A., ii, 630.

the equilibrium in acid solutions of potassium salts, 1912, A., ii, 30.

proteolysis of yeast, 1912, A., ii, 588. fermentative and proteolytic phenomena of yeast cells in the presence of iodoform, bromoform, chloroform, and acetone, 1912, A., ii, 588.

Vandevelde, Albert Jacques Joseph, and L. Bosmans, distribution of salts between saturated aqueous and moist

gluten, 1912, A., i, 736.

Vandevelde, Albert Jacques Joseph, and Edmond Poppe, the action of sodium fluoride on pepsin and trypsin, 1910, A., i, 795.

Vandevelde, Albert Jacques Joseph, and C. E. Wasteels, metallic substitution, 1903, A., ii, 200; 1904, A., ii, 549; 1906, A., ii, 167.

Vandevelde, Albert Jacques Joseph. also H. de Waele.

Vandeweyer and Wybauw, action of chalybeate waters on metabolic processes, 1906, A., ii, 778. Vandormael, Jos. See P. Hardy.

Vaney, Clement, and F. A. Maignon, variations in dextrose, glycogen, fat, and albumin in the course of the metamorphoses in the silk-worm, 1905, A., ii, 406.

Vaney, Clement, and F. A. Maignon, influence of sex on the nutrition of Bombyx mori in the last periods of metamorphosis; localisation of glycogen, fat, and soluble albumin in the course of nymphosis, 1905, A., ii. 467.

Vanha, Johann, the efficiency of calcium cvanamide. Chile saltpetre, and ammonium sulphate, 1910, A., ii,

538.

Vañha, Johann, Otto Kyas, and Josef Bukovansky, influence of the composition of barley on the development, quality, and productivity, and on the transmission of these properties, 1905, A., ii, 755.

Vanin, Ivan [Ivanovitsch], action of alkyl haloids on anhydrides of monobasic acids in presence of magnesium and

zinc, 1911, A., i, 416.

action of ethyl iodide and magnesium on menthone and carvone, 1911, A., i, 474.

action of methyl iodide and magnesium on menthone, 1912, A., i, 788. Vanino, Ludwig, action of sodium di-

oxide on paraformaldehyde, 1903, A., i, 67.

ignition of gun-cotton by means of water, 1903, A., i, 232. analysis of bleaching powder, 1903,

A., ii, 104.

interaction between formaldehyde and silver nitrate in presence of strong bases, 1904, A., i, 13.

gold hydrosols, 1905, A., ii, 171.

supposed solubility of aurous oxide in water, 1905, A., ii, 172.

Bologna phosphorus (phosphorescent sulphides). II., 1906, A., ii, 446. history of colloidal gold, 1906, A., ii,

formation of thio-aldehydes, 1908,

A., i, 318. action of sugars on gold chloride solutions, 1908, A., ii, 504.

bismuth carbonate, 1911, A., ii, 806. the action of acetic anhydride on uranium nitrate, 1911, Α., 898.

Vanino, Ludwig, and J. Gans, Bologna phosphorus[phosphorescent sulphides],

1905, A., ii, 248. Vanino, Ludwig, and Ferdinand Hartl, new modes of formation of colloidal solutions; behaviour of the latter towards barium sulphate, 1904, A., ii, 808.

organic double salts with bismuth

chloride, 1906, A., i, 574.

Vanino, Ludwig, and Ferdinand Hartl, action of the polyhydric alcohols on bismuth salts and the preparation of bismuth salts by means of a solution of mannitol bismuth nitrate, 1906, A., i, 785.

production of gold hydrosols by ethereal

oils, 1906, A., ii, 367.

double decomposition between gold chloride and formaldehyde in presence of radium hydroxide, 1907, A., ii, 558.

Vanino, Ludwig, and L. Rössler, formation of colloidal gold solutions by the auto-oxidation of aurous chloride, 1910,

A., ii, 620.

Vanino, Ludwig, and Paula Sachs, silver fluoride and silver sub-fluoride, 1911,

A., ii, 884.

Vanino, Ludwig, and Lorenz Seemann, action of formaldehyde on inorganic compounds, 1904, A., i, 973.

Vanino, Ludwig, and Emil Uhlfelder, preparation of anisoyl peroxide, 1904,

A., i, 1014.

Vanino, Ludwig, and Emilie Zumbusch, carbonates and oxalates of bismuth, 1909, A., ii, 56.

Bolognian stones, 1909, A., ii, 731; 1910, A., ii, 847; 1911, A., ii,

bismuth, 1911, A., ii, 118.

attempts to prepare bismuth hydride, 1911, A., ii, 1098.

Vanino, Ludwig. See also Otto Hauser,

and Emil Uhlfelder.

Vanjukoff, V., burning of admixtures on refining copper in a reverberatory furnace, 1909, A., ii, 237.

decomposition of copper sulphate in a current of dry air in relation to the temperature, 1909, A., ii, 809.

Vanstone, Ernest, the miscibility of solids, 1909, T., 590; P., 30.

the vapour pressures of two perfectly miscible solids and their solid solutions, 1910, T., 429; P., 47.

mercury-sodium alloys, 1912, A., ii, 155.

Vanzetti, Bartolo Lino, veratroylformic acid and its reduction, 1904, A., i, 249.

electrolysis of dicarboxylic organic acids; glutaric acid, 1904, A., i, 850.

electrolytic decomposition of dicarboxylic organic acids: adipic acid, 1906, A., i, 624.

silicon compounds of iron, etc.; formation of silicides in the electric furnace, 1906, A., ii, 614.

Vanzetti, Bartolo Lino, salts of quaternary ammonium bases with organic acids; tetramethylammonium formate, 1907, A., i, 18.

electrolytic decomposition of dicarboxylic acids; suberic acid, 1907 A., i,

823

electrolytic decomposition of dicarboxylic organic acids: pimelic acid, 1908, A., i, 939.

diffusion of electrolytes in aqueous solutions and in gelatin, 1908, A.,

ii, 20, 88.

hydrolysis of salts in solution; lecture experiment, 1908, A., ii, 805.

catalytic reactions and photochemical equilibria, 1908, A., ii, 915.

diffusion of electrolytes in aqueous

solutions, 1909, A., ii, 978. existence of a glucoside in the olive,

1909, A., ii, 1047. diffusion [of dissolved substances],

1911, A., ii, 260.

diffusion phenomena in [solutions] of electrolytes, 1911, A., ii, 860.

Vanzetti, Bartolo Lino, and Angelo Coppadoro, electrolytic synthesis of glutaric acid, 1904, A., i, 141.

Vanzetti, Bartolo Lino. See also Giuseppe Bruni, and Wilhelm Körner.

Varali-Thevenet, Adolfo, heat of solution, 1903, A., ii, 131.

Varanini, Mario, therapeutic value of methyl benzoylsalicylate (benzosalin), 1908, A., ii, 520.

Varenne, Eugène, and L. Godefroy, hydrates of ethyl alcohol, 1904, A., i, 2.

hydrates of methyl alcohol and of acetone, 1904, A., i, 465. applications of the chronostiliscope,

applications of the chronostiliscope 1904, A., ii, 160.

anethoglycol $[\gamma-p$ -methoxyphenylprop-

ane-βγ-diol, 1905, A., i, 282. Varenne, Eugène, J. Roussel, and L. Godefroy, action of anethole on the

organism, 1904, A., ii, 275. Varet, Raoul, mercury formates, 1905,

A., ii, 504.

Varrier-Jones, Pendrill Charles, effect of strychnine on muscular work, 1908, A., ii, 313.

Varvaro, Corrado. See Carlo Cervello.
Vas, Bernhard, the excretion of creatine and creatinine under pathological conditions, 1912, A., ii, 187.

Vasilieff, Alexei M[ichailovitsch], cryoacetates of potassium, sodium, and lithium acetates, 1909, A., i, 756. hydrates of magnesium and zinc

nitrates, 1909, A., ii, 887.

Vasilieff. Alexei M., investigation of the interactions between the hydrates of zinc or magnesium nitrate by the method of cooling mixtures, 1909, A., ii, 888.

cryohydrates of ammonium and potassium thiocyanates, 1910, A., i, 465.

application of the laws of eutectics to definite chemical compounds, 1910, A., ii, 606.

hydrates of cadmium nitrate, 1910, A., ii, 1066.

uranium salts, 1910, A., ii, 1072; 1911, A., ii, 1096.

use of nitron in the analysis of nitrates. 1910, A., ii, 1109.

eutectic alloys of arsenic and antimony tri-iodides, 1912, A., ii, 919. origin of the names of the chemical

elements, 1912, A., ii, 931.

Vasilieva, (Mlle.) Alexandra Feofilaktovna, photochemical properties tungstic acid, 1912, A. ii, 947.

Vasilieva, (Mlle.) Alexandra Feofilak-tovna. See also Alfred Coehn.

Vasiliu, Haralamb, parent substance of the hippuric acid produced in animals, 1908, A., ii, 211; 1909, A., ii, 252,

fate of the non-hydroxylated benzene ring of protein in the animal body, 1909, A., ii, 250.

fate of the non-hydroxylated benzene ring of protein in the animal body; phenaceturic acid as an important constituent of urine, 1909, A., ii, 906.

Vassallo, Ettore, behaviour of organic and inorganic substances in vegetable organisms. I., 1911, A., ii.

use of hæmatin in qualitative analysis and in the volumetric estimation of bismuth, 1911, A., ii, 1139.

aceteins of phenol, 1912, A., i, 761. Vassallo, Ettore. See also Bernardo

Oddo. Vassallo, G. See Gaetano Minunni, and

Giovanni Ortoleva. Vasterling, Paul. See Julius Tröger. Vater, Georg. See Walther Hempel.

Vaubel, [Johann] Wilhelm, equilibrium of the isomeric forms of diazoaminocompounds, 1903, A., i, 299.

evaluation of ethyl-a- and B-naphthylamines, 1903, A., ii, 395.

the dependence of the reactive power of potassium and sodium hydroxides on the concentration, 1903, A., ii, 425.

formation of hydrates deduced from partition coefficients, 1903, A., ii, 471.

Vaubel, [Johann] Wilhelm, the iodinetannin reaction for hydroxyl ions, 1904, A., ii, 82.

size of the molecules of compounds in the liquid state, 1904, A., ii, 327.

the molecular volume of solid compounds and the relation of the osmotic pressure to the depression of the freezing point and the raising of the boiling point of solutions, 1904, A., ii. 606.

action of ammonium nitrite, and ammonium nitrate (or of nascent hydrogen and of nitrous oxide) on aromatic compounds, 1905, A., i, 189.

relation between the size of the molecular complex and the temperaturecoefficient of expansion in different states of aggregation, 1905, A., ii, 74. molecular weight of indigotin, 1906,

A., i, 989.

[the bromine absorption of] commercial oil of turpentine, 1906, A., ii, 310. absorption of gases by charcoal, 1906,

A., ii, 738.

estimation of acetone in urine by means of extraction, 1909, A., ii, 769.

estimation of zinc, copper, and cobalt by means of ammonium hydroxide,

1909, A., ii, 832. loss [of weight] of heavy spar on heat-

ing, 1909, A., ii, 1005. primary and secondary bromine numbers of oils, 1910, A., ii, 1122.

substitution of the iodine numbers of fats by the bromine numbers, 1910, A., ii, 1122.

the configuration of the benzene nucleus, 1911, A., i, 774.

a new method of preparing diazoaminocompounds, and a new reaction for nitrous acid, 1911, A., i, 1049.

the ammonia content of tobacco smoke, 1912, A., ii, 83.

the corrosion of lead by lime mortar and the disinfecting power of calcium hydroxide, 1912, A., ii, 1172.

difference in chemical composition of aragonite and calcite, 1912, A., ii, 1180.

Vaubel, Wilhelm, and Eberhardt Bartelt, estimation of boric acid, 1905. A., ii, 554.

application of methylene-blue to the estimation of sulphonic derivatives of aromatic amino- and hydroxycompounds, 1906, A., ii, 207. Vaubel, Wilhelm, and Otto Scheuer,

benzylethylaniline and benzylidene-

aniline, 1905, A., i, 274.

Vaubel, Wilhelm, and Otto Scheuer, source of error in the estimation of acetone by the iodoform process, 1905, A., ii, 291.

the combination of more than one molecule of a diazo- or tetrazo-compound in the production of azo-dyes,

1906, A., i, 223.

tri-imides or azoimides of the benzidine series, 1906, A., i, 323.

estimation of halogens in organic compounds, 1906, A., ii, 250. estimation of tannin in tanning

materials, 1907, A., ii, 203. Vaughan, Victor Clarence, contribution

to cell chemistry, 1905, A., ii, 189. protein susceptibility and immunity, 1907, A., ii, 712.

Vavon, Gustave, hydrogenation in the terpene series, 1910, A., i, 52.

hydrogenation of turpentine oil, 1910, A., i, 400; 1911, A., i, 389.

rotatory power of pinene hydrochloride, 1910, A., i, 497.

hydrogenation of limonene, 1911, A., i. 657.

hydrogenation of carvone, 1911, A., i, method for preparing aromatical cohols,

1912, A., i, 260.

catalytic hydrogenation of benzylideneacetone[styryl methyl ketone], 1912, A., i, 628.

catalytic hydrogenation of ketones,

1912, A., i, 749.

Vavon, Gustave. See also Émile Henriot, and Robert Lespieau.

Veazey, William Reed. Clary Jones. See Harry

Vecchi, C. See Ciro Ravenna.

Vecchiarelli, V. See Federico Giolitti. Vecchiotti, Luigi. See Riccardo Ciusa, and Luigi Mascarelli.

Vegard, L., free pressure in osmosis, 1909, A., ii, 300.

Vegesack, Arved von, zinc-thallium and zinc-iron alloys, 1907, A., ii, 170. ternary alloys of lead, magnesium, and tin, 1907, A., ii, 769.

Vegesack, Arved von. See also Wilhelm

Biltz, and Rudolf Sahmen. Veiel, Otto. See Otto Fischer.

Veillon, R. See Gabriel Bertrand. Veit, Ludwig. See Hans Rupe.

Veit, Theo. See Edgar Wedekind. Veitch, Fletcher Pearre, colorimetric estimation of small quantities of phosphoric acid and silica, 1903, A.,

estimation of soil acidity and the lime requirements of soils, 1903, A., ii, 400.

Veitch, Fletcher Pearre, estimation of soil acidity, 1904, A., ii, 600.

estimation of potassium in soils, plants, and fertilisers, 1905, A., ii, 204.

Veitch, Fletcher Pearre, and H. H. Hurt, extraction of tanning materials for analysis, 1906, A., ii, 405.

Velardi, Giuseppe, detection of aldehydic compounds; constitution of nitrosodimethylaniline, 1904, A., 804.

effect of heat on the toxicity of bitter almonds, 1906, A., i, 444.

detection of boric acid, 1906, A., ii,

Velardi, Giuseppe. See also Francesco Angelico.

Velden, Reinhard von den, the catalase of human milk, 1907, A., ii, 374. distribution of iodine [in the body],

1909, A., ii, 911.

Velden, Reinhard von den. See also J. von Angyan.

Veley, Victor Herbert, the conditions of decomposition of ammonium nitrite, 1903, T., 736; P., 142; discussion, P., 142.

initial acceleration in chemical change,

1903, A., ii, 641.

hydrolysis of ammonium salts, 1904, P., 248; discussion, P., 248; 1905,

the affinity constants of aminocarboxylic and aminosulphonic acids as determined by the aid of methylorange, 1906, P., 313; discussion, P., 314; 1907, T., 153.

the Röse-Herzfeld and sulphuric acid methods for the estimation of the higher alcohols, 1906, A., ii, 497.

the affinity constants of aminosulphonic acids as determined by the aid of methyl-orange, 1907, T., 1246; P., 179.

the affinity constants of bases as determined by the aid of methyl-orange, 1907, P., 284; 1908, T., 652, 2122; P., 50, 238.

reactions between acids and methyl-

orange, 1907, A., ii, 76. the affinity of certain alkaloids for hydrochloric acid, 1908, T., 2114; P., 234; discussion, P., 235.

the affinity values of tropine and its derivatives, 1908, P., 280; 1909,

hydrolysis as illustrated by heats of neutralisation, 1908, A., ii, 813.

the affinity values of certain alkaloids, 1909, T., 758; P., 115; discussion, P., 116.

Veley, Victor Herbert, the rate of formation of azo-derivatives from benzenoid diamines, 1909, T., 1186; P., 175.

physical and physiological properties of tetrachloroethane and trichloroethylene, 1910, A., i, 214.

toxic action of compounds on isolated muscle regarded as a chemical change, 1910, A., ii, 979.

the reactions between chemical compounds and living muscle-proteins, 1911, T., 180; P., 3.

the solution volumes of nitric acid,

1912, A., ii, 836.

Veley, Victor Herbert, and John Cannell Cain, rate of evolution of gases from homogeneous liquids, 1910, A., ii, 25.

Veley, Victor Herbert, and John Job Manley, some physical and chemical properties of strong nitric acid, 1903, T., 1015; P., 196.

refractive indices of sulphuric acid at different concentrations, 1905, A.,

ii, 781.

Veley, Victor Herbert, and William Legge Symes, certain physical and physiological properties of stovaine and its homologues, 1911, A., ii, 516.

Veley, Victor Herbert, and Augustus Désiré Waller, action of cinchona alkaloids on muscle, 1910, A., ii, 55.

comparative action of stovaine and cocaine as measured by their direct effect on the contractility of isolated muscle, 1910, A., ii, 228.

action of strychnine and brucine on

muscle, 1910, A., ii, 331.

rate of action of drugs (alcohol, chloroform, quinine, aconitine) on muscle as a function of temperature, 1910, A., ii, 331.

action of organic acids on muscle as a function of chemical change; action of nicotine and other pyridine bases on muscle, and on the antagonism of nicotine by curarine, 1910, A., ii, 524.

the comparative toxicity of theobromine and caffeine as measured by their direct effect upon the contractility of isolated muscle, 1910, A., ii, 986.

Veley, Victor Herbert. See also William

Legge Symes.

Velich, Alois, betaine, 1905, A., ii, 106.
Velich, Alois, and Vladimir Staněk, chemico-physiology of betaine. II., 1905, A., ii, 266.

Velich, Alois. See also Karl Andrlik.

Velich, K. See Karl Andrlik.

Veller, S. M., estimation of uric acid in the urine, 1912, A., ii, 814.

Veltsa, I. F. See Vetscheslav Tischtschenko.

Vender, Vezio, preparation of mixed glycerol esters, 1909, A., i, 692.

Venditori, Domenico, reduction of potassium ferricyanide, 1906, A., i, 486. behaviour of chlorates and perchlorates during reduction, 1908, A., ii, 68.

Venditori, Domenico. See also Ugo

Alvisi, and Italo Bellucci.

Ventre, colorimetric process for the detection of very small quantities of sugar, 1903, A., ii, 47.

Venturi, Adolfo. See Gaetano Magnanini.

Venturoli, Giuseppe, and Guido Tartarini Gallerani, chemico-toxicological study of adrenaline, 1911, A., ii, 635.

Venulet, F., and G. Dmitrowsky, the behaviour of the chromaffine substance of the suprarenal body in hunger and under the influence of the potassium iodide, 1910, A., ii, 1088.

Veraguth, Hans. See Richard Will-

statter.

Verain, L., the dielectric constant for carbon dioxide in the neighbourhood of the critical point, 1912, A., ii, 318.

Veratietti. See Ludovico Cantoni.

Verbeek, Paul, a new mercury volumenometer, 1912, A., ii, 933.

Verbeek, Paul. See also C. Purrmann. Verda, Antonio, action of aqua regia on

Verda, Antonio, action of aqua regia on anilides and homologous derivatives, 1903, A., i, 21.

slow decomposition of the solutions of some very stable mineral salts and the influence of light on these changes, 1907, A., ii, 690.

estimation of uric acid in urine, 1909,

A., ii, 446.

estimation of volatile acids in wine, 1911, A., ii, 1037.

Verda, Antonio. See also Frédéric Seiler.

Verdier, E. See Evesque, and J. Galimard.

Verdon, Emile, pectins of Kalmia latifolia leaves and Verbascum thapsus roots, 1912, A., ii, 481.

Verein für Chemische Industrie in Frankfurt, preparation of the anhydrides of monobasic organic acids, 1906, A., i, 3, 621.

Verein Chemischer Fabriken in Mannheim, preparation of anhydrous sodium thiosulphate and hydrosulphide, 1908, A., ii, 689.

Vereinigte Chemische Werke Aktiengesellschaft, preparation of quinine and cinchonine p-aminophenylarsinates, 1909, A., i. 252,

[preparation of persulphates], 1909, A.,

ii, 312.

Vereinigte Chininfabriken Zimmer & Co., acyl derivatives of cinchona alkaloids, 1903, A., i, 50.

symmetrical carbonic esters of the cinchona alkaloids, 1903, A., i, 513. preparation of hydroxyhydroquinine,

1904, A., i, 819.

preparation of quinine magnesium oxyhaloids, 1907, A., i, 336.

preparation of quinine esters, 1907, A., i, 336.

preparation of bornyl borate, 1908, A:, i, 351.

preparation of santalyl allophanate,

1909, A., i, 247. preparation of easily soluble double salts of sodium theobromine, 1909, A., i, 505.

preparation of an allophanic ester of

castor oil, 1909, A., i, 696. preparation of acvl derivatives of castor oil [ricinoleic acid], 1911, A., i, 107.

preparation of substituted carbamic acid esters, 1911, A., i, 118.

preparation of aloin derivatives, 1911,

A., i, 480.

preparation of acid esters of quinine halogen additive products, 1911, A., i. 559.

preparation of acid chlorides from two or more molecules of carbamide chloride by elimination of hydrogen chloride, 1912, A., i, 97.

preparation of carbamic esters of tertiary alcohols, 1912, A., i, 541,

746.

preparation of quinine esters of aromatic amino-acids, 1912, A., 577.

preparation of esters of hydroquinine, 1912, A., i, 1013.

Vergari, Ernesto. See Gino Abati.

Verhaeghe. See Ernest Gérard. Verley, Albert, preparation of cyclocitrylideneacetic acid and its derivatives, 1904, A., i, 880.

alkyl ethers of p-allylphenol, 1905, A.,

i, 127.

tertiary alcohols of the cyclocitrylidene series, 1906, A., i, 196.

Verley, Albert, Edouard Urbain, and André Feige, preparation of isobornyl esters from camphene and monobasic organic acids, 1909, A., i, 311.

Vermeulen, Hendrik, structure of the dinitroanisoles, 1906, A., i, 256. trinitroanisoles, 1912, A., i, 347.

Vermorel, V., and E. Dantony, use of ferrous arsenate against insect parasites of plants, 1909, A., ii, 261.

a colloidal copper soap as an anticryptogamic paste, 1911, A., ii, 647. Wladimir Iv[anovitsch]. Vernadsky,

vorobyevite and the chemical structure of beryls, 1908, A., ii, 955, distribution of scandium, 1909, A., ii,

gaps in isomorphous mixtures, 1909, A., ii, 302.

cæsium in felspar, 1909, A., ii, 412. isomerism in the group of alumino-

and ferri-silicates, 1910, A., ii, 136. distribution of chemical elements in the earth's crust, 1910, A., ii, 1013.

triboluminescence, 1910, A., ii, 1018. present-day problems concerning

radium, 1911, A., ii, 359. Vernadsky, Wladimir Iv., B. A. Lindener, and (Mile.) E. D. Revutsky. distribution of chemical elements in the earth's crust, 1911, A., ii, 1042.

Vernadsky, Wladimir Iv., and (Mlle.) E. D. Revutsky, chemical distinction between orthoclase and microcline,

1911, A., ii, 122. Verneuil, Auguste [Victor Louis], artificial production of rubies by fusion,

1904, A., ii, 735.

reproduction of the blue colour of oriental sapphires, 1909, A., ii, 47. synthetical production of sapphires by

fusion, 1910, A., ii, 212.

nature of the oxides causing the colour of oriental sapphires, 1911, A., ii, 43.

Verneuil, Auguste. See also Grégoire N. Wyrouboff.

Vernon, Horace Middleton, pancreatic secretin, 1903, A., ii, 85.

precipitability of pancreatic ferments by alcohol, 1903, A., ii, 438.

the peptone-splitting ferments of the pancreas and intestine, 1904, A., ii. 57.

protective value of proteins and their decomposition products on trypsin, 1904, A., ii, 626.

universal presence of erepsin in animal tissues, 1905, A., ii, 100.

the ereptic power of tissues as measure of functional capacity, 1905, A., ii, 841.

tissue respiration, 1907, A., ii, 111. the occurrence of erepsin in the pan-

creas, 1907, A., ii, 185.

Vernon, Horace Middleton, the solubility of air in fats and its relation to caisson disease, 1907, A., ii, 711.

tissue respiration in perfused kidneys,

1908, A., ii, 53.

action of poisons on tissue respiration,

1909, A., ii, 1042.

the respiration of the tortoise heart in relation to functional activity, 1910, A., ii, 524.

union of certain poisons with cardiac

muscle, 1910, A., ii, 1086.

estimation of the indophenol oxydase of animal tissues, 1911, A., ii, 750. the indophenol oxydase of mammalian and avian tissues, 1911, A., ii, 905.

the action of homologous alcohols and aldehydes on the tortoise heart, 1912,

A., ii, 67.

the relation between oxydase and tissue respiration, 1912, A., ii, 578.

Vernon, R. H., estimation of sulphur trioxide in fuming sulphuric acid, 1910, A., ii, 803.

Verploegh, H. See C. J. C. van Hoogenhuyze, and Cornelis Adrianus Pekel-

haring. Verschaffelt, Eduard, measure for the action of poisons on plants, 1905, A., ii, 853.

Verschaffelt, Jules Emile, contributions to the knowledge of van der Waals' ψ-surface. VIII. The ψ-surface in the neighbourhood of a binary mixture, which behaves as a pure substance, 1904, A., ii, 385.

Verschaffelt, Jules Émile, and (Mlle.) L. van der Noot, measurement of surface tension by the method of capillary

rise, 1911, A., ii, 701.

Vervuert, Gottfried. See J. Höfle.

Verweij, Aart, ammoniacal citrate solution as used in the estimation of phosphoric acid, 1903, A., ii, 451.

estimation of potassium in potassium silicates, 1910, A., ii, 74.

Verzar. Fritz, action of methyl and ethyl alcohol on muscle, 1909, A., ii,

hydrogen cyanide in cassava flour, 1909, A., ii, 925.

the action of intravenous infusions of saline solutions on the respiratory exchanges, 1911, A., ii, 738.

the metabolism of starch when introduced parenterally, 1911, A., ii, 744.

the resorption and excretion of starch granules, 1911, A., ii, 744.

the magnitude of the work of the liver, 1911, A., ii, 746.

Verzár, Fritz, is the activity of the liver indispensable for the combus tion of sugar? 1911, A., ii, 746.

gaseous metabolism of striated muscle in warm-blooded animals. I., 1912.

A., ii, 653. influence of lack of oxygen on tissue

respiration, 1912, A., ii, 851. the work of the pancreas, and its in

fluence on the combustion of carbohydrates, 1912, A., ii, 1069.

Verzár, Fritz. See also Ernst Laqueur. Veselý, Victor, 2:2-dinaphtha-1:1-imine [aa-di-\beta-naphthacarbazole], 1905, A., i, 236.

See also Friedrick Veselý, Victor. Kehrmann, and Emil Votoček.

Vespignani, Gion Battista, critical constants of some organic substances, 1903, A., i, 545.

Vespignani, Gion Battista. See also

Luigi Balbiano.

Vesterberg, Albert, chemical studies of dolomite and magnesite, 1903, A., ii. 302. [formation of] retene from abietic acid,

1904, A., i, 151.

laboratory apparatus for fractional distillation, 1904, A., ii, 158. V., 1906, resin acids from conifers.

A., i, 92; 1907, A., i, 213.

elemi resins, 1906, A., i, 686. artificial crystals of ferric hydroxide and of anhydrous ferric oxide pseudomorphous with ferric sulphate, 1906,

A., ii, 547. standardisation of acids by metallic magnesium, 1907, A., ii, 390.

hydrolysis of salts in aqueous alcohol, 1907, A., ii, 938.

titrimetric estimation of carbon dioxide, 1910, A., ii, 345.

Vetere, V., estimation of sulphur dioxide in wine, 1907, A., ii, 811.

Vetter, Emil. See Emil Fromm.

Vetter, Ferdinand, deposition of calcium carbonate from solutions of calcium hydrogen carbonate, 1910, A., ii, 777.

Vèzes, Maurice, complex platinum salts; platoso-oxalonitrous acid and salts,

1903, A., i, 229.

complex platinum salts; reactions of platoso-oxalonitrites, 1903, A., il,

application of the phase rule to the distillation of turpentine, 1903, A., ii, 535.

analysis of Bordeaux oil of turpentine, 1903, A., ii, 698.

the preparation of alkali iridochlorides, 1908, A., ii, 703.

Veres, Maurice, turpentine of Aleppo pine, 1909, A., i, 818.

analysis of turpentine oil by miscibility curves, 1910, A., ii, 461.

Vezes, Maurice, and Alexis Duffour, complex iridium compounds; iridodichloro-oxalates, 1909, A., i, 762. complex iridium derivatives; iridodichlorodinitro-oxalates, 1910, A., i. 540.

Vèzes, Maurice, and J. Labatut, preparation of pure hydrogen, 1903, A.,

ii. 68.

Vèzes, Maurice, and Mouline, reciprocal solubility of oil of turpentine and aqueous alcohol, 1904, A., ii, 709.

Vial, A., o-phenolsulphonates, 1906, A.,

i, 255.

Viard, Georges [Marie Joseph], preparation of crystallised zinc sulphide and cadmium sulphide, 1903, A., ii, 427.

of homologues composition "Schweinfurt's green," 1905, A., i, 8. Viard, Marcel. See André Kling.

Vicari, Ferdinand. See Gustav Schultz. Vicario, A., mercuric bromide, 1907, A., ii, 772.

Victor, Ernst, tin analysis, 1905, A., ii,

Victoroff, C., the necessary duration of the fermentation in the detection of dextrose in urine, 1907, A., ii, 822.

Victoroff, C. See also Filippo Bottazzi, and Bernhard Schöndorff.

Vidal, J. See Charles Astre.

Vidal, Raymond, the presence and action of mercaptan groups in direct sulphur dyes, 1905, A., i, 306.

the constitution of nitrosophenols and the conception of ortho-, meta-, and para-positions, 1905, A., i, 521.

improbability of Kekulé's hypothesis,

1907, A., i, 1020.

quinone formation, 1908, A., i, 902. Videgren, E. V., improved process for the iodometric estimation of copper, 1909, A., ii, 765.

Viehöver, A. See E. Bierling.

Viele, Frederick W. See Frederick Jacob Alway.

Vielitz, C: See Ernst Deussen.

Vierhout, P., estimation of salicylic acid in fruit juices, 1911, A., ii, 775.

Vierling, A. See Josef Brandl. Vierling, Hubert. See Eduard Jordis. Viertel, Arthur. See Richard Möhlau. Vieser, Emmy. See Viktor Grafe.

Vieth, Gerhard, magnetic rotation of the plane of polarisation in crystalline liquid substances, 1910, A., ii, 672.

Vieweg, Walter, action of cold aqueous sodium hydroxide on cellulose, 1907. A., i, 893; 1908, A., i, 857.

Vieweg, Walter. See also Hans Stobbe, and Hermann Wichelhaus.

Vigano, L. See Marcel Ascoli.

Vigier, Ferd., cocaine formate, 1906, A., i, 379.

Vigier, Victor von. See Hans Stobbe. Vigneron, estimation of quinine in cinchona barks, 1905, A., ii, 363.

iodotannin, 1906, A., i, 597.

assay of cinchona bark; estimation of quinine and total alkaloids, 1911, A., ii, 234.

Vignolo-Lutati, Ferdinando, photochemical action of resins, 1912, A., ii.

882.

Vignon, G. See François Couturier, and

Victor Grignard.

Vignon, Léo, soluble cellulose, 1903, A., i, 461. constitution of nitrocelluloses, 1903,

A., i, 462.

nitrated cellulose, 1903, A., i, 462.

influence of copper in the silvering of glass, 1903, A., ii, 543.

optical activity of cellulose and its nitro-derivatives, 1904, A., i, 227.

the limit of coupling of diazobenzene with phenol, 1904, A., i, 699.

estimation of the amount of sodium carbonate necessary to precipitate lime and magnesia in the chemical purification of water, 1904, A., ii, 292.

limits of coupling of diazobenzene with

aniline, 1905, A., i, 250,

detection of free yellow phosphorus in phosphorus sulphide, 1905, A., ii,

diazo-derivatives of diamines (phenylenediamines, benzidine), 1906, A.,

i. 223.

coupling of benzidine with aniline; diphenylbisdiazoaminobenzene and diphenylbisazoaminobenzene, 1906, A., i, 391.

chemical functions of textile fibres, 1907, A., i, 102.

dyeing and ionisation, 1907, A., i, 231.

trisbenzeneazophenol, 1908, A., i, 1025. relation between the composition of coal and the amounts of carbon monoxide and dioxide contained in gas distilled from it, 1908, A., ii,

colouring and dyeing properties of pierie acid, 1909, A., i, 298.

electric conductivity of certain dyebaths, 1909, A., i, 526.

Vignon, Léo, influence of the colloidal | state on dyeing, 1909, A., ii, 474.

dyeing properties of lead chromate, 1909, A., ii, 576.

fabrics and insoluble colouring matters, 1910, A., ii, 272.

diffusive power of certain artificial colouring matters, 1910, A., ii, 273.

transport phenomena in solutions of colouring matters, 1910, A., ii, 483, adsorption of certain dyes, 1910, A., ii,

692.

influence of chemical affinity in certain adsorption phenomena, 1910, A., ii,

formation of hydrocarbons from carbon monoxide, 1911, A., i, 101.

action of water vapour on carbon in presence of lime, 1911, A., ii, 391. Vignon, Léo, and Isidore Bay, saponi-

fication of nitro-ethers, 1903, A., i, 2. Vignon, Léo, and Évieux, heat of neutralisation of acetic and benzoic acids by aniline in benzene solution,

1908, A., ii, 664. heat of neutralisation of picric acid by different aromatic bases in benzene

solution, 1908, A., ii, 664. Vignon, Léo, and J. Mollard, the 'chlorination" of wool, 1906, A., i,

Vignon, Léo, and Adolphe Simonet, action of diazobenzene chloride on diphenylamine, 1904, A., i, 637.

substituted derivatives of phenyldiazoaminobenzene, 1904, A., i, 1065.

diazoamino-compounds derived from diphenylamine and the homologues of aniline and the naphthylamines, 1905, A., i, 397.

diazoamino-compounds, secondary 1905, A., i, 494.

Vigouroux, Emile [Casimir], synthesis of silicon hydride from its elements, 1904, A., ii, 482.

reduction of oxides, a new method of preparing the binary compound, SiMn₂, by means of aluminium, 1905, A., ii, 822.

action of silicon on pure aluminium and its action on impure aluminium; silicoaluminides, 1906, A., ii, 30.

action of silicon chloride on iron, 1906, A., ii, 32.

cuprous silicide, 1906, A., ii, 168.

action of silicon tetrachloride on cobalt, 1906, A., ii, 287.

compounds of iron and molybdenum, 1906, A., ii, 364.

action of silicon tetrachloride on nickel, 1906, A., ii, 451.

Vigouroux, Emile [Casimir], pure ferrotungstens, 1906, A., ii, 453.

purification of crystalline silicon and some results of the presence of impurities in the preparation of copper silicide, 1907, A., ii, 82.

preparation of pure copper, 1907, A., ii, 88.

commercial copper silicides, 1907. A., ii, 89.

the reduction of oxides by aluminium; preparation of chromium, 1907, A., ii, 95.

action of silicon tetrachloride on chromium, 1907, A., ii, 176.

alloys of nickel and tin, 1907, A., ii, 354, 622, 780.

nature of the substance obtained from certain alloys rich in nickel and tin. 1907, A., ii, 354.

limit of silicuration of copper, 1907, A., ii, 461.

action of silicon tetrachloride on silver and copper, 1907, A., ii, 543.

silver, 1907, A., ii, 767. platinum silicide, PtSi, and a double silicide of platinum and copper, 1907, A., ii, 785.

action of arsenic trichloride on nickel and the arsenico-nickels. A., ii, 855.

action of antimony trichloride on nickel: formation of NiSb. 1909. A., ii, 149.

alloys of nickel and copper, 1910, A., ii, 132.

alloys of nickel and silver, 1910, A., ii,

Vigouroux, Emile, and G. Arrivaut, preparation of titanium tetrachloride, 1907, A., ii, 97, 270.

Vigouroux, Emile, and A. Bourbon, alloys of nickel and zinc, 1911, A., ii, 1095.

Vigouroux, Emile, and F. Ducelliez, reducing action of silicon, 1909, A., ii,

Vigouroux, Emile, F. Ducelliez, and A. Bourbon, investigation of ironzinc alloys by means of electromotive force, 1912, A., ii, 648.

Vigouroux, Emile, and Charles Hugot, silicon amide and imide, 1903, A., ii,

541. Vigreux, Henri, wash-bottle and safety-

tube, 1903, A., ii, 643. excelsior condenser; excelsior distillation column, 1904, A., ii, 611.

receiver for fractional distillation under reduced pressure, 1908, A., ii, 462.

Vigreux, Henri, a new aspirating reflux condenser, 1908, A., ii. 938.

a new aspirating condenser and recuperator for rapid evaporations.

1908, A., ii, 938.
apparatus for the estimation of ammonia, 1909, A., ii, 615.

apparatus for intermittent or continuous extraction, 1909, A., ii, 655. Vignier, Paul, ethyl acetal of tetrolal-

dehyde [diethoxybutinene], 1909, A., i, 691.

a-bromocrotonaldehyde, 1910, A., i, 461; 1911, A., i, 178.

tetrolaldehyde (Aa-butinal), 1911, A., i. 522.

attempt at the direct preparation of tetrolaldehyde, 1912, A., i, 7.

derivatives of tetrolaldehyde and its acetal [diethoxybutinene], 1912, A., i, 72.

action of potassium hydroxide on tetrolacetal, 1912, A., i, 161.

Viguier. Paul. See also Robert Lespieau.

Vila, Antony, and Maurice Piettre, spectroscopy of blood and of oxyhæmoglobin, 1905, A., i, 621; ii, 402.

oxyhæmoglobin fluorides, 1905, A., i, 847; 1906, A., i, 914.

Vila, Antony. See also Alexandre Etard, Maurice Piettre, and P. Pipereaut.

Vila, Auguste. See Ernest Fourneau. Vilikovsky, W. See B. Erben.

Villard, Jules, the so-called chlorophyll

of silk, 1904, A., ii, 628. Villarello, Juan D., asbestiform mineral from Mexico, 1906, A., ii, 774.

Villari, Emilio, comparison of the Röntgen rays with the radiations emitted from radiotellurium, 1904, A., ii, 797.

Ville, Jules [Joseph Mathieu], Pettenkofer's reaction for the detection of bile acids, 1907, A., ii, 913.

reduction of biliary pigments by the hydrogen evolved from palladium hydrogenised in presence of sodium hypophosphite: formation of urobilinogen, 1911, A., i, 554.

crystallisation of quinine and quinine trihydrate, 1912, A., i, 488.

Ville, Jules, and Eugène Derrien, estimation of chlorides in urine, 1904, A., ii, 513.

modification of the spectrum methæmoglobin under the action of sodium fluoride, 1905, A., i, 399.

methæmoglobin and its fluorine compound, 1905, A., i, 500, 622.

Ville, Jules, and Eugène Derrien, detection of fluorine in alimentary substances, 1906, A., ii, 390.

explanation of the colour reactions of sugars; reactions due to the formation of 2-hydroxy-4-methylfurfuraldehyde; reactions of Pettenkofer

and Seliwanoff, 1909, A., ii, 946. Ville, Jules, and W. Mestrezat, the nitrites of the saliva and their origin,

1908, A., ii, 310.

Ville, Jules, and Joseph Moitessier, action of hydrogen peroxide on blood, 1903, A., ii, 120.

separation of the constituents of blood to which the decomposition of hydrogen peroxide is due, 1903, A., ii, 737.

Ville, Jules. See also Charles Astre. Villedieu, Georges, detection of nitrates in the presence of bromides, 1909, A.,

ii, 699.

Villemontée, P. Gouré de, liquid dielectrics, 1905, A., ii, 624.

Villiers, [Charles] Antoine [Théodore], etherification with the hydracids, 1903, A., i, 598.

esterification of sulphuric acid, 1903, A., i, 599.

esterification of the hydracids, 1903. A., i, 674.

esterification of mineral acids, 1903, A., i, 732.

new form of water-pump, 1906, A., ii, 154.

pressure regulator; temperature regulator, 1906, A., ii, 277.

regulator for alternate heating and cooling, 1906, A., ii, 521.

periodic interrupter, 1906, A., ii,

of Maquenne's washmodification bottle, 1906, A., ii, 576.

regulator for diminished pressure with periodic alterations, 1911, A., ii,

Villiers, Antoine, Louis Magnier de la Ferdinand Rocques, Marcel Fayolle, detection of saccharin in beverages, 1904, A., ii, 599.

Villiers, R., modification of Liebig's potash bulbs, 1906, A., ii, 633.

Villiger, Victor, dichlorophthalic and dichloroanthranilic acids, 1909, A., i,

Villiger, Victor, and Louis Blangey, tetrachloroanthranilic acid, 1909, A., i, 922.

Villiger, Victor, and Eduard Kopetschni, colour bases of the triphenylmethane group, 1912, A., i, 1030.

Villiger, Victor. See also Adolf ron

Vilmar, Carl, preparation of benzoylarbutin, 1904, A., i, 681.

Vilstrup, Wilhelm, analysis of pyrites. 1910, A., ii, 458.

Vinay, H. See Enos Ferrario.

Vincent, E., tetanus and quinine, 1905, A., ii, 104.

Vincent, Joseph Herbert, and A. Bursill, negative result connected with radioactivity, 1912, A., ii, 417.

Vincent, [Thomas] Swale, extirpation of the thymus, 1903, A., ii, 664.

physiological effects of thymus extracts, 1903, A., ii, 664.

Vincent, Swale, and Wilhelm Cramer, extracts of brain and blood, 1903, A., ii, 673.

action of extracts of nervous tissues and blood, 1904, A., ii, 66.

Vincent, Swale, and W. A. Jolly, funcof thyroid and parathyroid glands, 1905, A., ii, 101.

Vincent, Swale, and William Sheen, intravascular injection of animal extracts, 1903, A., ii, 442.

Vines, Sydney Howard, proteolytic enzymes in plants, 1903, A., ii, 321.

Vinet, Emile. See Léon Moreau. Vinson, Albert Earl, endo- and ekto-

invertase of the date, 1908, A., ii, 418, 724.

stimulation of premature ripening by chemical means, 1910, A., ii, 336. chemical organisation of a typical

fruit, 1910, A., ii, 740.

fixing and staining tannin in plant tissues, 1910, A., ii, 744.

Vintilesco, J., detection and estimation of syringin in the various organs of lilac and privet, 1906, A., ii, 701.

glucosides of the Jasminaceæ: syringin and jasmiflorin, 1907, A., ii, 123.

presence of mannitol in the Jasminaceæ, 1907, A., ii, 501.

action of ferments on stachyose, 1909, A., i, 751.

stachyose from white jasmine, 1909,

A., ii, 427. existence of glucosides in varying proportions in two species of Veronica,

1910, A., ii, 339. See also Emile Bour-Vintilesco, J. quelot.

Vio, Giovanni. See Giovanni Pellini. Viola, Carlo Maria, crystallographic constants of 4-chloropyrazole, 1906, A., i, 893.

albite from Nurra, Sardinia, 1907, A.,

ii, 483

Violle, L. See Henri Labbé.

Virchow, C., precipitation of tannins by ammonium salts, 1906, A., ii, 504. estimation of caffeine in roasted coffee.

1910, A., ii, 1011.

estimation of lecithin, 1911, A., ii,

detection of vohimbine in medicinal tablets, 1912, A., ii, 1010.

the estimation of lecithin in medicinal tablets, 1912, A., ii, 1109.

Virck, Paul. See Otto Wallach.

Virgili. See Fages y Virgili. Virgin, Erik J., Pringsheim's method for estimating chlorine, bromine, and iodine in organic compounds, 1908, A., ii, 1070.

Virgin, Erik J. See also Oskar Widman. Visco, Sabato, biology of enzymes; action of heat on the lipases and amylases of pancreatic juice, 1910, A., i, 603. action of pancreatic lipase; contribu-

tions to the biology of the enzymes,

1911, A., ii, 809.

Visser, Arie Wilkert, enzyme actions considered as equilibria in a homogeneous system, 1904, A., i, 540.

autocatalysis and the transformation of y-hydroxy-acids, with and without addition of other acids, conceived as an ion reaction, 1905, A., ii, 511.

reaction velocity and chemical equilibrium in homogeneous systems and their bearings on cases of enzyme action, 1905, A., ii, 577.

Visser, Hendrik Ludwijn, estimation of dextrose in urine, 1905, A., ii, 359;

1907, A., ii, 657.

"nitron" as a microchemical reagent, 1907, A., ii, 394.

Hendrik Ludwijn. See also Eduard August Klobbie.

Visser, Louis Eduard Otto de, phospherescence of calcium sulphide containing bismuth in presence of traces of sodium, 1903, A., ii, 522.

Vitali, Dioscoride, analysis of persulphates, 1903, A., ii, 752.

detection of zinc in cases of poisoning, 1904, A., ii, 88.

Van Deen's reaction for blood spots, 1904, A., ii, 104, 600.

antiseptic and physiological action of persulphates and their toxicological

detection, 1904, A., ii, 366. chemico-toxicological detection of potassium permanganate, 1904, A., ii,

alkaloid salts of methylarsonic acid (arrhenalic acid), 1905, A., i, 657.

Vitali, Dioscoride, interference of mercuric chloride with the formation of arsenic, antimony, and phosphorus hydrides, 1905, A., ii, 354.

action of nascent hydrogen on certain metallic compounds in presence of oxygenated derivatives of arsenic,

1907, A., ii, 299.

potassium ferrocyanide and ferricyanide as reagents for metals in ammoniacal solutions, 1907, A., ii, 302.

detection of salicylic acid in wines and

foods, 1907, A., ii, 313.

action of concentrated hydrochloric and nitric acids on barium chloride and nitrate respectively, 1907, A., ii, 579.

abrastol, 1908, A., ii, 642.

behaviour of chlorates, perchlorates, iodates, and bromates towards reducing agents, 1910, A., ii, 496.

iodometric estimation of uric acid in urine, 1911, A., ii, 776.

new reaction for uric acid, 1912, A., ii,

211.
Vitali, G. See Nazareno Tarugi.

Vitek, Eugen. See Julius Stoklasa.

vitoria, Edouard, trichloroisopropyl alcohol, 1905, A., i, 110.
Vitoux, estimation of lactose in milk,

1911, A., ii, 74.

Vitry, G. See Henri Labbé.

Vittenet, Henri [Alfred Etienne], the variations in density of water-alcohol mixtures, 1903, A., i, 221.

a new cause of dissociation of mercuric chloride and its influence on the antiseptic properties of solutions of corrosive sublimate, 1905, A., ii, 35.

Vittenet, Henri, and Jean Chenu, a new cause of dissociation of mercuric chlor-

ide, 1905, A., ii, 711.

Viullemin, Armand. See Carl Hartwich. Vivck, Paul. See Otto Wallach.

Vivencio del Rosario, Mariano, determination of aldehydes in distilled liquors, 1910, A., ii., 760.

Vivian, A. See A. R. Whitson.

Viviani, Ettore, and Domenico Galeati, new apparatus for the estimation of sucrose in beet, 1906, A., ii, 586.

estimation of sucrose in Italian beet, 1906, A., ii, 586.

Viviani, Ettore. See also Nicola Parrayano.

Vizern, Marius, and L. Guillot, detection of arsenic in glycerol from soap-lyes, 1904, A., ii, 640.

Vlahutza, Eugène. See A. Bacovescu, and Stéphane Minovici.

Vock, Richard. See Arthur Hantzsch. Vodden, Leonard. See David Leonard Chapman.

Voegtlin, Carl, Millon's reaction in the urine as a criterion in the tuberculin

reaction, 1907, A., ii, 710.

Voegtlin, Carl, and Walter Jones, adenase and its relationship to the origin of hypoxanthine in the organism, 1910, A., ii, 631.

Voegtlin, Carl, and I. King, antagonistic action of ammonium and calcium salts,

1909, A., ii, 508.

Voegtlin, Carl, and Caroline Towles, creatinine metabolism, 1911, A., ii, 411.

Voegtlin, Carl. See also Emil Abderhalden, and Caroline Towles.

Voelcker, John Augustus [pot-culture experiments on the influence of the iodides and oxides of manganese, potassium, sodium, and lithium on wheat and barley], 1905, A., ii, 754.

[influence of manganese and iron sulphates and of potassium and sodium silicates on wheat and barley], 1906,

A., ii, 888.

experiment on late pulling of mangolds, 1907, A., ii, 647.

pot-culture experiments, 1908, A., ii, 622; 1911, A., ii, 922.

Völker, Watter, acidimetry of urine according to the Moritz and to Freund-Lieblein methods, 1907, A., ii. 311.

Völtz, Wilhelm, estimation of fat, 1903,

A., ii, 702.

the membrane of milk globules, 1904, A., ii, 500.

influence of different proteins, asparagine, and lecithin in nitrogenous metabolism, 1905, A., ii, 403.

behaviour of certain amides alone and in combination in carnivorous metabolism, 1906, A., ii, 560.

action of certain amino-substances in the metabolism of carnivora, 1907, A., ii, 109.

the value of betaine in the sheep, 1907, A., ii, 185.

the value of amide mixtures in molasses in ruminants, 1907, A., ii, 490.

nitrogen retention and equilibrium on feeding with ammonium salts, 1912, A., ii, 780.

Völtz, Wilhelm, and August Baudrexel, the influence of meat-extractives on the absorption of nutritive material; the physiological value of meat extract, 1911, A., ii, 214. Völtz, Wilhelm, and August Baudrexel, the utilisation of yeast in the human body, 1911, A., ii, 215, 304.

the amount of alcohol excreted by the animal organism under various con-

ditions, 1911, A., ii, 218.

the amount of alcohol excreted by the animal organism under various conditions. II. Influence of muscular work on the excretion of alcohol in expired air and urine, 1911, A., ii, 1011.

Völtz, Wilhelm, August Baudrexel, and Walter Dietrich, absorption of alcohol from the urinary bladder,

1912, A., ii, 466.

the quantity of alcohol excreted by the animal organism under various conditions. III. Influence on the secretion of alcohol by the breath and urine of the state of fulness of the alimentary canal, 1912, A., ii, 466.

Völtz, Wilhelm, and Walter Dietrich, the part played by methyl and ethyl alcohols in the general metabolism of the animal organism, 1912, A., ii,

575.

Völtz, Wilhelm, Rudolf Förster, and August Baudrexel, the value of beerextract and beer in the human and animal organism, 1910, A., ii, 975.
Völtz, Wilhelm, and G. Yakuwa, the

Voltz, Wilhelm, and G. Yakuwa, the value of amides in carnivora, 1908,

A., ii, 207.

Völtz, Wilhelm. See also Emil

Abderhalden.

Voerkelius, G. A., production of hydrocyanic acid from ammonia and wood charcoal, and also from di- and trimethylamine, 1909, A., i, 776.

Voerman, Gerardus Leonardus, anhydrides of saturated dibasic acids and Baeyer's tension theory, 1905, A., i, 13.

anhydrides of dibasic acids, 1906, A., i, 795.

monocarboxylic acids of thiophen,

1907, A., i, 868.

Voerman, Gerardus Leonardus. See also Emil Baur, Jacobus Henricus van't Hoff, and Arnold Frederik Holleman.

Vogdt, Kurt. See Volkmar Kohlschütter.

Voge, Adolph Law, isomeric inorganic compounds, 1911, A., ii, 977.

Vogel, Fritz, nitrites, 1903, A., ii, 591.

Vogel, Günther, thermodynamics of isopentane, 1910, A., ii, 687.

Vogel, Hans. See Leon Asher.

Vogel, Ignaz, assimilation of free elementary nitrogen by microorganisms, 1905, A., ii, 646, 750.

assimilation of ammonia and nitrates by the micro-organisms of soils, 1912, A., ii, 190.

potassium requirements of Azotobacter, 1912, A., ii, 473.

behaviour of nitrates in soils, 1912, A., ii, 1089.

behaviour of nitrates in field soils, 1912, A., ii, 1206.

Vogel, Ignaz. See also Max Gerlach. Vogel, M. See Rudolf Weissgerber. Vogel, Rudolf, gold-lead alloys, 1905,

A., ii, 462.

gold-tin alloys, 1905, A., ii, 640. gold-zinc alloys, 1906, A., ii, 287. gold-cadmium alloys, 1906, A., ii,

288.

gold-bismuth and gold-antimony alloys, 1906, A., ii, 679.

magnesium-silicon alloys, 1909, A., ii, 143.

gold-magnesium alloys, 1909, A., ii,

896. the ternary system: iron-copper-

nickel, 1910, Å., ii, 616. cerium-tin alloys, 1911, Å., ii, 1090. cerium-aluminium alloys, 1912, Å., ii,

eutectic crystallisation, 1912, A., ii,

Vogel, Rudolf, and Gustav Tammann, vanadium-iron alloys, 1908, A., ii, 502.

transformation of diamond into graphite, 1909, A., ii, 1000.

the preparation of vanadium by the aluminothermic method, 1909, A., ii, 1022.

Vogel, Rudolf. See also Georgei G. Urazoff.

Vogel, Wilhelm. See Oscar Piloty. Vogelsang, J. See Hermann Thoms. Vogelsang, Walter. See Arthur Rosen-

heim, and Wilhelm Windisch.
Voghera, Mario. See Mario Giacomo

Levi. Vogt, Hans, the rate of protein decomposition in different diets, 1906, A., ii, 779.

Vogt, Hans. See also Th. Boettcher, Thomas Gregor Brodie, and Karl Spiro.

Vogt, Johan H. L., labradorite-norite with porphyritic labradorite crystals, 1909, A., ii, 678.

Vogt, Karl, determination of the transition temperatures of ammonium nitrate, 1912, A., ii, 19.

Vogt, P. See Fritz Haber.

Vogt, Thorolf, yttrofluorite, a new mineral from Norway, 1911, A., ii. 733.

bertrandite from Iveland in Southern Norway, 1912, A., ii, 174.

Vogt, Wolfram. See Karl Fries, and Adolf Windaus.

Vogt, Xavier. See Friedrich Kehrmann. Vogtherr, Hermann. See Robert Pschorr. Vogtherr, Max, a new form of Kjeldahl

apparatus, 1903, A., ii, 179. Voigt, Ernst. See Alexander Naumann.

Voigt, J., are starch granules excreted by the kidneys? 1911, A., ii, 1116. Voigt, K., tube apparatus for drying in

a current of carbon dioxide, 1905, A., ii, 551.

estimation of zinc and analysis of zinc ores, 1910, A., ii, 74.

rapid estimation of zinc, 1912, A., ii, 93, 298, 687.

Voigt, Kurt. See Arthur Hantzsch.

Voigt, Paul Rudolf. See Alfred Stock. Voigt, Woldemar, and Kotaro Honda, natural and magnetic rotation of the plane of polarisation in crystals, 1908, A., ii, 912.

Voigt, Woldemar, and C. Statescu, alterations in the concentration of the solution of a magnetisable salt in a non-homogeneous magnetic field, 1911,

A., ii, 578.

Voinitsch-Sjanoschentzky, S., Guldberg and Waage's law from the point of view of the theory of probabilities, 1909, A., ii, 218.

interpretation of the periodic system of the elements, 1912, A., ii,

750.

Voisenet, E., sensitive colour reaction for formaldehyde; oxygenated compounds of nitrogen or protein matters, 1906, A., ii, 59.

detection of methyl alcohol, 1906, A.,

ii, 807.

condensation of 2-methylindole with formaldehyde, 1909, A., i, 607.

production of traces of formaldehyde in the oxidation of ethyl alcohol by chemical, physical, or biological methods, 1910, A., i, 91.

detection of hexamethylenetetramine in musts and wines, 1910, A., ii,

formation of acraldehyde in bitter wines, 1910, A., ii, 738.

bitter wines and the acrylic fermentation of glycerol, 1910, A., ii, 909.

a ferment causing bitterness in wines, acting as a dehydrating agent towards glycerol, 1911, A., ii, 915.

Voisenet, E., the disease causing bitterness in wines in connexion with the acrylic fermentation of glycerol, 1911, A., ii, 1127.

detection of methyl alcohol in alcoholic preparations and especially tincture of iodine, 1912, A., ii, 392.

Voit, Erwin, estimation of calorific value by means of elementary composition, 1903, A., ii, 384.

Voit, Erwin, and J. Zisterer, the difference in nutritive value of proteins in relation to their composition. II.,

1910, A., ii, 425. Voit, Fritz. See Otto Frank, and Her-

mann Hohlweg.

Voit, Wilhelm, the occurrence of lævulose in diabetic urines, 1909, A., ii.

diabetic lævulosuria and the detection of lævulose in urine, 1909, A., ii,

Voitinovici, Arthur. See Emil Abderhalden.

Vojtěch, V. See Jiri Baborovský.

Volchonsky, Evgenei Dmitrievitsch, equilibrium between two substances in a mixed binary solution. 1908, A., ii 934; 1911, A., ii, 25.

solutions from the point of view of general dynamics. I., 1911, A., ii, 23.

principle of the change of an equilibrated system under the influence of an external agent, 1912, A., ii, 441.

Volcy-Boucher, new differential reactions of the naphthols, 1908, A., ii, 990.

Volcy-Boucher, and J. Girard, detection of resorcinol by means of the cyanocupric reaction, 1910, A., ii, 162,

Voldere, Georges de, improvements in Hempel's gas-analysis apparatus, 1908, A., ii, 61.

the scientific foundations of the systematic separation of combustible

gases, 1911, A., ii, 329. Voldere, Georges de, and Willem de Smet, gas analyses, 1908, A., ii, 425.

analysis of combustible gases, 1909, A., ii, 755.

Volhard, Franz, fat-splitting ferment of gastric juice, 1903, A., ii, 494.

Volhard, Franz, and Waldemar Stade, estimation of the ferment-secretions in the stomach, based on the action of the fat-destroying enzymes, 1903, A., ii, 120.

Volhard, Justus, effect of heating on the solubility of nitrogenous food constituents in pepsin-hydrochloric acid, 1903, A., ii, 680.

Volhard, Justus, how does an excess of calcium carbonate in food affect the utilisation of the food constituents? 1904, A., ii, 750.

Volhard, Justus. See also Oskar Kellner,

and Albin Köhler.

Voljansky, I. See Sebastian M. Tanatar.

Volk, Hans. See Bernhard Rimbach. Volk, Walther. See Karl Fries.

Volkmann, Karl Theodor. See Max Trautz.

Volkmer, Franz. See Julius Tröger. Volland, Hans. See Robert Georgi, and

Hans Stobbe.

Vollant, Andre F., estimation of sucrose, and the detection of dextrin in foods,

1912, A., ii, 101. Vollenbruck, August. See Rudolf

Nietzki.
Voller, [Carl] August, properties of radium in small quantities, 1905, A., ii. 663.

Vollers, H., improved Gooch crucibles, 1905, A., ii, 855.

Vollhase, Ernst. See Franz Kunckell.
Vollrath, F., a source of error in the extraction of fats by means of carbon tetrachloride and its elimination,

1907, A., ii, 514. a simple distillation apparatus, 1910,

A., ii, 930.

Volmar, V., trialkylacetonaphthones and their decomposition by sodamide, 1910, A., i, 393.

Volovic, G. O. See Victor Caryl

Volpino, A. See Giuseppe A. Barbieri.
Volschin, V. A., conditions of equilibrium in the systems: ferric chloride-potassium ferrocyanide-water, 1908, A., ii, 468.

coagulation of colloids, 1910, A., ii, 1048.

Vonderwahl, Ernst. See Adolf Kaufmann.

Vondráček, Rudolf, catalytic action of platinum black, 1904, A., ii, 390. influence of metals on the hydrolysis of sucrose, 1905, A., ii, 151.

Vondráček, Rudolf. See also Emil Votoček.

Vondrasek, Josef, the quantitative relations of the thalleoquinine reactions, 1908, A., ii, 997.

Vongerichten, Eduard, identity of thebaol methyl ether from thebaine with 3:4:6-trimethoxyphenanthrene, 1903, A., i, 168.

derivatives of morphenol, 1905, A., i,

542.

Vongerichten, Eduard, and Kurl Bock, some reactions of the di- and triphenylmethane groups, 1903, A., i, 721.

Vongerichten, Eduard, and O. Densdorff, action of halogen on morphine deriva-

tives, 1907, A., i, 1068.

Vongerichten, Eduard, and Otto Dittmer, conversion of morphenol into trihydroxyphenanthrene, 1906, A., i, 422.

Vongerichten, Edward, and C. Höfchen, constitution of cyanine dyes, 1908, A., i, 914.

Vongerichten, Eduard, and Otto Hübner, action of halogens on morphine de-

rivatives, 1907, A., i, 718.

Vongerichten, Eduard, and Alfred Köhler, petroselic acid; a new acid of the oleic acid series, 1909, A., i, 454.

Vongerichten, Eduard, and L. Krantz, quinoline-red, 1910, A., i, 201.

Vongerichten, Eduard, and Fritz Müller, apocodeine and piperidinocodide, 1903, A., i, 571.

apiose, 1906, A., i, 143.

d-glucosephloroglucinol and \$\beta\$-glucosan, 1906, A., i, 198.

 Vongerichten, Eduard, and W. Rotta, quinaldinium bases, 1911, A., i, 676.
 Vongerichten, Eduard, and Carl Weil-

inger, reactions in the triphenylmethane series, 1904, A., i, 687. aminocodeine, 1905, A., i, 542.

Voorhees, Edward Burnett, denitrifica-

tion, 1903, A., ii, 35.

Voorhees, Edward Burnett, and Jacob Goodale Lipman, experiments on the accumulation and utilisation of atmospheric nitrogen in the soil, 1905, A., ii, 477.

Voorhees, Edward Burnett, Jacob Goodale Lipman, and Percy E. Brown, chemical and bacteriological effects of

liming, 1908, A., ii, 317.

Voorhoeve, N., calcium metabolism. I.

A new method for the quantitative estimation of small variations of the calcium content of the blood, 1911, A., ii, 126.

calcium metabolism. II. The calcium content of human blood after oral administration of large doses of cal-

cium, 1911, A., ii, 622.

Voorthuis, J. A. See Gysbert Romyn.
 Vorbrodt, Julian. See Ludwik Bruner.
 Vorbrodt, Wlad, investigations of the phosphorus compounds of seeds, particularly phytin, 1911, A., i, 263.

Voris, Floyd T. See Horace Greeley

Byers.

- Vorisek, Anton, detection of methyl alcohol in ethyl alcohol, 1909, A., ii, 834.
- Vorländer, Daniel, addition of ethyl malonate to a8-unsaturated ketones and acid esters, 1903, A., i. 632,

negative nature of unsaturated radicles, 1903, A., ii, 67.

bistriphenylmethyl and hexaphenylethane, 1904, A., i, 659.

liquid-crystalline substances [azoxycompounds], 1906, A., i, 317.

mechanism of additive reactions. VII. Reactivity of unsaturated nitrogen, 1906, A., i, 729.

diazobenzene perchlorate and phenylacridine perchlorate, 1906, A., i, 906. phenomena accompanying fusion and

crystallisation, 1907, A., ii, 70. substances with several solid and several liquid phases, 1907, A., ii,

influence of molecular structure in conditioning the formation of liquid crystals, 1907, A., ii, 442.

polymorphism of liquids, 1908, A., ii, 22.

crystal-systems and optical interference-figures of liquid crystals, 1908, A., ii, 88.

action of cyanogen on sulphurous acid, 1909, A., i, 142.

change of colour in additive reactions, 1909, A., i, 194.

Vorländer, Daniel, and Oskar Apelt, preparation of indole from indoxyl, 1904, A., i, 450.

Vorländer, Daniel, Georg Blau, and Theodor Wallis, oxidation of ammonia derivatives by permanganic acid, 1906, A., i, 730.

Vorländer, Daniel, A. Friedberg, Ch. van der Merve, Leo Rosenthal, M. E. Huth, and M. von Bodecker, new reactions of cyanogen and acyl cyanides, 1911, A., i, 865.

Vorländer, Daniel, and A. Gahren, formation of crystalline liquids by mixing substances, 1907, A., ii, 441.

Vorländer, Daniel, Paul Groebel, Wilhelm König, Franz Köthner, Alfred Sponnagel, Hermann May, Fritz Staudinger, Ernst Strunck, and Paul Weissheimer. addditive processes, 1906, A., i, 362.

Vorländer, Daniel, and Masataro Hayakawa, addition of acids to αβunsaturated ketones, 1904, A., i, 65. Vorländer, Daniel, and M. E. Huth,

character of the double refraction of liquid crystals, 1911, A., ii, 165.

Vorländer, Daniel, and Wilhelm Kasten. clear, transparent, crystalline liquids, 1908, A., i, 641.

Vorländer, Daniel, and Heinrich von Liebig, conversion of dibenzylideneacetone into derivatives of diphenylcyclopentane, 1904, A., i, 426.

Vorländer, Daniel, A. Logothetis, and Abraham Izaak Perold, salts of benzeneazophenyltrimethylammonium, 1906, A., i, 773.

Vorländer, Daniel, and Erich Mumme, addition of acids to as-unsaturated ketones, 1903, A., i, 495.

preparation of acetylphenylglycine-ocarboxylic acid, 1904, A., i, 317.

Vorländer, Daniel, Erich Mumme, Paul Groebel, and Karl Tubandt, the acidic properties of ethyl malonate, 1903, A., i, 230.

Vorländer, Daniel, and Abraham Izaak Perold, compounds of wool with colourless amines and acids, 1906, A., i, 736.

Vorländer, Daniel, Otto Rolle, Carl Siebert, and Paul Weissheimer, addition of acids and salts to a8-unsaturated ketones, 1905, A., i, 792.

Vorländer, Daniel, and Max Schrödter, action of sulphuric acid and acetic anhydride on dibenzylideneacetone, 1903, A., i, 496.

Vorländer, Daniel, and Carl Siebert, addition of acids to as-unsaturated ketones, 1904, A., i, 900.

Vorländer, Daniel, Carl Siebert, and Johannes Osterburg, new aromatic hydrocarbons, 1906, A., i, 345.

Vorländer, Daniel, and Karl Tubandt, additive compounds of acids with azocompounds and with aB-unsaturated ketones at low temperatures, 1904, A.,

Vorländer, Daniel, and Theodor Wallis, preparation of pure piperidine, 1906, A., i. 764.

Vorländer, Daniel, Richard Wilke, and M. E. Huth, behaviour of salts of organic acids on melting, 1910, A., ii, 1046.

Vorländer, Daniel. See also Max Kauffmann, and Albert Wangerin.

Voronkoff, M. P., action of magnesium amalgam on acetaldehyde, 1907, A., i, 285.

Voroschtsoff, Nicolai N[icolaevitsch], the stability towards light of methylated hydroxyazo-dyes; some derivatives of 1-methoxynaphthalene, 1911, A., i, 340.

new synthesis of o-hydroxyazobenzene,

1911, A., i, 818.

Voroschtsoff, Nicolai N[icolaevitsch], bisulphite compounds of hydroxyazocolouring matters, 1911, A., i, 819.

Voroschtsoff, Nicolai N. See also Paul

Friedländer.

Vorster, Wilhelm. See Paul Pfeiffer. Vortisch, Reinhard. See Fritz Fichter.

Vortmann, Georg, electrolytic estimation

of lead, 1907, A., ii, 302.

Vortmann, Georg, and A. Metzl, estimation of antimony as trisulphide and the separation of antimony from tin, 1905, A., ii, 655.

Vosburgh, Charles H., and Alfred Newton Richards, the blood after administration of adrenaline, 1903,

A., ii, 307.

Vosmaer, A., the periodic system, 1910,

A., ii, 600.

Voss, Arthur, and Julius Gadamer, isomerism of the ammonium compounds derived from tetrahydroberberine, 1910, A., i, 415.

Voss, Arthur. See also Franz Sachs.

Voss, Franz. See Carl Paal.

Voss, Gerhard, alloys of nickel with tin, lead, thallium, bismuth, chromium, magnesium, zinc, and cadmium, 1908, A., ii, 194.

Voss. H. See Karl Auwers.

Voswinckel, Hugo, hydrazidines, 1903, A., i, 777.

studies in the naphthacene series, 1906,

A., i, 99; 1909, A., i, 166.

bisdiketohydrindene, 1909, A., i, 166. derivatives of catechol, 1910, A., i, 42. a new synthesis of hordenine, 1912, A., i, 443.

Voswinckel, Hugo, and Fritz de Weerth. the naphthacene series. III., 1910,

A., i, 49.

gallocarboxylic[pyrogalloldicarboxylic]

acid, 1912, A., i, 472.

Voswinckel, Hugo. See also Carl Liebermann.

Voswinkel, Arnold, condensation products from tannin, formaldehyde, and carbamide or carbamates, 1905, A., i, 805.

cotarnine ferrichloride, 1906, A., i, 203. condensation products of tannic acid with formaldehyde and acid amides,

1906, A., i, 527.

condensation products of gallic acid with formaldehyde and carbamide, or with formaldehyde and urethanes, 1906, A., i, 961.

preparation of salt-like compounds from toluenesulphonamides 1-phenyl- or 1-p-tolyl-2:3-dimethyl-5-pyrazolone, 1911, A., i, 498.

Voswinkel, Arnold, preparation of stable bromo- and iodo-derivatives of fats free from sulphur, 1911, A., i.

preparation of derivatives of glycollic carbamides, 1912, A., ii, 837.

Votoček, Emil, oxidation products of

rhodeose, 1903, A., i, 67,

isorhodeose, the second methylpentose from convolvulin, 1904, A., i,

rhodeose and fucose as antipodal iso-

merides, 1904, A., i, 975.

detection of sulphites in the presence of thiosulphates and thionates. 1907, A., ii, 195.

configuration of rhodeose, 1910, A., i,

glucosidic acids of convolvulin and the composition of crude isorhodeose. 1910, A., i, 274.

nomenclature of the sugars, 1911, A.,

i, 179.

isorhodeose, 1911, A., i. 354.

the glucosidic acids of convolvulin and the composition of crude isorhodeose, 1912, A., i, 640. Votoček, Emil, and Jaromir Bulír,

rhodeitol, 1906, A., i, 483.

Votoček, Emil, and Johann Jelinek, hydroxy-derivatives of malachitegreen, 1907, A., i, 245.

Votoček, Emil, and Jaroslav Kastner, new rhamnoside from Ipomæa tur-

pethum, 1907, A., i, 330.

Votoček, Emil, and Cyrill Krauz, new kind of isomerism in the hydroxyand alkyloxy-malachite-green series, 1909, A., i, 518.

furfuraldehydephloroglucide, 1909, A.,

i, 949.

epirhodeose, 1911, A., i, 179.

degradation of isorhodeose, 1912, A.,

Votoček, Emil, and Hynek Němeček, kinetic studies in the sugar series, 1910, A., i, 95.

bromine water as an agent for discriminating between aldoses and

ketoses, 1910, A., ii, 463. Votoček, Emil, and Viktor Veseléy,

estimation of loosely combined methylene groups, 1907, A., i, 243.

Votoček, Emil, and Rudolf Vondráček, sugars of jalapin and other vegetable

glucosides, 1903, A., i. 570. sugar components of solanin and convallamarin, 1904, A., i, 177.

mutual replacement of hydrazine residues in hydrazones and osazones, 1904, A., i, 1055.

Votoček, Emil, and Rudolf Vondráček, separation and isolation of reducing sugars by means of aromatic hydrazines, 1904, A., i, 1055.

the so-called scammonose, 1905, A., i,

mutual replacement of sugar residues in hydrazones, 1905, A., i, 377.

sugar components of the glucosides solanin, convallamarin, and scam-

monin, 1906, A., i, 378.

Votruba, Karl, the determination of calcium carbonate in soils by the methods of Bernard and of Treitz, and its significance in the selection of soils [for vineyards], 1909, A., ii,

Vouk, Bruno. See Josef Herzig.

Vouk, Valentin, influence of aluminium salts on the colour of flowers, 1910, A., ii, 62.

Vouk, Valentin. See also Viktor

Grafe.

Vournasos, Alexander Ch., pentabenzoyltannic acid, 1903, A., i, 95.

detection of acetone in urine, 1904, A., ii, 300.

behaviour of dry nascent hydrogen, 1910, A., ii, 286.

reducing action of alkali formates on some inorganic substances, 1910, A., ii, 549.

direct synthesis of volatile hydrogen compounds, 1910, A., ii, 948. synthesis of hydrogen arsenide from

its elements, 1910, A., ii, 951.

decomposition of sodium chloride, 1911, A., ii, 392.

some definite bismuthides, 1911, A., ii, 405.

preparation of certain nitrides by reduction of alkaline cyanides, 1911, A., ii, 600.

bismuthides and inter-metallic com-

pounds, 1912, A., ii, 54.

Vozárik, Am., acidimetry of urine; influence of nutrition and muscular work on urinary acidity; influence of nutrition on the water of the body, 1906, A., ii, 377.

method of ashing foods and other organic substances for the estimation of their phosphorus content,

1912, A., ii, 386.

titrimetric estimation of phosphorus in foods and other organic substances by the uranium method, and the errors of the process, 1912, A., ii, 386.

See M. Voznesensky, S.

Kijner.

Vranceano, P. See H. Guillemard.

Vredenburg, Ernest Watson, sodalite from Kishengarh, India, 1904, A.; ii. 667.

Vrevsky, Michail Stepanovitsch, the composition and vapour tension of solutions. III. The influence of temperature on the composition of solutions. 1910, A., ii, 1038.

composition and vapour pressure of solutions. IV. Change in composition of mixtures of constant boiling

point, 1911, A., ii, 256.

composition and vapour pressure of solutions. V. Change of the partial pressures of vapours of solutions and mechanical mixtures with temperature, 1912, A., ii, 132.

composition and pressure of the vapour of binary liquid mixtures, 1912,

A., ii, 1139.

Vriens, Johannes Gerardus Cornelis, volumetric estimation of nitrogen in

nitrates, 1907, A., ii, 651.

Vries, Henri Johan Frederik de, estimation of potassium by the platinic chloride method, 1907, A., ii, 504, 719; 1908, A., ii, 430, 534.

porcelain Gooch crucibles with a layer of spongy platinum, 1909, A., ii,

1050.

Vries, Otto de, deduction of the stoicheiometric laws, 1908, A., ii, 366.

homocatechol and its methyl ethers,

1909, A., i, 712.

abnormal reduction of an aromatic nitro-compound with tin and hydrochloric acid and an interesting case of dimorphism, 1910, A., i, 29.

Vries, Otto de. See also Alfred Werner. Vrooman, C. H., heat rigor in vertebrate

muscle, 1907, A., ii, 566.

Vrshesnevsky, I. B., fusion and pressure of flow of mixtures of isomorphous salts, 1912, A., ii, 137.

Vrshesnevsky, I. B. See also Nicolai S. Kurnakoff.

Vuaflart, L., estimation of mineral constituents in vegetable substances, 1909, A., ii, 182; 1910, A., ii,

hydrogen cyanide in cassava flour,

1909, A., ii, 925.

detection and estimation of cyanamide in the presence of other fertilisers, 1911, A., ii, 776.

Vuilleumier, V. See Heinrich Brun-

Vulquin, E. See L. Roger, and Eloi de Stocklin.

W.

Waal, Antonius Jacobus Cornelis de. See Franz Antoon Hubert Schreinemakers.

Waal, Jacobus Wilhelmus de, the effect of light and temperature on the preservation of formaldehyde solutions, 1907, A., i, 893.

Waals, Johannes Diderik van der, the liquid state and the equation of

state, 1904, A., ii, 386.

equilibrium of a solid with a liquid phase, chiefly in the vicinity of the critical state, 1904, A., ii, 389.

derivation of the formula which gives the relation between the concentration of coexisting phases for binary mixtures, 1904, A., ii, 807.

shape of the sections of the surface of saturation normal to the x-axis in case of a three-phase pressure between two temperatures, 1905, A., ii, 683.

the (T, x) equilibria of solid and fluid phases for variable values of the pressure, 1905, A., ii, 683.

contributions to the theory of mix-

tures, 1906, A., ii, 339.

the value of the critical quantities,

1911, A., ii, 583. the value of the volumes of the coexisting phases of a simple substance, 1911, A., ii, 584.

Waals, Johannes Diderik van der, jun., the variability of the quantity b of the equation of condition, 1903, A., ii, 412.

Wachholtz, Franz, Franz Worgitzki, and Otto Weiss, the fate of carbon monoxide in the animal body, 1906, A., ii, 561.

Wachemuth, Franz. See Emil Abder-

halden.

Wachsmuth, Johannes, thermal conductivity of mixtures of argon and helium, A., ii, 351.

Wachsmuth, Richard, conductivity of gases in the "electrodeless ring discharge," 1912, A., ii, 1033.

Wachsmuth, Wolfgang. See Carl Adam

Bischoff.

Wacker, Alexander. See Otto Wallach.
Wacker, Leonhard, replacement of the
diazo- by the amino-group, 1903,
A., i, 132.

alkali salts of rhodamines, 1907, A.,

i, 726.

colorimetric method of determining the molecular size of carbohydrates (qualitative demonstration of aldehydes, alcohols, and carbohydrates), 1908, A., i, 135. Wacker, Leonhard, [physiological] action of substances of the saponin group, 1908, A., ii, 771.

colorimetric determination of the molecular weights of carbohydrates; differentiation of primary from secondary and tertiary alcohols. II., 1909, A., i, 633.

carbohydrate metabolism. I. A colorimetric method of estimating sugar, and its results, 1910, A., ii, 806.

colorimetric method of determining the molecular size of polysaccharides, 1911, A., i, 355.

does an abnormal composition of fat play any part in cancer? 1912, A., ii. 583.

cholesterol and accompanying substances in the depôt fat of carcinoma in man, 1912, A., ii, 1079.

Wacker, Leonhard. See also Emil Abder-

halden.

Wackernagel, Rudolf, and Richard Wolffenstein, constitution of sparteine, 1904, A., i, 917.

Wada, Toyotane, the removal of the poisonous properties of strychnine and cocaine by peripheral nerves, 1911, A., ii, 315.

Wada, Tsunashirō, [naëgite, a new mineral], 1905, A., ii, 177. naëgite, 1909, A., ii, 60.

Wade, Frank Bertram. See Warren Rufus Smith.

Wade, John, the influence of water and alcohols on the boiling point of esters.

I. A modification of Markownikoff's

P., 240.

Wade, John, and Horace Finnemore, influence of moist alcohol and ethyl chloride on the boiling point of chloroform, 1904, T., 938; P.,

method of preparation, 1905, T., 1656;

ethyl ether. Part I. The influence of water and alcohol on its boiling point, 1909, T., 1842; P., 236.

Wade, John, and Richard William Merriman, the correction of the specific gravity of liquids for the buoyancy of air, 1909, T., 2174; P., 290.

apparatus for the maintenance of constant pressures above and below the atmospheric pressure; application to fractional distillation, 1911, T., 984; P., 64.

influence of water on the boiling point of ethyl alcohol at pressures above and below the atmospheric pressure,

1911, T., 997; P., 65.

Wade, John, and Richard William Merriman, the purification, density and expansion of ethyl acetate, 1912, T., 2429; P., 246.

the vapour pressure of ethyl acetate from 0° to 100°, 1912, T., 2438; P.,

Wadmore, John Mello, notes on sodium alum, 1905, P., 150; discussion, P., 150.

Wadmore, John Mello. See also Frederick Daniel Chattaway.

Waegner, Anton, absorption spectra of didymium salt solutions containing phosphoric acid; didymium orthophosphate, 1903, A., ii, 729.

neodymium oxide, 1905,

35.

Waegner, Anton, and Arthur Müller. volumetric estimation of cerium, 1903, A., ii, 242, 512.

Wael, Aug. de. See Louis Henry.

Waele, H. de, and Albert Jacques Joseph Vandevelde, can the existence of an anticatalase be demonstrated? 1908, A., i, 491.

the fate of injected foreign proteins and peptones, 1911, A., ii, 128.

Waentig, Percy, effect of pressure on phosphorescing sulphides, 1903, A., ii. 625.

chemistry of phosphorescing sulphides of the alkaline earths, 1905, A., ii, 365.

condition of dissolved iodine, 1910,

A., ii, 117.

Waentig, Percy, and Otto Steche, enzymic decomposition of hydrogen peroxide, 1911, A., i, 759; 1912, A., i, 228; ii, 839.

Waentig, Percy. See also Ernst Beckmann.

Waentig, Rudolf. See Ludwig Knorr. Waerden, Herman van der. See Willem Jacob van Heteren, and David Jacobus

Wäser, B., the electrochemical preparation of chloroform, 1910, A., i, 213.

Wagenaar, M., estimation of glycerol, 1911, A., ii, 663.

titration of phosphoric acid, 1911, A., ii, 931.

micro-chemical reaction for manganese, 1912, A., ii, 206.

method of classifying indicators according to their sensitiveness to acids and alkalis, 1912, A., 1207.

Wagener, Elizabeth M. van. See David

Wilbur Horn.

Wagener, Friedrich, and Bernhard Tollens, compounds of hydroferrocyanic, hydroferricyanic, and hydrocobalticyanic acids, with furfuraldehyde and with nitrogen derivatives, 1906, A., i, 149.

Wagenknecht, Walter. See Alexander Gutbier.

Waggaman, W. H. See William O. Robinson.

Wagner, Alfred. See Otto Diels.

Wagner, Alois, substituted rhodanic acids and their aldehyde condensation products. VI., 1907, A., i, 233. Wagner, Benno, the Pavy-Sahli sugar

titration [in urine], 1906, A., ii, 400.

estimation of antimony in vulcanised indiarubber, 1906, A., ii, 583.

the acid reaction of urine, 1907, A., ii, 492

Wagner, Benno. See also Heinrich Determeyer, and Ferdinand Henrich.

Wagner, Bernhard, Arthur Rinck, and F. Schultze, standardisation of normal solutions [acids and alkalis]; note on the Zeiss immersion refractometer, 1907, A., ii, 49.

Wagner, Bernhard, and F. Schultze, estimation of calcium, magnesium, and phosphoric acid with the Zeiss immersion refractometer, 1907, A., ii. 814.

estimation of ethyl alcohol with the Zeiss immersion refractometer. 1907, A., ii, 821.

Wagner, Bernhard. See also Hermann Matthes.

Wagner, Carl. See Fritz Ullmann. Wagner, Carl L., rate of dissolution of salts, 1910, A., ii, 275.

velocity of crystallisation and dissolution, 1911, A., ii, 265; 1912, A., ii,

Wagner, Carl L., and Ernst Zerner, the binary system: pyridine-potassium

thiocyanate, 1910, A., ii, 942. Wagner, Dmitri, Viktor Lwoff, and Alexandr Bening, action of sulphuric acid on certain glycerols obtained by the oxidation of unsaturated tertiary alcohols of the series C_nH_{2n-1}OH, containing one allyl radicle, 1904, A., i, 643.

Wagner, Ernst, regularities in the changes of the electrical conductivity of metals in liquefaction, 1911, A., ii, 177.

Wagner, Franz Ludwig, the ultra-violet spark spectrum of air, 1911, A., ii, 829.

Wagner, Georg, Stefan Moycho, and Franz Zienkowski, camphene, 1904, A., i, 438.

Wagner, H., and H. Oestermann, Njave nuts and Njave butter, 1912, A., ii,

1108.

Wagner, Hans. See Julius Schmidt, H. Sprinkmeyer, and Theodor Zincke.
Wagner, Heinrich. See Karl Andreas

Hofmann.

Wagner, Hermann. See Carl Bülow. Wagner, H. W., detection of nitric and

nitrous acids, 1907, A., ii, 196.

Wagner, Joseph. See Richard Anschütz.
Wagner, Julius [Eugen], and Felix
Hildebrandt, splitting off of hydrogen
ions from methylene groupings, 1904,
A., i, 140.

Wagner, Julius, and Johannes Mühlenbein, viscosity of solutions, 1904, A.,

ii, 239.

Wagner, L., crystallography of halogen salts of aliphatic ammonium bases, 1907, A., i, 589.

chemico-crystallographic notes, 1912,

A., i, 72.

Wagner, Max, influence of different manurial conditions on the assimilation of nutrients and the structure of plants, 1908, A., ii, 1066.

Wagner, Paul, what forms of phosphoric acid are suitable for manurial

purposes? 1904, A., ii, 768.

manurial questions, 1906, A., ii, 120. calcium or sodium nitrate [as manure],

1911, A., ii, 65.

Wagner, Paul, Robert Dorsch, Fritz Aschoff, Heinrich Ruths, and Georg Hamann, ammonium sulphate and organic nitrogen compared with sodium nitrate, 1904, A., ii, 78.

Wagner, Paul, Robert Dorsch, Sigmund Hals, and Max Popp, employment of calcium cyanamide as manure, 1907.

A., ii, 573.

Wagner, Paul, Robert Dorsch, Heinrich Ruths, and Georg Hamann, potassium

manuring, 1905, A., ii, 551.

Wagner, Paul, Georg Hamann, and A. Münzinger, manurial experiments with sodium nitrate, ammonium salts, and calcium cyanamide, 1908, A., ii, 622.

Wagner, Paul, R. Kunze, and W. Simmermacher, determination of the phosphoric acid soluble in citric acid in basic slag, 1907, A., ii, 577.

Wagner, Paul. See also Wilhelm

Fuchs.

Wagner, Ph., cheiroline, an alkaloid containing sulphur, 1908, A., i, 202.

Wagner, Richard. See Hans Handovsky, and Wolfgang Pauli.

Wagner, Waldemar. See Ernst Schmidt.
Wahl, André [R.], new reduction product of dinitrostilbenedisulphonic acid; nitroaminostilbenedisulphonic

ethyl acetylisonitrosoacetoacetate,

1905, A., i, 408.

acid, 1903, A., i, 475.

constitution of diketobutyric ester phenylhydrazones, 1905, A., i, 474. ethyl dioximidosuccinate, 1906, A., i, 624.

ethyl benzoylglyoxylate, 1907, A., i,

217.

constitution of azo-derivatives of ethyl benzoylacetate, 1907, A., i, 362.

isomeric dioximinosuccinic acids, 1907,

A., i, 493.

ethyl dioximinosuccinate; action of nitric acid on ethyl dioximinosuccinate, 1908, A., i, 140.

preparation of nitromethane, 1909, A.,

i, 198.

indigoid dyes derived from phenyliso-

oxazolone, 1909, A., i, 261.

condensation of ethyl acetate with its higher homologues, 1911, A., i, 108.

ethyl dinitroacetate, 1912, A., i, 333. Wahl, André, and P. Bagard, a new

isomeride of indigo, 1909, A., i, 330. isoindogenides, 1909, A., i, 735.

constitution of indirubin, 1911, A., i, 164, 577.

Wahl, André, and M. Doll, preparation of αβ-diketonic esters, 1912, A., i, 536.

o- and p-methoxybenzoylglyoxylic esters, 1912, A., i, 625.

Wahl, André, and André Meyer, ethyl hexahydrobenzoylacetate, 1907, A., i, 765.

some derivatives of phenyliso-oxazolone, 1908, A., i, 368.

esters of hexahydrobenzoylacetic acid, 1908, A., i, 890.

action of magnesium cyclohexyl bromide on tetramethyldiaminobenzophenone, 1910, A., i, 134.

Wahl, André, and C. Silberzweig, methyl anisoylacetates, 1910, A., i,

263.

ethyl anisoylacetates, 1912, A., i, 114. derivatives and decomposition products of methyl methoxybenzoylacetates, 1912, A., i, 213.

Wahl, André, and Yoshisaka, preparation of benzoylacetic esters, 1908, A.,

i, 647.

Wahl, André. See also Louis Bon-

Wahl, Emil. See Hans Stobbe.

Wahl, Walter Andre, [hyperstheneaugite from Lake Onega], 1909, A., ii, 65.

cobalt-gold alloys, 1910, A., ii, 299.

meteorites, 1911, A., ii, 47.

physico-chemical determinations at high pressures by optical methods, 1912, A., ii, 828.

optical investigation of crystallised nitrogen, argon, methane, and some of the simpler organic compounds of low melting points, 1912, A., ii, 1044.

Wahlberg, Erik, ethyl tert.-valeryl-

acetate, 1911, A., i, 707.

Wahlberg, Erik. See also Oskar Widman. Wahle, Karl. See August Michaelis. Wahlgren, Valdemar, glycocholeic acid,

1903, A., i, 302.

the significance of the tissue as a chlorine depot, 1909, A., ii. 911.

Waidner, Charles William, and George Kimball Burgess, radiation from, and melting points of, palladium, and platinum, 1907, A., ii, 882.

melting point of platinum, 1909, A.,

ii, 584.

the constancy of the boiling point of sulphur, 1912, A., ii, 19.

Wainoff, Julius. See Alfred Benrath. Wait, Charles Edward, effect of muscular activity on the digestion and metabolism of nitrogen, 1903, A., ii, 308.

Waitz, Moses. See Fritz Ullmann. Waitz, Paul, position of the substituents in a-resodicarboxylic acid, 1911, A., i,

Wake, Ernest, and Harry Ingle, the iodine value of the phenols, 1908, A., i, 416.

Wakeman, Alfred John, nitrogen distribution in the liver of the sturgeon, 1905, A., ii, 467.

chemical changes in the liver in phosphorus poisoning, 1905, A., ii, 470.

hexone bases of liver tissue, 1905, A., ii, 841.

[amount of] arginine, lysine, and histidine in the hydrolytic products of various animal tissues, 1908, A., ii. 209.

estimation of "saccharin" in urine and fæces, 1910, A., ii, 1011.

Wakeman, Alfred John, and Henry Drysdale Dakin, decomposition of B-hydroxybutyric acid and acetoacetic acid by enzymes of the liver, 1909, A., ii, 908.

Wakeman, Alfred John, and Henry Drysdale Dakin, the decomposition of acetoacetic acid by enzymes of the liver. II., 1910, A., ii, 977.

katabolism of phenylalanine, tyrosine, and of their derivatives, 1911, A.,

ii. 416.

relationship between urea and ammonium salts, 1911, A., ii, 629.

Wakeman, Alfred John. See also Henry

Drysdale Dakin.

Walbaum, Heinrich [Wilhelm], ethereal oil of cassia flowers, 1903, A., i, 845.

aroma of natural musk, 1906, A., i. 595.

occurrence of anisyl alcohol and anisaldehyde in the fruit of Tahiti vanilla. 1910, A., ii, 235.

Walbaum, Heinrich, and O. Hüthig. oils of neroli and of petit grain,

1903, A., i, 506.

occurrence of a dihydrocuminol in ginger grass oil, 1905, A., i, 53. ginger grass oil, 1905, A., i, 603.

Walbaum, Heinrich, and Wilhelm Müller, coriander oils, 1910, A., i, 184. Walbaum, Heinrich, and Max Salzmann.

barzarin, 1912, A., ii, 1196.

Walbaum, Heinrich. See also Carl Jacobj.

Walbaum, Hermann, the effect of sulphurous acid and sulphites on health, with special reference to the presence of free sulphurous acid, 1906, A., ii, 567.

Walbinger, Paul. See Alexander Gutbier.

Walbum, L. See Thorvald Madsen.

Walbum, L. E., a new albuminometer, 1909, A., ii, 195.

quantitative estimation of cantharidin, 1909, A., ii, 839.

Walcott, R. Henry, minerals of Victoria, 1903, A., ii, 302.

Wald, Franz, are the stoicheiometrical law intelligible without the atomic hypothesis? 1907, A., ii, 755; 1908, A., ii, 367; 1909, A., ii, 134.

new views on chemical processes, 1908, A., ii, 478.

deduction of stoicheiometric laws, 1908, A., ii, 681.

Walden, Alfred Edward. See George Druce Lander.

Walden, Paul, esters of nitromalic and nitrotartaric acids, 1903, A., i, 148, 319.

esters of ricinoleic acid, 1903, A., i,

abnormal electrolytes, 1903, A., ii, 408.

Walden, Paul, organic solvent and ionising media, 1904, A., ii, 227; 1906, A., ii, 149.

the rotation of optically active substances, 1905, A., ii, 130; 1906, A.,

ii, 257.

- relationship between the molecular weight and the rotation of an active compound in solution, 1906, A., ii,
- connexion between viscosity and ionic velocity or rate of diffusion, 1906, A., ii, 217.
- organic solvent and ionising media. III. Viscosity and its relation to the conductivity, 1906, A., ii, 335.

organic solvent and ionising media. IV. Ebullioscopic measurements,

1906, A., ii, 336.

optical activity and origin of mineral

oil, 1906, A., ii, 368.

organic solvent and ionising media. V. Solvent power, 1906, A., ii, 527. preparation of aliphatic thiocyanates, nitriles, and nitro-compounds, 1907,

A., i, 752, 1017. organic solvent and ionising media. VI. Heats of solution, 1907. A.,

ii, 231.

organic solvent and ionising media. VII. Heats of solution and dissociation, 1907, A., ii, 437.

organic solvent and ionising media. VIII. Refractivity and electrolytic dissociation, 1907, A., ii, 519.

rotatory power in solutions, 1907, A.,

ii, 519.

organic solvent and ionising media. IX. Electro-striction, 1907, A., ii,

organic solvent and ionising media. X. Solvent power and dielectric constant, 1908, A., ii, 159.

heat of fusion, specific cohesion, and molecular weight at the melting point, 1908, A., ii, 1014.

- relation between the capillary constants and the latent heat of vaporisation of the solvent, 1909, A., ii, 119.
- expansion coefficient, specific cohesion, surface tension, and molecular weight of solvents, 1909, A., ii, 122.
- relation of the surface tension to the internal pressure and to van der Waals' constants, a and b, 1909, A., ii, 547.

dielectric constants of solvents, 1910, A., ii, 254.

history of colloidal silicie acid, 1910, A., ii, 500; 1911, A., ii, 1086.

Walden, Paul, electrolytic conductivity of non-aqueous solutions at low temperatures, 1910, A., ii, 684.

constitution of water; is water an electrolyte? 1910, A., ii, 841.

- some molecular weights in phosphoryl chloride as a cryoscopic solvent, 1910, A., ii, 1036.
- some abnormal temperature-coefficients of the molecular surface energy of organic substances, 1911, A., ii. 97.
- relationship between the limiting value of the molecular conductivity and the viscosity, 1912, A., ii, 23.

formamide as solvent and ionising medium, 1912, A., ii, 26.

dielectic constants of dissolved salts. I., 1912, A., ii, 421.

phosphoryl chloride as a cryoscopic solvent, 1912, A., ii, 429.

principal dates from the history of osmotic pressure and of the osmotic solution theory, 1912, A., ii, 542.

Walden, Paul, and Mieczyslaw Centnerszwer, compounds of sulphur dioxide with salts, 1903, A., ii, 284.

molecular condition of some salts in pyridine, 1906, A., ii, 333.

kinetics of the reaction between alkyl sulphates and inorganic salts, 1909, A., ii, 649.

Walden, Paul, and Richard Swinne, capillary constants of liquid esters, 1912, A., ii, 628.

Walden, Percy Talbot, acid oxalates of ammonium, 1905, A., i, 679.

dissociation pressures of ferric oxide, 1908, A., ii, 852.

Walden, Percy Talbot. See also Harry Ward Foote.

Waldenberg, Heinrich. See Rudolf Höber.

Walder, Emil. See Robert Gnehm, and Eugène Grandmougin.

Waldmüller, Martin. See Wilhelm Wislicenus.

Waldschmidt, Wilhelm, the different methods for estimating pepsin and trypsin, with a description of a new simple method, 1912, A., ii, 108.

Waldschmidt, Wilhelm. See also Paul von Grützner.

Waldvogel, [Karl Friedrich] Richard, ferments and fatty degeneration, 1904, A., ii, 751.

conditions for the formation of acetone [in the body], 1905, A., ii, 735.

Waldvogel, Richard, and Tintemann, jecorin, 1906, A., i, 469.

Waliaschko, Nicolai A[vksentevitsch], the glucoside robinin, 1904, A., i, 606.

rutin from rue (Ruta graveolens), 1904, A., i, 760.

completely methylated flavonol derivatives, 1909, A., i, 248.

the kaempferol from robinin, 1909. A., i, 948.

absorption spectra and constitution of benzene derivatives, 1910, A., ii, 1015; 1911, A., ii, 2.

Waliaschko, Nicolai A., and N. Krasowsky, constituents of the fruit of Rhamnus cathartica, 1909, A., ii, 174.

Waliaschko, Nicolai A. See also Ernst Schmidt.

Wali-Mohammad, Ch., magnetic resolution of fine spectral lines in the vacuum arc light, 1912, A., ii, 874.

Walker, Arthur B. See Frederick Jacob

Alway.

Walker, Andrew Jamieson, and (Miss) Elizabeth Smith. o-cvanobenzenesulphonic acid and its derivatives, 1906, T., 350; P., 62.

Walker, (Mrs.) Annie Purcell. James Walker.

Walker, Charles Edward, and (Miss) Alice L. Embleton, nucleoli of Hydra fusca, 1908, A., ii, 868.

Walker, Charles Edward. See also John

Bretland Farmer.

Walker, Ernest William Ainley, factors in bacteriolytic action, 1903, A., ii,

comparison of ferments and lysins,

1906, A., i, 327.

Walker, Ernest William Ainley, and John Henry Ryffel, pathology of acute rheumatism, 1903, A., ii, 673.

Walker, Ernest William Ainley.

also Georges Dreyer.

Walker, G. W. See George Bell Frankforter.

Walker, George W., dependence of the refractive index of gases on temperature, 1903, A., ii, 623.

Walker, Harry Bertram. See Leonard

Erskine Hill.

Walker, James, the state of carbon dioxide in aqueous solution, 1903, T.,

qualitative separation of arsenic, antimony, and tin, 1903, T., 184.

equilibrium between carbamide and ammonium cyanate, 1903, A., ii, 136. theory of amphoteric electrolytes, 1904, A., ii, 309; 1905, A., ii, 138;

1906, A., ii, 723. determination of avidity by the polarimetric method, 1904, A., ii, 316.

Walker, James, ions of pure water, 1906. A., ii, 263.

method for determining velocities of saponification, 1906, A., ii, 732.

affinity constants of amphoteric electrolytes. III. Methylated aminoacids, 1906, A., ii, 735.

Walker, James, and (Miss) Heather Henderson Beveridge, p-toluidine monohydrate, 1907, T., 1797; P., 236.

Walker, James, and Thomas Blackadder. combustion analysis, 1909, A., ii, 93.

Walker, James, and William Alexander Fyffe, the hydrates and the solubility of barium acetate, 1903, T., 173.

Walker, James, and John Johnston. tetramethylammonium hydroxide,

1905, T., 955; P., 210. Walker, James, and Sidney Alexander Kay, acidity and alkalinity of natural

waters, 1912, A., ii, 1215.

Walker, James, and Andrew John Robertson, freezing point depression in electrolytic solutions, 1903, A., ii, 412.

Walker, James, and (Mrs.) Annie Purcell Walker, tetraethylsuccinic acid, 1905,

T., 961; P., 210.

Walker, James, and John Kerfoot Wood, hydrolysis of urea hydrochloride, 1903, T., 484; P., 67

the electrolysis of salts of \$8-dimethylglutaric acid, 1906, T., 598; P., 104.

Walker, James Wallace, the catalytic racemisation of amygdalin, 1903, T., 472.

ionisation and chemical combination.

1904, T., 1082; P., 133. optical activity and the product of assymetry, 1909, A., ii, 846.

Walker, James Wallace, and (Miss) Mary Violette Dover, the iodides of copper, 1905, T., 1584; P., 232.

Walker, James Wallace, and Frederick Murray Godschall Johnson, the interaction of alcohols and phosphorus haloids, 1905, T., 1592; P., 232.

the electrical conductivities of some salt solutions in acetamide, 1905,

T., 1597; P., 233.
Walker, James Wallace, and Vernon K. Krieble, the hydrolysis of amygdalin by acids. Part I., 1909, T., 1369 ; P., 203.

the amygdalins. Part I., 1909, T.,

1437; P., 208.

James Wallace. Walker, Douglas McIntosh, and Ebenezer Henry Archibald, ionisation and chemical combination in the liquefied halogen hydrides and hydrogen sulphide, 1904, T., 1098; P., 134.

Walker, James Wallace, and Arthur Spencer, some compounds of aluminium chloride with organic substances containing oxygen, 1904, T., 1106; P., 135.

Walker, (Miss) Maggie. See Holland

Crompton.

Walker, Norman. See John Theodore Hewitt.

Walker, Percy Hargraves, unification of reducing sugar methods, 1907, A., ii, 585; 1912, A., ii, 303.

estimation of reducing sugars, 1909,

A., ii, 102.

Walker, Percy Hargraves, and Herman Schreiber, estimation of zinc as carbonate and silicate in ores, 1907, A., ii,

Walker, Percy Hargraves, and H. A. Whitman, rapid analysis of Babbit metal, 1911, A., ii, 442.

Walker, Percy Hargraves. See also

Levois Storms Munson.

See Albert Prescott Walker, Sydney. Mathews.

Walker, Thomas Leonard, tungstite and meymacite, 1908, A., ii, 507.

Walker, William Hultz, the electrolytic theory of the corrosion of iron, 1909, A., ii, 485.

Talker, William Hultz, Anna M. Cederholm, and Leavitt N. Bent, corrosion of iron and steel, 1907, A., ii, 875.

Walker, W. O., and J. A. MacRae, estimation of halogens in organic compounds, 1911, A., ii, 434.

Wallace, C. C., automatic filter, 1912,

A., ii, 678.

Wallace, George Barclay, and Holmes Condict Jackson, action of alcohol on

gastric secretion, 1903, A., ii, 308. Wallace, George Barclay. See See also Phæbus A. Levene, and Alfred Newton Richards.

Wallace, (Miss) Marion Love.

James Frederick Spencer.

Wallace, Robert Charles, the binary systems of sodium metasilicate with lithium, magnesium, calcium, strontium, and barium metasilicates, of lithium metasilicate with potassium, magnesium, calcium, strontium, and barium metasilicates, and the ternary system: Na₂O-Al₂O₃-SiO₂, 1909, A., ii, 665.

dimorphism of ammonium haloids,

1910, A., ii, 208.

crystallographic (isomorphous) relations of indium and thallium, 1911, A., ii, 890.

Wallace, Thomas Arthur, and William Ringrose Gelston Atkins, properties of mixtures of allyl alcohol and water. Part I., 1912, T., 1179; P., 141.

properties of mixtures of allyl alcohol, water, and benzene. Part II., 1912.

T., 1958; P., 231.

Wallach, A., simple process for the continuous electrolytic preparation of potassium chlorate, 1906, A., ii, 748.

Wallach, Otto, terpenes and ethereal oils, 1905, A., i, 709; 1906, A., i, 194; 1907, A., i, 1058; 1908, A., i, 425; 1910, A., i, 569.

terpenes and ethereal oils. LXXVII. New heptacyclic compounds, 1906,

A., i, 370.

synthesis of menthene, 1906, A., i,

condensation products from cyclo-hexanone, 1907, A., i, 220.

boiling point and the nature dipentene, 1907, A., i, 228.

terpinenes, 1907, A., i, 228. sabinene and its relationship

terpinene, 1907, A., i, 229. terpenes and ethereal oils. LXXXV. Behaviour of the nitrites of primary bases and enlargement of rings in

carbocyclic systems, 1907, A., i, 602. terpenes and ethereal oils. XCIII. Resolution of linkings by addition of water to terpene compounds,

1908, A., i, 429.

terpenes and ethereal oils. XCVI. Terpinene and its modifications,

1908, A., i, 813.

terpenes and ethereal oils. XCVII. Synthesis of fenchene β-pinene, camphene, and camphor nopinone, 1908, A., i, 997. camphor

terpenes and ethereal oils. CVII. Constitution and synthesis of pinolone and of dihydropinolone (3-acetylisopropylcyclopentane), 1911, A., i, 891.

reduction of sabinene, 1912, A., i, 202. Wallach, Otto, Max Behnke, Walter Norman Haworth, and Walther Ost, terpenes and ethereal oils. CX., 1912,

A., i, 569.

Wallach, Otto, Max Behnke, Alfred Homberger, Werner Lange, Friedrich Heinrich Ritter, and Wienhaus, terpenes and ethereal oils. CI., 1909, A., i, 811.

Wallach, Otto, and Erich Beschke, terpenes and ethereal oils. LXVIII. Nitrites of some cyclic hydrocarbons, 1904,

A., i, 987.

Wallach, Otto, and Erich Beschke. terpenes and ethereal oils. Phellaudrene, 1904, A., i. 1035.

Wallach, Otto, Erich Beschke, and Hans Müller, terpenes and ethereal oils; additive products of nitrogen tri-oxide and nitrosyl chloride with unsaturated compounds, 1904, A., i. 753.

Wallach, Otto, and Arnold Blumann. terpenes and ethereal oils. LXXXVII.

Nopinone, 1907, A., i, 936.
Wallach, Otto, and Theodor Böcker, terpenes and ethereal oils; phellandrene, 1903, A., i, 105.

Wallach, Otto, Erich Böcker, and Wilhelm Fritzsche, terpenes and ethereal oils. LXX. Compounds of the thujone

series, 1905, A., i, 147.

Wallach, Otto, and Friedrich Boedecker, terpenes and ethereal oils. LXXXII. Compounds, purification, and constitution of terpinene, 1907, A., i. 64.

terpineol of majorana oil, 1907, A., i,

Wallach, Otto, Friedrich Boedecker, and Fritz Meister, terpenes and ethereal oils. LXXXVI. Compounds of the terpinene series, 1907, 943.

Wallach, Otto, and Frederick Challenger, terpenes and ethereal oils. CVIII.,

1912, A., i, 262.

Wallach, Otto, Frederick Challenger, Erwin Meyer, Friedrich Pohle, and Friedrich Ritter, terpenes and ethereal CV. Reduction of alicyclic compounds, 1911, A., i, 469.
Wallach, Otto, and Fritz Collmann,

terpenes and ethereal oils; camphorphorone and its decomposition, 1904,

A., i. 752.

Wallach, Otto, Fritz Collmann, Julius Meyer, Eugen Seldis, and Johannes Thede, terpenes and ethereal oils; pulgenic acid and its derivatives, 1903, A., i, 567.

Wallach, Otto, Curt Engelbrecht, Eduard Isaac, and Friedrich Jäger, terpenes and ethereal oils. LXXVIII.

Pinene series, 1906, A., i, 683. Wallach, Otto, Edgar Evans, Karl Fleischer, and Eduard Schellack, terpenes and ethereal oils. LXXXIV. Carboxylic acids of cyclic hydrocarbons and their transformation products, 1907, A., i, 616.

Wallach, Otto, Edgar Evans, and Paul Gutmann, terpenes and ethereal oils.

LXXXIX., 1907, A., i, 1061.

Wallach, Otto, Edgar Evans, Paul Mendelssohn-Bartholdy, Jesse Briggs Churchill, Mahlon Rentschler, and Heinrich Mallison, terpenes and ethereal oils. XCII. Preparation of cyclic hydrocarbons with semicyclic linkings and their use in new syntheses, 1908, A., i, 402.

Wallach, Otto, and Ulrich Franke, terpenes and ethereal oils; transformation of 1:3- into 1:2-methylcyclo-

hexanone, 1904, A., i, 424.

Wallach, Otto, and Erich Grosse, terpenes and ethereal oils. C., 1909,

A., i, 726.

Wallach, Otto, Friedrich Henjes, and Paul Virck, terpenes and ethereal oils. CIV., 1911, A., i, 312.

Wallach, Otto, and Richard Hever. terpenes and ethereal oils.

1908, A., i, 424.

Wallach, Otto, Karl Hüttner, and Johannes Altenburg, terpenes and ethereal oils. LXXV. Conversion of ketones and aldehydes into bases, 1906, A., i, 160.

terpenes and ethereal oils. LXXIX. compounds of the cyclohexanone

series, 1906, A., i, 514. Wallach, Otto, and Eduard Isaac, terpenes and ethereal oils. LXXIV. Cyclohexanone, 1906, A., i, 175.

Wallach, Otto, Eduard Isaac, Beschke, and Edgar Evans, terpenes and ethereal oils. LXXXI. The simplest methylene hydrocarbons of various ring systems and their conversion into alicyclic aldehydes, 1906, A., i, 563.

Wallach, Otto, Friedrich Jäger, and Hendrik van Beeck-Vollenhoven, terpenes and ethereal oils; transformation of cyclic ketones into alkamines and cyclic bases not containing oxygen,

1903, A., i, 103.

Wallach, Otto, and Wilhelm Kempe, terpenes and ethereal oils; a new case of optical isomerism, 1904, A., i, 754.

Wallach, Otto, Wilhelm Kempe, Fritz Collmann, Julius Meyer, and Hermann Sonneborn, terpenes and ethereal oils; [1:4:4-trimethyl-5-hexanpulenone one], 1904, A., i, 74.

Wallach, Otto, and Hugo Köhler, terpenes and ethereal oils; constitution of eucarvone and its reduction products, 1905, A., i, 450.

the simplest methylene hydrocarbons of various ring systems and their conversion into alicyclic aldehydes, 1906, A., i, 818.

Wallach, Otto, and Hermann Lautsch, terpenes and ethereal oils. LXXX. isoCarvoxime and the constitution of carvoline; remarks on the mechanism of the isomerisation of oximes, 1906, A. i. 522.

Wallach, Otto, Heinrich Mallison, and Kurt von Martius, condensation products of cyclic ketones with aromatic

aldehydes, 1908, A., i, 424.

Wallach, Otto, Kurt von Martius, and Mahlon Rentschler, terpenes and othereal oils. XCIX. Preparation of unsaturated cyclic acids and hydrocarbons with a semicyclic linking, 1909, A., i, 383.

Wallach, Otto, Fritz Meister, and Richard Heyer, terpenes and ethereal oils. XCV. Alcohols of the terpinene series (ter-

pinenols), 1908, A., i, 811.

Wallach, Otto, Erwin Meyer, and Hans Schlubach, terpenes and ethereal oils.

CXI., 1912, A., i, 878.

Wallach, Otto, Ludwig Oldenberg, Friedrich Ritter, and Heinrich Wienhaus, terpenes and ethereal oils. CIII. Studies in the fenchone series, 1911, A., i, 310.

Wallach, Otto, and Walter Ost, terpenes and ethereal oils. CIX., 1912, A., i, 567.

Wallach, Otto, Walter Ost, Friedrich Pauly, and Alexander Wacker, terpenes and ethereal oils. CVI. Dicyclic compounds from cyclohexanone, 1911, A., i, 473.

Wallach, Otto, Petros Rhoussopoulos, cyclic bases from methylheptenone,

1905, A., i, 818.

Wallach, Otto, Adolf Rosenbach, and Rudolf Müller, terpenes and ethereal oils. XCVIII. Transformation of pulegone into isopulegone during oximation in alkaline solution, 1909, A., i, 399.

Wallach, Otto, and Ernst Schmitz, terpenes and ethereal oils. LXXVI.

New compounds from β-terpineol,

1906, A., i, 372.

Wallach, Otto, and Adolf Steindorff, terpenes and ethereal oils; transformation of cyclic ketones into pyrazole bases, 1904, A., i, 104.

Wallach, Otto, and Paul Vivck, terpenes and ethereal oils. XCIV. The fenchone

series, 1908, A., i, 809.

Wallach, Otto, and Heinrich Wienhaus, terpenes and ethereal oils. LXXXIII.,

1907, A., i, 541.

Wallach, Otto. See also Walter Norman

Haworth, Hans Landolt, and William

Henry Perkin, jun.

Wallenreuter, R. See Alfred Heiduschka.

Wallbridge, William Knickerbocker, a double salt of potassium and barium

nitrates, 1903, A., ii, 646.

Wallbridge, William Knickerbocker. See also Treat Baldwin Johnson, and Horace Lemuel Wells.

Wallee, E. See Alexander Etard.

Waller, Augustus Désiré, estimation of chloroform by densimetry, 1903, A., ii, 699.

estimation of ether by densimetry, 1903, A., ii, 699.

densimetric estimation of the pulmonary absorption of ether vapour, 1903, A., ii, 699.

photo-electrical effects in frog's eyeball,

1905, A., ii, 545.

action of aconitine on nerve fibres,

1908, A., ii, 55.

chloroform balance, 1908, A., ii, 541. comparative effect of alcohol, ether, and chloroform on striped muscle; effects of muscarine and atropine on striped muscle, 1909, A., ii, 75.

action of digitalin and allied substances on striated muscle, 1909, A., ii, 254. anæsthetics and laurel leaves, 1910,

A., ii, 741.

estimation of hydrocyanic acid in the blood and tissues after death, 1910, A., ii. 759.

comparative effects of yohimbine, protoveratrine, and veratrine on isolated muscle and nerve, 1911,

A., ii, 138.

Waller, Augustus Désiré, and Bertram James Collingwood, estimation of carbon dioxide by densimetry, 1904, A., ii, 292, 622.

estimation of inspired and expired chloroform, 1905, A., ii, 424.

Waller, Augustus Désiré, (Sir) Frederick William Hewitt, and (Sir) Frederick Treves, anæsthetics, 1910, A., ii, 735.

Waller, Augustus Désiré, and Robert Henry Aders Plimmer, physiological action of betaine extracted from raw beet-sugar, 1904, A., ii, 65.

Waller, Augustus Désiré, and (Miss) S. C. M. Sowton, action of choline, neurine, muscarine, and betaine on isolated nerve and heart, 1904, A., ii.

65.

Waller, Augustus Désiré, and William Legge Symes, comparative physiological power of chloroform, alcohol, and ether, measured by their effects on arterial blood-pressure, 1910, A., ii, 432.

Waller, Augustus Désiré. See also

Hubert William Bywaters, and Victor Herbert Veley.

Wallerant, Frédéric [Félix Auguste], polymorphism of nitrates, 1904, A.,

potassium and ammonium nitrates and the law of Bravais, 1905, A., ii,

isodimorphism, 1905, A., ii, 237,

the constitution of crystalline substances, 1906, A., ii, 14.

solid solutions, 1906, A., ii, 151. mixed crystals of alkali nitrates, 1906,

A., ii, 151.

a crystalline modification stable in two intervals of temperature, 1906, A., ii, 152.

isomorphism and the law of Mitscher-

lich, 1906, A., ii, 530. spiral arrangement in crystallised sub-

stances, 1906, A., ii, 837.

liquid crystals of cholesteryl propionate, 1906, A., ii, 837.

liquid crystals of ammonium oleate,

1906, A., ii, 838.

polymorphic transformations of isomorphous mixtures of three substances, 1907, A., ii, 607.

biaxial liquid crystals, 1909, A., ii,

Wallis, Robert Lauder Mackenzie, and Edwin Goodall, effect of electric bath treatment of the insane on the urinary creatinine, 1910, A., ii, 636.

Wallis, Robert Lauder Mackenzie, and Harold Alfred Schölberg, chylons and pseudo-chylous ascites, 1910, A., ii, 635; 1911, A., ii, 512.

Wallis, Robert Lauder Mackenzie. also Harold Alfred Schölberg.

Wallis, Theodor, synthesis of cyanogen and of hydrogen cyanide from their elements, 1906, A., i, 730.

Wallis, Theodor. See also Daniel Vor-

länder.

Wallis, Thomas Edward, estimation of chloral hydrate, 1906, A., 255.

analysis of chromic anhydride and its solutions, 1907, A., ii, 820.

Walpole, George Stanley, a simple gasdrying apparatus for use with a mechanical exhaust pump, 1909, P.,

syntheses of p-hydroxyphenylethylalkylamines, 1910, T., 941; P.,

a method of titrating physiological fluids, 1910, A., ii, 541.

Walpole, George Stanley, extraction apparatus, 1910, A., ii, 907.

chart presentation of recent work on indicators, 1910, A., ii, 995.

action of Bacillus lactis aërogenes on dextrose and mannitol. II. Investigation of the By-butanediol and the acetylmethylcarbinol formed: effect of free oxygen on their production; action of B. lactis aërogenes on fructose, 1911, A., ii, 318.

direct estimation of creatine in pathological urine, 1911, A., ii, 671.

Walpole, George Stanley. See also George Barger, A. T. Glenny, and Arthur Harden.

Walsh, (Miss) Gertrude Maud, and Charles Weizmann, 1:4-dichloroanthraquinone and its derivatives, 1910, T., 685; P., 61.

Walsh, (Miss) Gertrude Maud, See also

Victor John Harding.

Valter, August. See Max Busch.

Walter, Bernhard [Ludwig Johann Heinrich], variation of the index of refraction of salt solutions with the concentration, 1903, A., ii, 705.

new radiation produced in atmospheric air by the rays from radiotellurium.

1905, A., ii, 567.

spectrum of the high tension are in

air, 1906, A., ii, 257.

spectrum of the nitrogen glow produced by the rays of radiotellurium, 1906, A., ii, 516.

manner of formation and spectrum of metallic vapour in the electric spark, 1907, A., ii, 2.

band spectrum of calcium fluoride, 1908, A., ii, 336.

volatilisation of cathodes in attenuated gases, 1908, A., ii, 925.

the ratio of argon to nitrogen in gases from springs, 1911, A., ii, 280.

absorption spectra of phosphorescent

substances, 1912, A., ii, 110. Walter, Bernhard, and Robert Pohl, luminescence of radium bromide, 1906, A., ii, 2.

Walter, Ernst, use of benzidine for the detection of blood and its application in medico-legal practice, 1910, A., ii, 665.

Friedrich. Walter, See August Michaelis.

Walter, Heinrich, causticising of soda, 1907, A., ii, 681.

Walter, Heinrich. See also Rudolf Wegscheider.

Walter, Johann, the reaction of cellulose nitrate with dimethylaniline, 1911, A., i, 124.

Walter, Johann, colorations produced by the interaction of aromatic aminoand nitro-compounds, 1911, A., i, 363.

Walter, Karl, apatite from Epprechtstein in Bavaria and Luxullian in Cornwall, 1907, A., ii, 481.

Walter, Leonhard. See Emil Knoeven-

Walter, L. H., the metal tungsten as valve electrode, 1909, A., ii, 858.

Walter, O., T. Krasnoselskaya, Maksimoff, and W. Malschewsky, content and distribution of hydrogen cyanide in the bamboo, 1911, A., ii, 525. Walter, Otto. See Fritz Fichter.

Walter, Paul. See Richard Anschütz. Walter, Wilhelm. See Hermann Pauly, and Theodor Zincke.

Walters, E. H., the action of trypsin. Hydrolysis of caseinogen by

trypsin, 1912, A., i, 522. action of trypsin. II. (a) (a) The influence of the products of hydrolysis on the rate of hydrolysis of caseinogen by trypsin. (b) The autohydrolysis of the caseinates, 1912, A., i, 671.

Walters, Harry Edward, volumetric estimation of manganese in iron and

steel, 1903, A., ii, 513.

use of ammonium persulphate in the estimation of chromium in steel, 1906, A., ii, 198.

Walters, Harry Edward, and Oscar I. Affelder, analysis of bronzes and bearing metals, 1903, A., ii, 614.

Walther, Adolf R. See Emil Abderhalden.

Walther, Gustav, modification of Beck-mann's new boiling apparatus for heating in a current of vapour, 1904, A., ii, 234.

Walther, Hans. See Max Busch.

Walther, Julius, synthesis of organic acids, carbohydrates, and proteins, 1903, A., i, 67.

Walther, Oskar, formation of indigotin in plants, 1909, A., ii, 514.

Walther, [Ernst Richard Heinrich] Reinhold (Freiherr) von, action of sodium on nitriles, 1903, A., i, 582. synthesis of quinolines from dinitriles, 1903, A., i, 652.

action of ammonium persulphate on thiobenzamide, 1904, A., i, 348.

phenylcarbamidodiphenylmethenylamidine and its easy decomposition with formation of phenylcarbimide, 1906, A., i, 212.

preparation of cyanuric acid from carbamide, 1909, A., i, 141.

Walther, Reinhold von, and R. Bamberg, derivatives of o-amino-m-xylvl-ptoluidine, 1905, A., i, 298.

quinazolines from o-amino-m-xylyl-ptoluidine, 1906, A., i. 385.

Walther, Reinhold von, and H. Greifenhagen, action of bromoacetophenone on thiocarbamides, 1907, A., i, 349.

action of bromoacetophenone on thiocarbimides and thiourethanes, 1907,

A., i, 551.

Walther, Reinhold von, and Albert Grossmann, amidines. LXXXVIII. 1909, A., i, 55.

Walther, Reinhold von, P. Herschel, and Hans Litter, condensation of esters of alkyloxy-acids with cyanides and ketones, 1911, A., i, 237.

Walther, Reinhold von, and Leon Hirschberg, condensation of p-chlorobenzyl cyanide with aromatic esters in presence of sodium ethoxide, 1903.

A., i, 494.

Walther, Reinhold von, and Alex. Kessler, preparation of benziminazoles from dinitrodiphenylamines, 1904, A., i, 348.

some benziminazoles from 4:2-nitroaminodiphenylamine, 1906, A., i.

Walther, Reinhold von, and E. Krumbiegel, synthesis of triazoles by the action of sodium on nitriles, 1903, A., i, 661.

Walther, Reinhold von, and A. Lehmann, preparation of benzeneazodiphenylamines from aminoazobenzene,

1904, A., i, 352.

Walther, Reinhold von, and P. Roth-acker, condensation of diazobenzeneimides with pyrazolones, 1906, A., i,

Walther, Reinhold von, and A. Stenz, action of bases on thiocarbamides,

1906, A., i, 831.

Walton, James Henri, jun., catalysis of hydrogen peroxide by iodine ions, 1904, A., ii, 319.

colorimetric estimation of titanium,

1907, A., ii, 584.

crystallisation through membranes, 1909, A., ii, 649; 1911, A., ii, 194.

tap for hydrogen sulphide apparatus,

1911, A., ii, 975. method of filling reagent bottles,

1911, A., ii, 976.

Walton, James Henri, jun., and Roy C. Judd, equilibrium in the system; lead nitrate and pyridine, 1911, A., ii, 705.

Walton, James Henri, jun., and Herman A. Scholz, decomposition of certain minerals and industrial products by means of sodium peroxide and metallic sulphides, 1908, A., ii, 732.

Walton, James Henri, jun. See also Georg Bredig.

Walton, W. See Frederic William Richardson.

Wandel, Oskar, lysol and cresol poison-

ing, 1907, A., ii, 380, 497.
Wangerin, Albert, detection of pilocarpine and reactions for apomorphine,

1903, A., ii, 118.

Wangerin, Albert, and Daniel Vorländer, titration of dissolved oxygen with indigo and hyposulphite solution, 1903, A.; ii, 99.

Wangnick, Hans. See Wilhelm Rothe,

and Albert Stutzer.

Waniczek, A. See Paul Askenasy.

Wanner, Fr., chemistry of sputum, 1903, A., ii, 500.

Wanscheidt, Alexis. See Johannes
Thiele.

Wanselin, J. See Peter Klason.

Want, G. F. van der. See Jacob Böeseken.

Warburg, Emil [Gabriel], ozonising of oxygen by the silent electric discharge, 1904, A., ii, 24.

ozonising of oxygen and atmospheric air by the discharge from metallic

points, 1905, A., ii, 516.

photochemical action. II., 1910, A., ii. 6.

the transformation of energy in photochemical reactions in gases, 1911, A., ii, 834; 1912, A., ii, 315.

Warburg, Emil, and Gustav Leithäuser, preparation of ozone from oxygen and atmospheric air by the silent discharge from metallic electrodes. III., 1906, A., ii, 740.

influence of moisture and temperature on the ozonisation of oxygen and atmospheric air, 1906, A., ii, 741.

oxidation of nitrogen by the action of the silent discharge in atmospheric air, 1906, A., ii, 743; 1907, A., ii, 342.

analysis of the oxides of nitrogen by means of their ultra-red absorption

spectra, 1908, A., ii, 175.
measurements of the efficiency of
ozone tubes. VII., 1909, A., ii,

production of ozone from oxygen and atmospheric air by means of ozonisers. VIII., 1909, A., ii, 227. Warburg, Emil, and Julius E. Lilienfeld, spectro-analytical recognition of argon in atmospheric air, 1904, A., ii, 689.

Warburg, Emil, and Erich Regener, chemical action of radiations of short wave-length on gaseous compounds, 1904, A., ii, 692.

Warburg, Emil. See also T. Noda.

Warburg, Harry. See Karl Bernhard Lehmann.

Warburg, Otto, hydrolysis of leucine ethyl ester by the pancreatic ferment, 1905, A., i, 176; 1906, A., ii, 691.

oxidation processes in echinoderm eggs, 1908, A., ii, 963.

oxidation in the egg. II., 1909, A., ii, 684.

estimation of small quantities of carbon dioxide, 1909, A., ii, 830.

oxidations in living cells (sea urchin), 1910, A., ii, 628.

the influence of oxidation in living cells according to researches on the red corpuscles, 1911, A., ii, 49.

[poisonous action of sodium chloride on sea urchin's eggs], 1911, A., ii, 60. the influence of breathing oxygen,

1911, A., ii, 211.

the influence of breathing oxygen. II. Relationship to constitution, 1911, A., ii, 503.

hindrance of the action of hydrogen cyanide in the living cell, 1912, A., ii, 373.

the relationship between cell-structure and biochemical reactions, 1912, A., ii, 577.

estimation of small quantities of carbon dioxide dissolved in water, 1912, A., ii, 1210.

Warburg, Otto, and Rudolf Wiesel, the action of substances of homologous series in vital processes, 1912, A., ii, 872.

Warburg, Otto. See also Emil Fischer, and Otto Neubauer.

Warburton, Christopher Henry. See Hubert Frank Coward.

Warcollier, G., cause of the presence of abnormal amounts of starch in bruised apples, 1905, A., ii, 753.

invertase in apple must and cider, 1907, A., ii, 499.

estimation of tartaric acid in apples, pears, cider, and perry, 1911, A., ii, 1038.

Warcollier, G. See also Charles Maurain.

Ward, Henry A., the Billings meteoric iron, 1905, A., ii, 263.

Ward. Herbert C., diurnal variations in blood corpuscles, 1904, A., ii, 573.

Ward. Herbert C. See also Christian Archibald Herter.

Ward, Hiram Lee, estimation of lead, nickel, and zinc by precipitation as oxalates and titration with potassium permanganate, 1912, A., ii, 492.

the oxalate-permanganate process for the determination of copper associated with cadmium, arsenic, iron, or lead, 1912, A., ii, 605.

Ward, Hiram Lee. See also Frank Austin Gooch.

Ward, P. G., action of various salts on isolated muscle. I. Sodium, potassium, and ammonium salts, 1911, A., ii, 906.

Ward, R. Ogier, alveolar air on Monte

Rosa, 1909, A., ii, 66.

Ward, Thomas John. See George Senter. Wardle, (Sir) Thomas, obituary notice of, 1910, T., 681.

Ware, F. C. See Roemer Rex Renshaw. Warin, Jules, estimation of quinotannates in de Vrij's cinchona extract, 1904, A., ii, 303.

estimation of the active principles of alder bark, 1905, A., ii, 363.

estimation of the active principles of alder bark and Cascara sagrada and their extracts, 1905, A., ii, 659.

Waring, W. George, volumetric estimation of zinc, 1904, A., ii, 211.

Warington, Robert, obituary notice of, 1908, T., 2258.

Wark, N. J., the solubility of iron

carbide in y-iron, 1912, A., ii, 52. polyhedral structure of ironcarbon alloys, 1912, A., ii, 165.

Warmbrunn, David, and Albert Stutzer, chloro- and bromo-hydroxybehenic acids and their transformation products, 1904, A., i, 6.

Warnecke, Georg. See Julius Tröger. Warren, Charles Hyde, mineralogical notes, 1904, A., ii, 45.

estimation of columbium and tantalum in the presence of titanium, 1907, A., ii, 133.

ilmenite-rocks containing rutile and sapphirine from St. Urbain, Quebec, 1912, A., ii, 360.

Hyde. Warren, Charles See also William Earl Hidden, Benjamin L. Johnson, and Charles Palache.

Warren, C. M. See William Elborne. Warren, E. Bruce, an improved extraction cup, 1906, A., ii, 489.

Warren, Robert C. See William Albert Noyes.

Warren, R. D. See Gregory Paul Baxter.

Warren, William Homer, apparatus for absolute alcohol, 1910, A., i, 350.

"sugar sand" from maple sap; source of malic acid, 1911, A., ii, 821.

detection of gas in sealed-tube reactions, 1911, A., ii, 925.

of alcoholic ammonia αβ-dibromopropionic, acid, 1912, A., i, 746.

Warren, William Homer, and M. R. Grose, reactions of certain fumaroid maleinoid compounds aromatic amines, 1912, A., i, 961.

Warren, William Homer, and R. S. Weiss, picrolonates of certain alkaloids, 1907, A., i, 869.

Warren, William Homer. See also A. Ravold.

Warschauer, Friedrich, metaphosphates. 1904, A., ii, 26.

Warschawsky, J., respiration and fer-mentation of the different varieties of dead yeast, 1905, A., ii, 342.

Wartenberg, H. von, molecular weight of silver vapour, 1906, A., ii, 161.

determination of high temperatures by means of chemical equilibrium and the laws of thermodynamics, 1906, A., ii, 522.

dissociation of water vapour. I., 1906, A., ii, 728.

cyanogen, hydrogen cyanide, and acetylene equilibria, 1907, A., i, 299.

the melting point of pure tungsten, 1907, A., ii, 697.

calculation of hydrocarbon equilibria. 1908, A., ii, 26, 676.

vapour density determinations at very high temperatures, 1908, A., ii, 86.

determination of the density of small quantities of liquids, 1909, A., ii, 466.

heat of formation of cuprous and cupric sulphides, 1909, A., ii, 794.

thorium, 1910, A., ii, 134.

optical constants of certain elements, 1910, A., ii, 246.

optical temperature measurement in the case of polished substances, 1910, A., ii, 268.

the ultra-violet absorption of oxygen, 1911, A., ii, 1.

crystalline liquids, 1911, A., ii, 952; 1912, A., ii, 112.

reduction of quartz by hydrogen, 1912, A., ii, 939.

thermochemistry of silicon, 1912, A., ii, 1137.

Wartenberg, H. von. See also Ebenezer Henry Archibald, Theophile Fischer, Walther Nernst, and O. J. Stafford.

Wartenburg, H. See Wilhelm Connstein.

Warth, C. See Georg Erlwein.

Warth, Frederick John. See Robert Crosbie Farmer, and H. Warth.

Warth, H., and Frederick John Warth, composition of Indian laterite, 1904, A., ii, 181.

Warunis, Theodor Stanislaus, action of phenylthiocarbimide on mono- and di-isoamylaniline, 1911, A., i, 38.

estimation of sulphur in organic compounds, 1911, A., ii, 67.

estimation of total sulphur in coals,

1911, A., ii, 436. estimation of halogens in organic com-

pounds, 1911, A., ii, 927. the estimation of sulphur in insoluble sulphides, 1912, A., ii, 600.

assay of chrome-iron ore, 1912, A., ii, 692.

estimation of arsenic in organic compounds, 1912, A., ii, 1094.

Warunis, Theodor Stanislaus, and P. Lekos, condensation of cuminaldehyde with methyl propyl ketone, 1910, A., i. 269.

Warunis, Theodor Stanislaus, and Franz Sachs, w-cyanodimethylaniline, 1904, A. i, 669.

Warunis, Theodor Stanislaus. See also Carl Dietrich Harries.

Warynski, T., resistance of ferrous solutions to oxidation by the air, 1909, A.,

Warynski, T., and B. Mdivani, stannometric estimation of alkali vana-

dates, 1908, A., ii, 636.

simultaneous volumetric estimation of iron and vanadium [in ferrovanadium], 1908, A., ii, 736.

reduction of vanadic acid by potassium

iodide, 1908, A., ii, 953.

Warynski, T., and P. A. Tscheishwili, reduction of solutions of potassium permanganate acidified with sulphuric acid in the presence of mineral salts, 1908, A., ii, 936.

Waschata, R. See Franz Wilhelm

Dafert.

Waschetko, Nikolai, excretion of sodium ferrocyanide by the kidney in dogs, 1910, A., ii, 430.

Waser, Ernst. See Richard Willstät-

Washburn, Edward W[ight], theory and practice of the iodometric estimation of arsenious acid, 1908, A., ii, 363.

Washburn, Edward W[ight], improved apparatus for the measurement of transference numbers in solutions of the halogen acids and their salts, 1908, A., ii, 805.

determination of the hydration of ions by transference; experiments in the presence of a non-electrolyte, 1908.

A., ii, 1009.

influence of salts on the optical rotatory power of sucrose and raffinose, 1910, A., i, 300.

simple system of thermodynamic chemistry, based on a modification of the method of Carnot, 1910, A., ii, 391.

fundamental law for a general theory of solutions, 1910, A., ii, 1044.

the laws of "concentrated" solutions. II. The estimation of the degree of ionisation of electrolytes in moderately concentrated solutions, 1911, A., ii, 862.

Washburn, Edward W., and Stuart J. Bates, iodine coulometer and the value of the Faraday, 1912, A., ii, 1129.

Washburn, Edward W., and Duncan A. MacInnes, cæsium nitrate and the law of mass action, 1911, A., ii, 794.

laws of "concentrated" solutions. III. Ionisation and hydration relations of electrolytes in aqueous solution at 0°: (A.) Cæsium nitrate, potassium chloride, and lithium chloride, 1911, A., ii, 1076.

Washington, Henry Stephens, a suggestion for mineral nomenclature,

1912, A., ii, 263.

Washington, Henry Stephens, and Frederic Eugene Wright, kaersutite from Linosa and Greenland, 1908, A., ii, 863.

Wasmus, Th. See Wladimir Gulewitsch.

Wassermann, E. See Max Scholtz.

Wassilieff, N., protein formation in ripening seeds, 1908, A., ii, 976.

Wassiljewa. See Vasilieva.

Wassmer, Eugène, and Philippe Auguste Guye, active lactic and malic esters, 1904, A., i, 471.

Wassmer, Eugène. See also Adrien Jaquerod.

Wassmuth, Otto. See Julius Tafel. Wasteels, C. E. See Albert Jacques Joseph Vandevelde.

Wasteneys, Hardolph. See Jacques

Watanabe, Matajiro, the constituents of Scopolia japonica, 1911, A., ii, 427.

Watanabe, Rinji, the Kumagawa-Suto method of estimating fat, 1912, A., ii, 701.

Watanabe, Tosio, utilisation of metallic residues, 1907, A., ii, 967.

Watanabe, Tosio. See also Friedrich Willy Hinrichsen, and Henri Moissan.

Waterman, H. J., importance of temperature-correction in weighing, 1912, A., ii, 635.

Waterman, H.J. See also Jacob Böeseken. Waterman, N., d-suprarenine (d-adrenaline), 1910, A., ii, 59.

[physiological action of] pilocarpine, 1911, A., ii, 220, 636.

adrenaline immunity, 1911, A., ii, 1016.

Waters, Campbell Easter, action of ozone on carbon monoxide, 1903, A., ii.

convenient potash bulb, 1911, A., ii,

study of the products formed by the action of heat on p-sulphamido-mtoluic acid, 1912, A., i, 355.

Waters, Campbell Easter. See also

Kaufman George Falk.

Waters, John William, radioactive minerals in common rocks, 1909, A., ii, 848; 1910, A., ii, 569.

rate of decay of the radioactivity of polonium, 1910, A., ii, 569.

Waters, L. See Adolf Beythien, and Heinrich Lührig.

Watkins, Harold Cole. See Julius Otto Schlotterbeck.

Watkins, Harris Ralph. See Roscoe Wilfred Thatcher.

Watkyn-Thomas, F. W., the action of the opium alkaloids, 1912, A., ii, 1197. Watson, Alexander Forbes, obituary notice of, 1910, T., 684.

Watson, Alexander McMillan. See

Diarmid Noël Paton.

Watson, [Douglas] Chalmers, effect of raw meat diet on fowls, 1904, A., ii, 426. influence of meat diet on the thyroid and parathyroids, 1905, A., ii, 271. adrenal gland of rat, 1907, A., ii, 373.

Watson, Chalmers, and Andrew Hunter, influence of diet on growth and nutrition, 1906, A., ii, 101, 239.

Watson, Edwin Roy, acetylenic ketones,

1904, T., 1319; P., 181. silver dioxide and silver peroxynitrate, 1905, P., 297; 1906, T., 578.

the relation between the chemical constitution of monoazo-dyes and their fastness to light, 1909, P., 224.

aminoquercetin; preliminary note, 1911, P., 163.

Watson, Edwin Roy, and Jatindra Mohan Dutta, relation between chemical constitution and fastness to light and other agencies of polyhydroxybenzophenone dyes, 1911, A., i, 305.

Watson, Edwin Roy, Anakul Chandra Sircar, and Jatindra Mohan Dutta, the relation between the chemical constitution of monoazo-dyes and their fastness to light, 1909, P., 290.

Watson, Edwin Roy. See also Jatindra Mohan Dutta, Siegfried Ruhemann, and Anakul Chandra Sircar.

Watson, G. N., a delicate test for acetanilide, 1911, A., ii, 777.

Watson, Hubert. See Henry Gardner.

Watson, Herbert Edmeston, spectrum of the lighter constituents of air, 1908, A., ii, 786.

variation of the rate of disinfection with change in the concentration of the disinfectant, 1908, A., ii, 976.

wave-lengths of lines in the secondary spectrum of hydrogen, 1909, A., ii,

spectrum of radium emanation, 1909, A., ii, 954.

the densities and molecular weights of neon and helium, 1910, T., 810; P., 70.

the molecular weights of krypton and xenon, 1910, T., 833; P., 70.

a method for the accurate volumetric determination of the oxygen in air, 1911, T., 1460; P., 135.

regularities in the spectrum of neon,

1911, A., ii, 559.

Watson, Herbert Edmeston. See also Francis William Aston, and Edward Charles Cyril Balv.

Watson, John Adam. See Henry Edward Armstrong.

Watson, Thomas Leonard, bauxite deposits of Georgia, 1903, A., ii, 83. granites of Georgia [analyses of felspar], 1903, A., ii, 84.

vanadium and chromium in rutile, 1912, A., ii, 1179.

Watson, William, isopiestic expansibility of water at high pressures and temperatures, 1911, A., ii, 793.

Watson, Walter Henry. See William Hobson Mills.

Watson, William Norman West, reaction of blood-serum in malignant disease, 1909, A., ii, 507.

Watt, Henry Edgar, estimation of orcinol in Orchella "weed," 1908,

A., ii, 739.

Watt, Henry Edgar, the alkaloids of Senecio latifolius, 1909, T., 466; P., 68.

Watteville, Charles de, the flame spectra of the alkali metals, 1904, A., ii, 222. flame spectra, 1905, A., ii, 2.

flame spectrum of mercury, 1906, A.,

ii, 137.

flame spectra of certain metalloids.

1909, A., ii, 629.

Watteville, Charles de. See also (Comte) Arnaud de Gramont, and Gustave Adolphe Hemsalech.

Watts. (Miss) Constance Hamilton. See

Clarence Smith.

Watts, Francis, and Harold Augustine Tempany, the inversion of cane sugar in the presence of milk constituents, 1905, A., ii, 425.

polarimetric determination of sucrose,

1905, A., ii, 656.

polarimetric determination of the sucrose; the effect of clarification with basic lead acetate on the optical activity and copper reducing power of sugar solutions, 1908, A., ii, 236.

the keeping power of Fehling's solution, and the volumetric process of estimating reducing sugars with it,

1908, A., ii, 437.

Watts, Hugh F., estimation of tungstic acid in natural and concentrated tungsten ores, 1907, A., ii, 507. Watts, Oliver P., iron and calcium, 1906, A., ii, 759.

new molybdenum silicide, 1907, A., ii, 31.

action of carbon on magnesia at high

temperatures, 1907, A., ii, 953.

Watts, Oliver P., and Charles Elwood
Mendenhall, the melting of carbon,
1911, A., ii, 881.

Watts, William Marshall, existence of a relationship between the spectra of some elements and the squares of their atomic weights, 1903, A., ii,

atomic weight of radium, 1903, A., ii,

atomic weight of radium and relationships between the atomic weights of the elements and their spectra, 1904, A., ii, 720.

atomic weight of radium from spectroscopic data, 1909, A., ii, 780.

Waumsley, Harry. See Edward Watkin Lewis.

Wauters, Jules, water in butter, 1907,

A., ii, 315.

Wdowiszewski, Henryk, estimation of "carborundum" in fragments of coke crueibles, 1910, A., ii, 1113.

Wdowiszewski, Henryk, and P. Bogoluboff, estimation of chromium in chrome-tungsten steel, 1911, A., ii, 157.

Weaver, J. T. See Clifford Duer Holley. Webb, Harold W. See George Braxton Pegram.

Webber, H. N. See William Halse Rivers Rivers. Weber, Carl, detection of uric acid in

blood, 1912, A., ii, 501.

Weber, Carl Otto, caoutehouc. III., 1903, A., i, 845.

analysis of india-rubber and rubber

goods, 1903, A., ii, 762. constitution of gutta-percha resin,

1904, A., i, 331. coagulation and solubility of caoutchouc, 1905, A., i, 363.

Weber, Everhard. See Richard Anschütz.

Weber, Ewald, detection of heated milk by means of the guaiacum test, 1903, A., ii, 190.

See Augustin Bi-Weber, Franz von. strzycki.

Weber, Fritz. See Carl Bülow.

Weber, Frederick Parkes, multiple myeloma and albumosuria, 1904, A., ii,

a case of leucæmia, 1905, A., ii, 48. Weber, G. See J. Davidsohn.

Weber, Gottlieb. See Robert Gnehm.

Weber, Hermann, condensation products of ethyl lævulate, hydrogen cyanide, and para-substituted anilines, 1907, A., i, 1071.

Weber, H. C. P., preparation of chloroplatinic acid by electrolysis of platinum black, 1908, A., ii, 391. atomic weight of bromine, 1912, A., ii, 1163.

Weber, H. C. P. See also William Albert Noyes.

Weber, J., polymorphous substances, 1908, A., ii, 302.

See Erich Müller. Weber, Julius.

Weber, Lothar E. See Emil Abderhalden, and Hermann Leuchs.

Weber, Max Gustav. See Walter Hempel.

Weber, O. See Franz Schwarz.

Weber, Otto. See Eberhard Rimbach. Weber, O. H. See Otto Cohnheim.

Weber, Rudolf H., magnetic susceptibility of the manganic salts, 1906, A., ii, 331.

magnetisability of the salts of metals

of the iron group, 1911, A., ii, 1057. Weber, Rudolf H. See also Friedrich Kohlrausch.

Weber, Siegfried. See J. Forschbach. Weber, Walter. See Ernst Beckmann. Webster, A. See Edward S. Edie.

Webster, Charles Stuart Stanford, luminescope for comparing substances under the influence of radium rays, 1905, A., ii, 71.

triboluminescence, 1905, A., ii, 786. Webster, M. H., general method for alkaloidal assay, 1907, A., ii, 724.

Webster, M. H., and R. C. Pursel, estimation of strychnine in nux vomica by the nitric acid process, 1907, A., ii, 319.

Webster, T. Arthur. See Benjamin Moore, and Maximilian Nierenstein.

Webster, W., physiological action of ethyl chloride, bromide, and iodide, and of somnoform, 1906, A., ii, 566. physiological action of atropine and allied alkaloids, 1908, A., ii, 412. choline in animal tissues and fluids,

1909, A., ii, 526.

Webster, W. H. See Eustace H. Gane. Wechsler, Adolf, a gravimetric method for the estimation of sucrose by oxidation with chromic acid, 1912, A., ii, 303.

Wechsler, Elkan, a protein substance in the pancreatic juice, 1910, A., i, 527. hemielastin, 1910, A., i, 703.

the technique of the phosphotungstic acid precipitation, 1911, A., ii, 828. nitrosalmine, 1912, A., i, 401.

Wechsler, Elkan. See also Reginald William Lane Clarke, Arthur Hantzsch, and Arthur Lapworth.

Wechsler, Marcus. See Karl Dziewonski.

Wecker, Ernst. See Heinrich Wieland. Weckowicz, Romuald, desylanthranilic

acid, 1909, A., i, 28.

Wedd, B. H., and Sidney Russ, effect of Röntgen and radium emanations on the vitality of the cells of mouse carcinoma, 1912, A., ii, 962.

Wedding, Hermann, and Wilhelm Müller, copper and iron [alloys], 1907,

A., ii, 93.

Wedekind, Edgar [Léon Waldemar Otto], preparation and properties of lower chloromethyl alkyl ethers, 1903, A., i, 137.

the simplest chloro-esters, 1903, A., i,

azosantonic acids, 1903, A., i, 542.

extraction of zirconium, 1903, A., ii,

reduction of zirconia, 1903, A., ii,

colloidal zirconium, 1903, A., ii, 652.

Wedekind, Edgar [Léon Waldemar Otto]. problem of activity in connexion with asymmetric nitrogen, 1904, A.,

phenylmethylethylallylammonium iodide, 1904, A., i, 37.

constitution of derivatives of santonin. 1904, A., i, 60.

diacid quaternary ammonium bases: ethylene dikairolinium iodide, 1904, A., i, 96.

electrolytic enriching of radium from radium-barium preparations, 1904, A., ii, 399.

preparation of crystallised zirconium in the electric furnace, 1904, A., ii, 489.

introduction of nitrogen into the santonin molecule, and the physiological behaviour of certain santonin derivatives, 1905, A., i, 134.

action of allyl iodide on tetrahydroquinoline, 1905, A., i, 234.

asymmetric nitrogen. XIX., 1905, A., i, 520.

the reduction of zirconium oxide and the spontaneous formation of zirconium nitride, 1905, A., ii, 596.

asymmetric nitrogen. XXII. Optically active ammonium salts, 1906, A., i,

velocity of autoracemisation of optically active ammonium salts, 1906, A., i, 419; il, 660.

synthesis of simple pyronones from acid haloids, 1906, A., i, 528.

magnetic compounds of non-magnetic elements, 1906, A., ii, 70; 1907, A., ii, 530.

santonin, 1907, A., i, 137.

chemical reactions showing green luminescence, 1907, A., i, 576.

autoracemisation of optically active ammonium salts, 1907, A., ii, 246. zirconium carbide from natural zir-

conia, 1907, A., ii, 626.

preparation and properties of the man-MnB and MnB2, ganese borides, 1907, A., ii, 874.

demonstration of radium emanation and the radioactivity of uranyl molybdate, 1907, A., ii, 922.

quaternary phenacylammonium salts, 1908, A., i, 878.

natural zirconium oxide free from iron, 1908, A., ii, 1046.

asymmetric nitrogen. XXXV. Onesided addition of a tertiary base to a dihalogenide, 1909, A., i, 184.

an ammonium model, 1909, A., ii,

532.

Wedekind, Edgar [Léon Waldemar Otto]. magnetic character of compounds prepared from non-magnetic elements, 1909, A., ii, 541.

natural zirconium earths, 1910, A., ii.

colloidal zirconium silicide, 1910, A., ii, 1074.

a group of synthetic organic colloids, 1911, A., i, 684.

behaviour of zirconium oxide towards hydrofluoric acid, 1911, A., ii, 774.

methylethylpropylisobutylammonium d-camphorsulphonate, 1912, A., i,

asymmetric phosphorus. I., 1912, A., i, 1043. the use of rods of magnesia instead of

platinum wire in analytical work,

1912, A., ii, 382. Wedekind, Edgar, and Heinrich Baumhauer, colloidal thorium, 1909, A., ii,

Wedekind, Edgar, and Lucien Dürr, the reduction of silicates by means of metallic calcium, 1912, A., ii, 756.

Wedekind, Edgar, and K. Fetzer, preparation and properties of manganese boride, 1905, A., ii, 322.

reduction of thorium oxide by boron and silicon, 1905, A., ii, 718. chromium boride, 1907, A., ii, 175.

Wedekind, Edgar, K. Fetzer, and Theo. Veit, magnetochemical investigations. Ferromagnetic compounds manganese with boron, antimony, and

phosphorus, 1907, A., ii, 353. Wedekind, Edgar, and Emil Fröhlich, resolution of phenylbenzylmethylpropylammonium bases into their optical antipodes, 1905, A., i, 878.

asymmetric nitrogen. XXI. Activation of phenylbenzylmethylisobutylammonium hydroxide, 1906, A., i,

asymmetric nitrogen. XXIII. Isomerism with asymmetric ammonium

salts, 1906, A., i, 162.

asymmetric nitrogen. XXVI. Optically active phenylbenzylmethylethylammonium bases, 1907, A., i,

asymmetric nitrogen. XXVII. Asymmetric ammonium salts of the pphenetidine series and the resolution p-ethoxyphenylbenzylmethylallylammonium into its optical isomerides, 1907, A., i, 409.

Wedekind, Edgar, and Karl Greimer, action of formaldehyde on menthol,

1904, A., i, 680.

Wedekind, Edgar, and Johannes Haussermann, pyronone syntheses by means of the "tertiary bases reaction." I.. 1908, A., i, 671.

Wedekind, Edgar, Johannes Häussermann, Moriz Miller, and W. Weisswange, pyronone synthesis by means of the "tertiary bases reaction." II., 1911, A., i, 219.

Wedekind, Edgar, and C. Horst, the magnetic susceptibility and the magneton number of the oxides and sulphides of vanadium, 1912, A., ii, 228.

Wedekind, Edgar, and Adolf Koch, the oxonium nature of santonin, 1905,

A., i, 211.

the behaviour of halogens towards santonin, 1905, A., i, 212. isoartemisin(δ-hydroxysantonin), 1905,

A., i, 529.

Wedekind, Edgar, and Samuel Judd Lewis, studies on zirconium, 1908, P., 170; 1910, A., ii, 302.

colloidal zirconium, 1908, A., ii, 501. analytical investigation of zirconium metal, 1909, T., 456; P., 60.

chlorine generated by potassium permanganate; its preparation and purity, 1909, P., 59; discussion, P., 59.

Wedekind, Edgar, and W. Maass, preparation of tantalic acid from West Australian fergusonite; sodium tantalate, 1911, A., ii, 44.

Wedekind, Edgar, and Woldemar Mayer, asymmetric nitrogen. XXXVI. Quaternary amino-ammonium salts, a new type of asymmetric nitrogen, 1909, A., i, 186.

Wedekind, Edgar, and Moriz Miller. ketenium compounds, 1909, A., i, 459.

action of ammonia on tetramethylcyclobutanedione, 1910, A., i. 324. a hydrocarbon of the cyclobutane

series, 1912, A., i, 17.

Wedekind, Edgar, and F. Ney, stereoisomerism of compounds containing asymmetric nitrogen and active asymmetric carbon, 1909, A., i, 514; 1912, A., i, 501.

Wedekind, Edgar, and Fritz Oberheide, isomerism of asymmetric tolylammonium salts, 1904, A., i, 732, 992.

behaviour of unsaturated groups in quaternary ammonium salts and tertiary sulphonamides, 1909, A., i, 904.

Wedekind, Edgar, and Robert Oechslen, interaction of kairoline with esters of iodoacetic acid, 1903, A., i, 54.

Wedekind, Edgar, and Robert Oechsien, ethylallyltetrahydroquinolinium iodide, 1903, A., i, 116.

asymmetric quaternary ammonium salts of the tetrahydroisoquinoline

series, 1903, A., i, 517.

diacid asymmetric ammonium bases and a new isomerism of nitrogen, 1903, A., i, 517.

Wedekind, Edgar, and Fritz Paschke, mechanism of the autoracemisation of optically active ammonium salts and the state of quaternary ammonium salts in solution, 1908, A., i, 722.

influence of constitution on the velocity of decomposition of quaternary ammonium salts, 1910, A., i,

372.

kinetics of the decomposition of quaternary ammonium salts in chloroform solution, 1910, A., ii, 597.

cryoscopic behaviour of quaternary aromatic ammonium salts in bromoform, and the cryoscopic measurement of a velocity of decomposition, 1911, A., ii, 1060; 1912, A., ii, 533.

Wedekind, Edgar, Fritz Paschke, and Woldemar Mayer, the influence of the medium and of light on the rate of decomposition of quaternary ammonium salts, 1911, A., i, 628.

Wedekind, Edgar, and Martin Rödiger, santonin. X. Bromination of san-

tonin, 1908, A., i, 183.

Wedekind, Edgar, and Daniel Schenk, action of strong tertiary bases on sulphonyl chlorides, 1911, A., i, 190.

Wedekind, Edgar, and Oscar Schmidt, interaction of diazonium salts with derivatives of santonin, 1903, A., i, 542.

Wedekind, Edgar, and Theo. Veit, ferromagnetic nitrogen compounds of man-

ganese, 1908, A., ii, 1041.

Wedekind, Edgar, Theo. Veit, and K. Fetzer, further ferromagnetic compounds of manganese, 1911, A., ii, 985.

Wedekind, Edgar, and Otto Wedekind, asymmetric nitrogen. XXXI.
Stereoisomerism resulting from the combination of asymmetric nitrogen with asymmetric carbon and the problem of the asymmetric synthesis of ammonium bases, 1908, A., i, 258.

isomerism in compounds with two similar asymmetric nitrogen atoms,

1910, A., i, 834.

Wedekind, Edgar, Otto Wedekind, and Robert Oechslen, asymmetric nitrogen. XXX. Resolution of a cyclic asymmetric ammonium base 1907 A i 1972

metric ammonium base, 1907, A., i, 1073.

Wedekind, Edgar, Otto Wedekind, and
Fritz Paschke, asymmetric nitrogen.

XXXII. Dependence of the velocity
of racemisation of optically active
ammonium salts on the nature of the
anion, 1908, A., i, 334.

Wedekind, Edgar, W. Weisswange, and L. Erdmann, synthesis of a ketone of the cyclobutane series, 1906, A., i.

437

Wedekind, Edgar. See also Emil Fröhlich, and Osear Schmidt.

Wedekind, Otto. See Edgar Wedekind.
Wedekind & Co., R., chloro-derivatives
of β-hydroxyanthraquinones, 1904,
A., i, 813.

chloro-1:7-dihydroxyanthraquinone,

1904, A., i, 902.

preparation of anthraquinone-di- and tri-sulphonic acids, 1906, A., i, 677.

preparation of p-mono- and p-dichloroanthrarufin, 1906, A., i, 678.

preparation of dichlorochrysazin, 1906, A., i, 868.

preparation of halogen derivatives of \$\beta\$-hydroxyanthraquinone, 1907, \$\text{A}\$, i, 327.

preparation of trichloroanthraflavic acid, 1907, A., i, 942. preparation of a chlorine additive com-

preparation of a chlorine additive compound of anthraflavic acid, 1907, A., i, 943.

preparation of dichloroanthraflavic acid, 1908, A., i, 192.

preparation of αβ-dihydroxyanthraquinones and αβ-hydroxyanthraquinone sulphonic acids, 1908, A., i, 661.

preparation of anthraquinone-aβ-sulphonic acids, 1909, A., i, 242.

preparation of 4-chloro-1-hydroxyanthraquinone, 1909, A., i, 243.

[the sulphonation of alizarin and anthraflavic acid], 1909, A., i, 496. preparation of 1:2-dihydroxyanthraquinone-3:5- and 3:8-disulphonic acids, 1909, A., i, 811.

Wedemann, Wilhelm. See Eduard Buchner, and Johannes Thiele.

Wedemeyer, Konrad, Java olive oil, 1906, A., ii, 814.

Owala oil, 1906, A., ii, 815.

Njave butter, 1907, A., ii, 315. Weed, Lewis Hill. See Frank Austin

Gooch, and Isaac King Phelps.

Weedon, William Stone, and Howard Waters Doughty, diphenylsulphone-o-carboxylic acid and related compounds, 1905, A., i, 345.

Weehuizen, F., phenolphthalin as reagent for hydrogen cyanide, 1905,

A., ii, 489.

microscopic reactions of pyramidone,

1907, A., ii, 142.

colour reactions of carbohydrates with indole and scatole, 1907, A., ii, 308. the occurrence of nitrous acid in

Erythrina, 1907, A., ii, 905.

indole in flowers, 1908, A., ii, 1065. Weerman, Rudolf Adriaan, action of formaldehyde (methanal) on tetra-

hydroguinoline, 1906, A., i, 696. action of potassium hypochlorite on cinnamamide, 1907, A., i, 132; 1908, A., i, 22.

a synthesis of aldehydes and indole.

III., 1909, A., i, 589.

Weerman, Rudolf Adriuan, and W. J. A. Jongkees, action of sodium hypochlorite and of bromine and sodium alkyloxides on hydrocinnamamide, 1906, A., i, 665.

Weerth, Fritz de. See Hugo Vos-

winckel.

Weevers, Theodorus, investigations of glucosides in connexion with the internal mutation of plants, 1903, A., ii, 232.

the physiological significance of certain glucosides, 1909, A., ii, 1047. the action of the respiratory enzymes

of Sauromatum venosum, 1912, A., ii, 83.

Weevers, Theodorus, and (Mrs.) Cornelia J. Weevers de Graaff, xanthine derivatives from plants, 1904, A., ii,

Weevers de Graaff, (Mrs.) Cornelia J. See (Miss) Alide Grutterink, and Theodorus Weevers.

Wegelin, Gustav, preparation of colloidal vanadic acid, 1912, A., ii, 849.

Wegelin, Gustav. See also Erich Müller. Wegelius, Henrik, effect of concentration on the temperature of maximum electrolytic conductivity of weak electrolytes with negative heat of dissociation, 1908, A., ii, 801.

method for determining the uniformity or the phase-number of a substance; application to silver mercuric iodide,

1911, A., ii, 883.

Wegelius, Henrik, and Sulo Kilpi, method for the estimation of mercury in solutions containing iodides, 1909, A., ii, 350.

Wegener, Alfred, the nature of the uppermost layers of the atmosphere. 1911, A., ii, 271, 387.

the investigation of the upper layers of the atmosphere, 1912, A., ii, 636.

Weger, Adolf. See Karl Bernhard Lehmann.

Weger, Max, auto-oxidation of some coal-tar hydrocarbons, 1903, A., i,

Weger, Max, and Adolf Billmann, impurities of technical indene and a new synthesis of truxene, 1903, A., i, 332.

Weger, Max, and Karl Döring, action of molten potassium hydroxide on fluorene; synthesis of o-phenylbenzoic

acid, 1903, A., i, 410.

Wegner, Max, suitability of various indicators for the estimation of alkali in presence of nitrite and formate, 1903, A., ii, 453.

analysis of sodium nitrite, 1903, A.,

ii, 453.

gasometric estimation of formic acid and its salts, 1903, A., ii, 700.

Wegscheider, Rudolf [Franz Johann], nomenclature of the hydrogen esters of unsymmetrical dibasic acids, 1903, A., i, 146.

formation of acid esters, 1903, A., i, 559.

tautomerism of the o-aldehyde-acids, 1903, A., i, 562. phase rule, 1903, A., ii, 356; 1904,

A., ii, 112, 389; 1905, A., ii, 508, conception of independent ponents, 1903, A., ii, 356, 413; 1904, A., ii, 17.

heats of solution and of dilution,

1905, A., ii, 505.

constitution of o-aldehydo-acids in aqueous solution, 1906, A., i, 86.

determination of melting points in capillary tubes, 1906, A., ii, 8. progressive dissociation of dibasic

acids. II., 1906, A., ii, 78.

affinity constants of amino-acids, 1906, A., ii, 77.

density of solutions of sodium carbonate and sodium hydroxide. II.. 1906, A., ii, 282.

lecture experiment with cobaltinitrites,

1906, A., ii, 549.

esterification of unsymmetrical di- and poly-basic acids. XV. Esterification of 4-nitrophthalic acid, 1907, A., i,

esterification of unsymmetrical dipoly-basic acids. XVII. Aminoterephthalic esters, 1907, A., i, 850.

Wegscheider, Rudolf [Franz Johann], causticising of soda, 1907, A., ii, 682.

theory of the saponification of the glycerides, 1908, A., i, 499; ii, 165. esterification of unsymmetrical di- and

poly-basic acids. XIX. Esterification of phthalonic acid, 1908, A., i,

esterification of unsymmetrical di- and poly-basic acids. XX. Methyl esters of 3-nitrophthalic acid, 1908, A., i, 793.

reactivity of undissociated electrolytes,

1908, A., ii, 265.

ionisation constants of the secondary hydrogen ion of dibasic acids, 1908, A., ii, 1009.

formation of benzyl ether, 1909, A., i,

catalytic displacement of equilibrium in the vaporisation of ammonium chloride from the point of view of thermodynamics, 1909, A., ii, 23.

formation of esters, 1909, A., ii, 305. anomaly of strong electrolytes and the limits within which the dilution law is valid, 1909, A., ii, 965.

hydrolysis of fats and oils, 1910, A.,

i, 6.

a-phenyltricarballylic acid, 1911, A., i, 458.

sublimation of ammonium chloride, 1911, A., ii, 16.

the hydrates of sodium carbonate,

1912, A., ii, 156.

equilibrium in heterogeneous systems at variable pressure, 1912, A., ii, 441.

work done in chemical changes, 1912,

A., ii, 442.

relationship between electrolytic dissociation constants and chemical constitution, 1912, A., ii, 529.

source of error in the characterisation of chemical individuals, 1912, A., ii,

Wegscheider, Rudolf, and Siegmund Black, esterification of unsymmetrical di- and poly-basic acids. XXV. Esterification of dimethylaminoterephthalic acid, 1912, A., i, 463.

Wegscheider, Rudolf, and Erich Bondi, esterification of unsymmetrical di- and poly-basic acids. XIII. Ester-acids of 4-substituted phthalic acids, 1905, A.,

i, 895.

Wegscheider, Rudolf, and Franz Faltis, esterification of unsymmetrical di- and poly-basic acids. XXIV. Esterification of amino- and acetylamino-terephthalic acids, 1912, A., i, 463.

Wegscheider, Rudolf, Franz Faltis. Siegmund Black, and Oskar Huppert. methylamino- and other derivatives of terephthalic acid, 1912, A., i, 263.

Wegscheider, Rudolf, and Erich Frankl. esterification of unsymmetrical diand poly-basic acids. XIV. i-Aspartic acid, 1906, A., i, 727.

abnormal reactions, especially in the action of alkyl haloids on salts, 1907.

A., i. 373.

Wegscheider, Rudolf, and Margarete Furcht, esterification of unsymmetrical di- and poly-basic acids. IX. Esterification of sulphonic and sulphocarboxylic acids, 1903, A., i, 342.

Wegscheider Rudolf, and Heinrich Gehringer, diazomethane, 1903, A.,

i. 685.

esterification of unsymmetrical di- and poly-basic acids. XVIII. Esterification of dibasic acids by diazomethane, 1908, A., i, 792.

Wegscheider, Rudolf, and Arthur Glogau, esterification of unsymmetrical di- and poly-basic acids. Esterification of phthalonic homophthalic acids, 1904, A., i, 249.

Wegscheider, Rudolf, and Josef Hecht. esterification of unsymmetrical di- and poly-basic acids. X. Phenylsuccinic acid and its esterification, 1903, A., i,

Rudolf, and Oskar Wegscheider, Huppert, esterification of unsymmetrical di- and poly-basic acids. XXVI. Esterification of methyl aminoterephthalic acid, 1912, A., i, 464.

Wegscheider, Rudolf, and Anton Kailan,

esterification, 1906, A., ii, 340.

Rudolf, and Alfons Wegscheider, Klemenc, nitration of hemipinic acid and its esters, 1910, A., i,

derivatives of nitrohemipinic acid, 1911, A., i, 541.

Wegscheider, Rudolf, and Leo (Ritter) Kusy von Dúbrav, nitrophthalaldehydic acids, 1904, A., i, 244.

Wegscheider, Rudolf, Leo (Ritter) Kusy von Dúbrav, and Peter von Rusnov, esterification of o-aldehydo-acids, 1904, A., i, 59.

Wegscheider, Rudolf, and Paul Lux, sulphonic acids and Ostwald's dilution

law, 1909, A., ii, 649.

Wegscheider, Rudolf, and Noe L. Müller, esterification of unsymmetrical di- and poly-basic acids. Acid esters of nitrohemipinic acid, 1912, A., i, 771.

Wegscheider, Rudolf, Noe L. Müller. and Eduard Chiari, nitration of opianic esters and derivatives of nitro-opianic acid, 1908, A., i, 896.

Wegscheider, Rudolf, Heinrich Felix Perndanner, and Otto Auspitzer, esterification of unsymmetrical di- and poly-basic acids. XXIII. Trimellitic acid, 1911, A., i, 130.

Wegscheider, Rudolf, and Peter von Rušnov, esterification of unsymmetrical di- and poly-basic acids. Behaviour of acid esters of hemipinic acid towards hydrazine hydrate and thionyl chloride, 1903, A., i, 702,

Wegscheider, Rudolf, Peter von Rušnov, and Leo (Ritter) Kusy von Dubrav, esterification of unsymmetrical diand polybasic acids. XXI. Nitrohemipinic acid, 1908, A., i, 793.

Wegscheider, Rudolf, and A. Schugowitsch, change of colour of phenolph-

thalein, 1908, A., ii, 806.

Wegscheider, Rudolf, and Ernst Späth, addition of acid anhydrides to aldehydes and ketones, 1910, A., i, 155. derivatives of aldol and crotonalde-

hyde, 1911, A., i, 112.

Wegscheider, Rudolf, and Hugo Strauch. esterification of unsymmetrical di- and XXII. Isomerism poly-basic acids. of methyl nitrohemipinates, 1908, A., i, 794.

Wegscheider, Rudolf, and Hermann Suida, terephthalaldehyde and terephthalaldehydic acid, 1912, A., i, 976.

Wegscheider, Rudolf, and Heinrich Walter, specific gravities of sodium carbonate and sodium hydroxide solutions, 1905, A., ii, 521.

causticising of soda, 1907, A., ii, 259. conditions of existence of sodium calcium carbonates, 1907, A., ii, 686.

Wehln, Richard. See Richard Stoermer. Wehmer, Carl, formation of oxalic acid by Aspergillus niger, 1906, A., ii, 191; 1907, A., ii, 44.

vitality and activity of technical lactic acid bacteria. I., 1906, A., ii, 879. fungi which produce citric acid, 1910,

A., ii, 61.

Wehnelt, Arthur [Rudolf Berthold], Wehnelt cathode in high vacua, 1908, A., ii, 147.

Wehr, Otto. See Karl Auwers. Wehrle, E., the functions of the liver,

1911, A., ii, 812.

Weibull, Mats, analysis of Wiborgh phosphate and basic slag, 1903, A., ii, 575.

Weibull, Mats, note on soil analysis, 1906, A., ii, 712. Swedish soils, 1907, A., ii, 649.

occurrence of manganese in a spring water in Sweden, 1907, A., ii, 888.

Weichardt, Wolfgang, protein cleavage products in expired air, 1911, A., ii, 993.

Weichardt, Wolfgang, and Hermann Stadlinger, opium toxins, 1907, A., i.

Weichardt, Wolfgang, and Hermann Stötter, expired air. II., 1912, A., ii, 571.

Weichardt, Wolfgang. See also Emil Abderhalden.

Weichhold, Oskar. See Emil Fischer. Weickel, Tobias. See Wilhelm Schlenk.

Weidel, Arno. See Ludwig Knorr. Weidel, Hugo. See Franz Wenzel.

Weidenhaupt, Otto. See Max Siegfried. Weidenkaff, Erich. See Carl Paal. Weidert, Franz. See Leo Grunmach.

Weidig, M., radioactive springs of exceptionally high activity at Brambach in the Saxon Vogtland, 1911, A., ii. 686.

Weidlich, Richard. See Carl Bülow. Weidman, Samuel, hudsonite, an amphibole, not a pyroxene, 1903, A., ii,

irvingite, a new variety of lithia-mica,

1907, A., ii, 630.

Weidman, Samuel, and Victor Lenher, marignacite, a new variety of pyrochlore from Wisconsin, 1907, A., ii, 482.

Weidmann, Hugo, lead matte, 1906, A., ii, 755.

Weidmann, William O. See John Charles Olsen.

Weidner, Edmund. See Gustav Heller. Weigand, Christian, measurements in the spectrum of molybdenum from $\lambda = 4647$ to $\lambda = 7134$, 1912, A., ii, 878.

Weigand, Friedrich, double acetates of gold; crystallised barium auryl oxide,

1906, A., i, 136.

Weigel, Oskar, solubility of the sulphides of the heavy metals in pure water, 1907, A., ii, 237.

Weigert, Fritz, syntheses by means of carbonyl sulphide, 1903, A., i, 418. constitution of histidine, 1903, A., i, 784.

action of depolarisers, 1906, A., ii, 417; 1907, A., ii, 838.

photochemical reactions. I. Influence of light on the phosgene equilibrium, 1907, A., ii, 835.

Weigert, Fritz, photochemical reactions.
II. Gaseous reactions which are photochemically sensitised; a theory of the catalytic influence of light, 1908, A., ii, 5.

thermodynamic treatment of photochemical processes, 1908, A., ii,

748.

photochemical reactions. III. Decomposition of ozone by light, 1908, A., ii, 914.

photochemical reactions. IV. Thermodynamic theory of photochemical processes, 1909, A., i, 219.

calculations in photochemical processes, 1909, A., ii, 532. chemical action of light. V. and VI.

chemical action of light. V. and VI. photochemical phenomena in dye solutions, 1910, A., ii, 174, 373.

the grouping of photochemical re-

actions, 1911, A., ii, 834.

mercury lamp for quantitative photochemical investigations in the ultraviolet, 1912, A., ii, 714.

chemical action of light. VII. Decomposition of ozone in ultra-violet light, 1912, A., ii, 715.

kinetics of photochemical reactions,

1912, A., ii, 880.

Weigert, Fritz, and D. Saveanu, retardation of photochemical reactions by oxygen, 1912, A., ii, 1120.

Weigert, Fritz. See also Jacobus Henricus van't Hoff, and Robert Luther.

Weigert, Richard. See Franz Steinitz. Weigert, Walter. See Franz Sachs. Weightman, Alfred T., reduction of

Weightman, Alfred T., reduction of insoluble cathodes, 1903, A., ii, 196.
Weigle Otis M. See J. Newton Pearse

Weigle, Otis M. See J. Newton Pearce.
Weik, isoform, a new antiseptic, 1905,
A., ii, 847.

Weil, Arthur. See Emil Abderhalden. Weil, Albert Otto. See Roland Scholl.

Weil, Albert Otto. See Roland Scholl. Weil, Edmund, anti-agglutination by

extracts of bacteria, 1911, A., ii, 619.

Weil, Edmund, and Wilhelm Spät, the mechanism of the complement deviation in the case of antiprotein sera, 1911, A., ii, 618.

Weil, F. See Alexander Tschirch.

Weil, Friedrich Josef. See Heinrich Wieland.

Weil, Hugo, sulphamic acids of aromatic carboxylic esters, 1904, A., i, 414. [precipitation of rosaniline solutions

by alkali], 1904, A., i, 454. preparation of salts of sulphamic acids of benzene and its homologues, 1904, A., i, 567.

elementary analysis by Dennstedt's method, 1905, A., ii, 202.

Weil, Hugo, preparation of aromatic o-hydroxy-aldehydes, 1908, A., i, 800.

use of lead peroxide in organic combustions, 1910, A., ii, 242.

a new reagent for nickel and cobalt and its use for distinguishing between these metals, 1911, A., ii, 158

Weil, Hugo, Karl Dürrschnabel, and Paul Landauer, action of sulphurous acid and of sulphites on various dyes, 1911, A., i, 1006.

Weil, Hugo, and Walter Heerdt, action of sodium amalgam on naphtholearb-

oxylic acids, 1911, A., i, 978. Weil, Hugo, and Karl Weisse, prepara-

tion of acylaminophenylsulphonamic acids, 1910, A., i, 469.

Weil, Hugo. See also Karl Dürrschnabel, Alfred Human, Rudolf Lambrecht, Paul Landauer, and Herbert Teichner.

Weil, Lotte, p-dimethylaminocinnamic

acid, 1908, A., i, 982.

Weil, Ludwig. See Alexander Tschirch. Weil, Richard, formation of solanin in potatoes as the product of bacterial action, 1907, A., ii, 387.

Weil, Richard. See also Carl Dietrich

Harries.

Weil, S., apnœa and carbon dioxide in the inspired air, 1906, A., ii, 460.

Weiland, Gerhard. See Ludwig Wolff.
Weiland, Walter, carbamido-acid formation, 1912, A., ii, 278.

Weiler-Ter-Meer. See Chemische Fabrik vorm. Weiler-Ter-Meer.

Weilinger, Karl. See Paul Rabe, Richard Schmidt, and Eduard Vongerichten.

Weiller, Paul, lead silicates, 1911, A., ii. 983.

Weiller, Paul. See also Siegfried Hilpert.

Weimann, Charles, camphoformylacetic and -a-propionic esters, 1907, A., i, 327.

Weimann, Charles. See also Albin Haller.

Weimarn, Petr Petrovič von, apparatus for measuring the solubility of solids in liquids, 1906, A., ii, 838.

colloidal, amorphous, and crystalline

states, 1908, A., ii, 90. the crystalline state as a general property of matter, 1908, A., ii,

modification of Wolfgang Ostwald's system of colloids, 1908, A., ii, 820.

- Weimarn, Petr Petrovič von, preparation of colloidal amorphous forms of crystalline and soluble salts of the alkaline-earth metals, 1908, A., ii,
 - the liquid-crystalline state as a general property of matter, 1908, A., ii,

forms of matter. II., 1909, A., ii, 132, 134, 221, 306, 666.

physical and chemical properties as functions of the magnitude of the granules (number of molecules in the granule) of the solid and liquid phases, 1909, A., ii, 135.

ultramicroscopic observations on crystalline liquids, 1909, A., ii, 301.

classification and nomenclature of disperse systems, 1909, A., ii, 646.

proof of the crystalline nature of "amorphous" precipitates and condensation methods for the preparation of disperse systems, 1910, A., ii, 399.

colloidal ice, 1910, A., ii, 404.

phenomena observed on mixing liquid air with water, 1910, A., ii, 404.

elastic sulphur resembling caoutchouc, 1910, A., ii, 496, 603.

crystalline solid solutions as disperse systems of different degrees of dispersity, 1910, A., ii, 696.

examples of compound disperse systems, 1910, A., ii, 834.

classification of disperse systems, 1910, A., ii, 834.

theory of the production and the stability of colloidal solutions. I.,

1910, A., ii, 835. influence of the degree of dispersion on the stability of chemical compounds and the decomposition of the

elements, 1910, A., ii, 835. influence of the degree of dispersity of a solid crystal on its melting point, 1910, A., ii, 939, 1033.

colloidal chemistry; a general introduction, 1910, A., ii, 940.

a general theory for obtaining disperse systems by the dispersion method, 1910, A., ii, 940.

a simple method of measuring the affinity between the solvent and the dissolved substance, 1910, A., ii, 1045.

crystallisation of agar-agar and gelatin in connexion with the mechanism of gelatinisation, 1910, A., ii, 1046.

[history of the orientation theory of matter], 1910, A., ii, 1048.

Weimarn, Petr Petrovic von, theory of the phenomena of transition between colloidal and true solutions, 1911, A., ii, 102.

methods of investigation of capillary chemical problems, 1911, A., ii,

the "precipitation coefficient" 1911, A., ii, 261.

the degree of dispersity and its influence on the chemical composition and the firmness of the combination of water of hydration, 1911, A., ii, 377.

nature of disperse systems, 1911, A.,

ii, 381.

gelatinisation- and hydration-capacity, 1911, A., ii, 866. dispersoid chemistry of cellulose, 1912,

A., i, 679.

systematics of the aggregated states of matter, 1912, A., ii, 142.

electrical conductivity of metals and alloys from the standpoint of dispersoid chemistry, 1912, A., ii, 418.

a more exact definition of colloidal systems and the classification of colloids in general, 1912, A., ii,

ultra-microscopic structure of gelatinous precipitates and of jellies, 1912, A., ii, 439.

history of colloid chemistry, 1912, A., ii, 912.

Weimarn, Petr Petrovič von, and J. B. Kagan, a simple general method for obtaining solid colloidal solutions of any degree of dispersion, 1910, A., ii, 940.

Weimarn, Petr Petrovič von, and B. V. Maljisheff, a simple method of obtaining sulphur, selenium, tellurium, and phosphorus in a colloidal state, 1910, A., ii, 941.

Weimarn, Petr Petrovič von, and Wolfgang Ostwald, colloidal ice, 1910, A.,

ii, 400.

Wein, E., nutrition of barley with potassium with reference to its quality, 1906, A., ii, 484.

calcium cyanamide, 1906, A., ii, 487. nitrogenous nutrition of agricultural plants, 1907, A., ii, 48.

Weinberg, S. See Fritz Ephraim. See Hans Reitter, Weindel, Anton. and Robert Stolle.

Weingarten, Fred S., and Burrill B. Crohn, influence of internal hæmorrhage on protein metabolism, 1908, A., ii, 710.

Weinhausen, Hugo. See Carl Tubandt. Weinheber, M. See Arthur Rosenheim.

Weiniger, Ernst. See Georg Lockemann.

Weinland, Ernst, antiferments, 1903, A., ii, 661.

fatty acids formed by Ascaris, 1903, A., ii, 666.

proteolytic action of extracts of intestine and pancreas, 1904, A., ii, 57.

decomposition of the nitrogenous substances in Ascaris, 1904, A., ii, 273.

invertin in blood, 1905, A., ii, 730.

metabolic changes during the metamorphosis of the meat-fly (Calliphora vomitoria), 1905, A., ii, 734.

excretion of ammonia by the larvæ of Calliphora, 1905, A., ii, 740.

intermediary metabolism in the anaerobic stage of the pupe of Calliphora, 1906, A., ii, 560.

further observations on the pupæ of Calliphora, 1907, A., ii, 638.

Weinland, Ernst, A. Grohmann, and Th. Steffen, the hydrochloric acid of the gastric juice of the Selachian fishes, 1910, A., ii, 1082.

Weinland, Ernst, and Max Riehl, glycogen in heterothermic animals,

1907, A., ii, 796.

Weinland, Ernst. See also Otto Krum-

macher, and Hans Reuss.

Weinland, Rudolf Friedrich, salts of an acetatochromo-base, 1908, A., i, 847. basic ferric acetate contained in the former official solution of ferric acetate, 1910, A., i, 587.

Weinland, Rudolf Friedrich, and Ernst Bames, stannithiocyanates, 1909, A.,

i, 462.

Weinland, Rudolf Friedrich, and Georg Barttlingck, compounds of selenates with iodates, phosphates, and arsen-

ates, 1903, A., ii, 420.

Weinland, Rudolf Friedrich, and Karl Binder, the red coloration produced in the ferric chloride reaction with catechol in alkaline solution. I., 1912, A., i, 184.

the ferric chloride reaction with catechol. II. Violet-iron catechol com-

pounds, 1912, A., i, 445.

iron compounds of phenols. HI. Iron guaiacol derivatives, 1912, A., i, 850.

Weinland, Rudolf Friedrich, and Ernst Büttner, green and violet complex chromic acetates, 1912, A., i, 530. Weinland, Rudolf Friedrich, and P. Dinkelacker, salts of a hexa-acetato-(formato)-trichrome base. II., 1909, A., i, 757.

action of hydrochloric acid on permanganates, 1909, A., ii, 48.

Weinland, Rudolf Friedrich, and Kurt Feige, halogen double salts of pentavalent antimony and their parent acids, 1903, A., ii, 218.

Weinland, Rudolf Friedrich, and Max Fiederer, derivatives of quinquevalent chromium, 1907, A., i, 549; ii, 31.

Weinland, Rudolf Friedrich, and Walter Fridrich, compounds of quinquevalent

chromium, 1906, A., i, 37.

Weinland, Rudolf Friedrich, and Ernst Gussmann, salts of an acetatoferribase and of two acetatochromiferribases. III., 1909, A., i, 872.

ferriacetates, the acetic acid reaction with ferric chloride, and the basic precipitation of iron, 1910, A., i, 296. simple preparation of a crystalline

ferric acetate, 1910, A., i, 457. an acetato-pyridine-iron base and a very basic pyridine-containing ferric

acetate, 1910, A., i, 635.

Weinland, Rudolf Friedrich, Ernst Gussmann, and Ernst Büttner, salts of a hexaacetatotripyridinetrichromi-base, 1910, A., i, 503.

Weinland, Rudolf Friedrich, and Alfred Herz, ferric benzoates, 1912, A., i, 854.

Weinland, Rudolf Friedrich, Karl Hoehn, and Max Fiederer, salts of a green and of a violet propionatochromium-base, 1911, A., i, 104.

Weinland, Rudolf Friedrich, and Wilhelm Knöll, chlorinated molybdates and the acids from which they are derived, 1904, A., ii, 263.

chlorinated and brominated molybdates, brominated molybdites and their corresponding acids, 1905, A.,

ii, 323.

Weinland, Rudolf Friedrich, and Adolf Koch, amount of chlorine which can be precipitated by silver salts from the green hydrate of chromium chloride or bromide, 1904, A., ii, 488.

Weinland, Rudolf Friedrich, and Reinhold Krebs, two isomeric chromium chlorosulphates, 1906, A., ii, 233. violet sulphates of chromium, 1906,

A., ii, 453.

Weinland, Rudolf Friedrich, and Hugo Kühl, compounds of stannic sulphate with alkaline earth sulphates and with lead sulphate, 1906, A., ii, 762. Weinland, Rudolf Friedrich, and Hugo Kühl, compounds of molybdates with sulphates, 1907, A., ii, 625.

compounds of stannic sulphate with metallic sulphates, 1907, A., ii,

625.

compounds of titanic sulphate with sulphates of the alkaline earths, 1907, A., ii, 626.

Weinland, Rudolf Friedrich, and Hermann Lewkowitz, benzenesulphonic peroxide, 1903, A., i, 808.

hydrofluorides of some anilides and

substituted anilines, 1905, A., i, 518.

Weinland, Rudolf Friedrich, and Ferdinand Reischle, hydrofluorides of some, in part very weak, organic bases, 1908, A., i, 974.

hydrate of iodine oxyfluoride, fluoroiodates, and iodoxyfluorides, 1909,

A., ii, 36.

Weinland, Rudolf Friedrich, and Hans Schmid, a simple method for the formation and preparation of alkyl haloids, 1905, A., i, 557, 850.

halogen double salts of quadrivalent antimony, 1905, A., ii, 258.

chlorinated antimonates; metachloroantimonic acid, 1905, A., ii, 326.

preparation of methyl and ethyl iod-

ides, 1907, A., i, 169.

Weinland, Rudolf Friedrich, and Theodor Schumann, chlorochromium sulphate (CrCl, 5H₂O)SO₄, 3H₂O, 1907, A., ii, 623,

compounds of salts of the dichlorochromium base with ammonium

salts, 1907, A., ii, 877.

chromium chlorosulphate, 1908, A., ii, 595.

Weinland, Rudolf Friedrich, and Werner Stille, addition of hydrogen fluoride to oxalates and ammonium tartrate, 1903, A., i, 731.

substitution of oxygen by fluorine in iodoxy- and iodoso-compounds, 1903,

A., i, 748.

addition of hydrogen fluoride to salts of sulphonie acids, 1903, A., i,

749.

Weinland, Rudolf Friedrich, and Ludwig Storz, haloid salts of columbium oxychloride (CbOCl3) and of columbium oxybromide, 1906, A., ii,

chloro- and bromo-columbates and chlorotantalates, 1907, A., i, 721.

reduction of cupric to cuprous sulphide, 1907, A., ii, 771.

Weinmayr, Ignaz. See Georg Bredig.

Weinschenk, Arthur, dye-condensation of aromatic m-diamines with chloroform, 1903, A., i, 291.

β-4-dimethylamino-2-hydroxybenzovlpropionic acid and its application in preparing succinein dyes, 1904, A.,

i, 59.

reaction of aromatic azo-compounds with aromatic amines differing from the induline synthesis, 1905, A., i, 724.

condensation of epichlorohydrin with phthalic anhydride in presence of tertiary bases, 1906, A., i. 90.

behaviour of gelatin solutions towards naphthols or mixtures of naphthols with formaldehyde, 1908, A., i, 377.

Weinschenk, Ernst [Heinrich Oskar Kasimir], a peculiar diopside from Moravicza, Hungary, 1904, A., ii, 50.

Weinschenk, Ernst, and Hermann Steinmetz,, a new type of moldavite, 1911,

A., ii, 501.

Weintraub, Ezechiel, properties and preparation of boron, 1912, A., ii, 43.

Weintraub, Naum. See Fritz Ullmann. Weintroube, Jacob. See Martin Onslow Forster.

Weir, John, new derivatives of aminolauronic acid, 1911, T., 1270; P., 154.

Weir, John. See also James Colguhoun Irvine, and Hermann Pauly.

Weirich, T., and G. Ortlieb, estimation of an organic phosphorus compound in grape stones and wines, 1904, A.,

ii, 304. Weis, Edmund, the condensation proof formylisobutyraldol acetaldehyde, 1905, A., i, 17.

Weis, Fr., proteolytic enzyme of germinating barley (malt), 1903, A., ii, 747; 1904, A., ii, 280.

changes of proteins during malting and brewing, 1904, A., ii, 761.

production of nitric acid in humus and peat soils, 1909, A., ii, 428.

Weisberg, Julius, a levorotatory sub-stance found in altered beetroot, 1908, A., i, 505.

estimation of calcium oxide in sugar refinery products, 1911, A., ii, 659. sugar solutions and lime, 1912, A., i,

See Arthur Fischer. Weise, J.

Weiser, Stephan, digestibility of pentosans, 1903, A., ii, 507.

avenine, 1903, A., ii, 747.

the calcium, magnesium, phosphorus, and nitrogen metabolism of the growing pig, 1912, A., ii, 1067.

Weiser, Stephan, and Arthur Zaitschek, digestibility of carbohydrates: estimation of starch in the presence of pentosans, 1903, A., ii, 225.

composition of goose fat, 1903, A., ii,

227.

estimation of starch in substances containing pentosans, 1903, A., ii, 515.

estimation of carbohydrates in fæces,

1903, A., ii, 516.

Weiser, Stephan. See also Franz Tangl. Weiske, Hugo, [feeding experiments on sheep], 1904, A., ii, 750.

Weisl, Siegmund, p-hydroxydeoxybenz-

oin, 1905, A., i, 904.

Weisl, Siegmund. See also M. Picha. Weisman, Charles, the Bardach test for proteins, 1912, A., ii, 1220.

Weiss, Arno. See Max Guthzeit. Weiss, Eugen. See Fritz Fichter.

Weiss, Franz, formation of protamine in the salmon, 1907, A., ii, 638. salts of inactive ornithine, 1909, A., i, 542.

salts of arginine, 1911, A., i, 667. See also Weiss, Franz. Albrecht

Kossel.

Weiss, Hermann, bark and fruits of Aegiceras majus with especial reference to saponin, 1906, A., ii, 571.

Weiss, Hans Richard, tryptic digestion,

1904, A., ii, 270.

Weiss, J., and Johann Georg Koenigs-berger, thermo-electric forces of certain metallic oxides and sulphides, 1910, A., ii, 15.

Weiss, J. See also Johann Georg

Koenigsberger.

Weiss, Joseph, influence of alkalis on the alkalinity of the blood, 1903, A., ii, 493.

Weiss, Ludwig, and Oswald Aichel, reduction of metallic oxides by means of the cerite metals, 1905, A., ii, 164.

Weiss, Ludwig, and Theodor Engelhardt, nitrogen compounds of silicon, 1910, A., ii, 122.

Weiss, Ludwig, and Hans Kaiser, metallie titanium, 1910, A., ii, 302.

Weiss, Ludwig, and Max Landecker, estimation of [tantalic and columbic] acids, 1909, A., ii, 942.

Weiss, Ludwig, and Richard Lehmann, natural zirconium dioxide, 1910, A.,

ii, 133.

Weiss, Ludwig, A. Martin, and Anton Stimmelmayr, metallic tungsten, 1910, A., ii, 216.

Weiss, Ludwig, and Eugen Neumann, metallic zirconium, 1910, A., ii, 217.

Weiss, Ludwig, and K. Reiter, electrolytic reduction of the three isomeric nitrobenzylsulphonic acids, 1907, A., i. 841.

Weiss, Ludwig, and Woldemar Trautmann, the analysis of ferrozirconium,

1912, A., ii, 495.

Weiss. Ludwia. See also Wilhelm Muthmann.

Weiss. Maurus. See Carl Dietrich Harries.

Weiss, Moriz, the neutral sulphur of urine and its relationship to the diazoreaction and the elimination of proteic acids, 1910, A., ii, 879.

Weiss, Otto, and J. Harris, destruction of adrenaline in the living animal,

1904, A., ii, 628.

Weiss, Otto. See also Franz Wachholtz. Weiss, Pierre, a new property of the magnetic molecule, 1911, A., ii, 91.

rationality of the ratios of the magnetic moments of atoms and a new universal constituent of matter, 1911, A., ii, 183.

value of magneton, deduced from the coefficients of magnetisation of solutions of iron salts, 1911, A., ii, 250.

magneton in solid paramagnetic substances, 1911, A., ii, 367.

rationality of the proportions of the molecular magnetic moments and the magneton, 1911, A., ii, 694.

Weiss, Pierre, and Paul N. Beck, specific heat and molecular magnetic field of ferromagnetic substances, 1908, A., ii,

Weiss, Pierre, and Otto Bloch, magnetisation of nickel, cobalt, and of alloys of nickel and cobalt, 1912, A., ii, 17.

Weiss, Pierre, and G. Foëx, the magnetisation of ferromagnetic substances above the Curie point, 1911, A., ii, 183, 250.

Weiss, Pierre, and Heike Kamerlingh Onnes, magnetic properties of manganese, vanadium, and chromium, 1910, A., ii, 388.

magnetisation at very low temperatures, 1911, A., ii, 15.

Weiss, Pierre. See also A. Cotton. Weiss, R. See Rudolf Lesser.

Weiss, Rudolf. See Heinrich Biltz.

Weiss, R. S. See William Homer Warren.

Weiss, Valentin. See Carl Dietrich Harries.

Weissbach, Hans, ethylphenylhydrazonecvanoacetate and phenylazocyanoacetate, 1903, A., i, 541:

Weisse, Gottfried von. See Paul Dutoit.

Weisse, Karl, action of chloride of sulphur and of sulphuryl chloride on piperonal, 1910, A., i, 853.

Weisse, Karl. See also Hugo Weil.

Weissel, Leopold. See Hugo Kauffmann. Weissenberg, Rudolf. See Karl Bernhard Lehmann.

Weissenberger, Georg, o-nitrodialkylanilines, 1912, A., i, 690.

Weisser, Franz, estimation of ash in coals, 1912, A., ii, 810.

Weissgerber, Rudolf, acetophenone and other ketones in coal tar, 1903, A., i 348

sodium derivative of fluorene, 1908, A., i, 873.

sodium derivative of indene, 1909, A., i, 219.

indole in coal tar, 1911, A., i, 155. benzylindene, 1911, A., ii, 713.

Weissgerber, Rudolf, P. Brehme, A. Dombrowsky, F. Kraft, and M. Vogel, indene series, 1911, A., i, 623.

Weissheimer, Paul. See Daniel Vorländer.

Weissmann, Leon, liberation of electrically charged particles from an incandescent platinum wire during the catalysis of electrolytic gas (hydrogen and oxygen), 1912, A., ii, 412.

Weissmann, Leon. See also Franz Goldschmidt.

Weisspfenning, G. See Theodor Zincke.
Weisswange, W. See F. E. Nottbohm,
C. von Rechenberg, and Edgar
Wedekind.

Weisweiller, Gustave. See Gabriel Bertrand.

Weisz, Herman, solarisation in silver bromide films, 1906, A., ii, 137.

Weisz, Moriz, the relation of the precursors of the normal yellow pigment of urine to the diazo-reaction, and a colorimetric estimation of urochrome and urochromogen, 1911, A., ii, 136.

Weitbrecht, W., detection of acetone in urine by Lieben's test, 1909, A., ii,

the sensitiveness of certain reactions for blood and their use in the analysis of urine, 1911, A., ii, 447.

Weitz, Ernst. See Johannes Thiele.
 Weitz, R., use of various zinc salts in the detection of urobilin, 1910, A., ii, 666.

Weitz, R. See also Gustav Patein.
Weitzel, K. See Eberhard Rimbach.
Weitzenböck, Richard, occurrence of

isoleucine în casein, 1907, A., i, 167.
Weitzenböck, Richard, and Hans Lieb,
new synthesis of chrysene, 1912, A., i,
547.

Weitzenböck, Richard. See also Roland Scholl, Hugo Schrötter, and Christian Seer.

Weitzner, Emil, dimethylglycoluril and β-methylhydantoin, 1908, A., i, 841.

Weizmann, Charles, and Clayton Aniline Co., Ltd., preparation of isobornyl esters of fatty acids, 1909, A., i, 311.

Weizmann, Charles, Harold Davies, and Henry Stephen, condensation of acid chlorides with the ethyl esters of (a) cyanoacetic acid, (b) malonic acid, and (c) acetoacetic acid; preliminary note, 1912, P., 103.

Weizmann, Charles, and Ernest Basil Falkaner, ethyl β-naphthoylacetate, 1905, P., 307; 1906, T., 122. Weizmann, Charles. See also Roman

Weizmann, Charles. See also Roman Alpern, William Henry Bentley, Harold Davies, Christian Deichler, Arthur Friedl, Victor John Harding, (Miss) Dorothy Harrop, Arthur Hopwood, Ian Quiller Orchardson, William Henry Perkin, jun., Samuel Shrowder Pickles, Henry Stephen, and (Miss) Gertrude Maud Walsh.

Weizsäcker, Viktor, work and gaseous exchange in the frog's heart. II. Action of cyanide, 1912, A., ii, 952. work and gaseous metabolism in the frog's heart, 1912, A., ii, 1193.

Welbel, Benzion M., atmospheric precipitations, 1903, A., ii, 508. lysimeter water, 1903, A., ii, 509.

nitrogen in atmospheric precipitation, 1903, A., ii, 749.

Welde, Ernst, new method for estimating volatile fatty acids, 1910, A., ii, 1118.

Welde, Ernst. See also Emil Abderhalden, Theodor Curtius, and F. Edelstein.

Welde, Robert. See Georg Merling.

Welecki, St., the influence of adrenaline on the excretion of carbon dioxide and urine, 1909, A., ii, 506.

Welker, William H., red coloration in the iodoform test for acetone in urine, 1907, A., ii, 721.

influence of potassium cyanide on nitrogen excretion in dogs, 1908, A., ii, 411.

Barfoed's test, 1909, A., ii, 524.

Welker, William H. See also William N. Berg, Julia T. Emerson, and Louis Hussakof.

Weller, Arnold. See Emil Fromm.

Weller, H. R. See Alvin Sawyer Wheeler.

Wellik, Albert, radioactive behaviour of the water of Gratz and its environs, 1909, A., ii, 202.

Wellisch, Edward Montague, laws of mobility and diffusion of the ions formed in gaseous media, 1909, A., ii, 299.

phenomena which accompany the transport of the active deposit,

1911, A., ii, 358.

Wellisch, Edward Montague, and Howard L. Bronson, the distribution of the active deposit of radium in an electric field, 1912, A., ii, 521.

Wellmann, Oszkár, metabolism of calcium. magnesium, and phosphorus during

inanition, 1908, A., ii, 306.

Wells, A. A., and Grant S. Reeder, fruit of Celastrus scandens and Solanum dulcamarum, 1908, A., ii, 58.

Wells, Edward E. See Ellwood Barker

Spear.

Wells, F. J. See A. R. Whitson.

Wells, Harry Gideon, relation autolysis to protein metabolism, 1904, A., ii, 574.

the transport of iodised fat in phosphorus poisoning, 1905, A., ii,

745.

the composition of liver in acute yellow atrophy, 1907, A., ii, 710.

fats and lipoids of malignant hypernephromas, 1908, A., ii, 411.

liver in chloroform necrosis (delayed chloroform poisoning), 1908, A., ii, 974.

the purine metabolism of the monkey,

1910, A., ii, 322.

the presence of iodine in the human pituitary, 1910, A., ii, 427.

the purines and purine enzymes of tumours, 1912, A., ii, 371.

Wells, Harry Gideon, and Harry John Corper, uricolysis, 1909, A., ii,

purines and purine metabolism of the human fœtus and placenta, 1909, A., ii, 1034.

Wells, Harry Gideon, and Lafayette Benedict Mendel, absorption from the peritoneal cavity, 1907, A., ii, 282. Vells, Harry Gideon. See also Emil

Wells, Harry Gideon. Abderhalden, Robert L. Benson, and Lafayette Benedict Mendel.

Wells, Horace Lemuel, double and triple thiocyanates of cæsium, cadmium, and silver, 1903, A., i, 737.

rubidium barium silver thiocyanates, 1903, A., i, 737.

composition of double halogen salts, 1904, A., ii, 392.

a colour effect of isomorphous mixture, 1912, A., ii, 240.

Wells, Horace Lemuel, William Knickerbocker Wallbridge, Howard Stanley Bristol, Charles Samuel Leavenworth. Robert Tuckerman Roberts, Henry Franklin Merriam, and O. G. Hupfel. double and triple thiocyanates, 1903, A., i, 154.

Wells, Horace Lemuel. See also George Samuel Jamieson, Champion Herbert Mathewson, and Frederick Lafayette

Shinn.

Wells, Roger Clark, estimation of opalescent silver chloride precipitates, 1906, A., ii, 252, 492. equilibria in silver chloride solutions.

1906, A., ii, 340.

instability of certain tungstates in

water, 1907, A., ii, 269.

electrical conductivity of ferric sulphate solutions, 1909, A., ii, 892. new occurrence of hydrogiobertite,

1910, A., ii, 965.

sensitiveness of the colorimetric estimation of titanium, 1911, A., ii, 444.

Wells, Roger Clark, and Dunlap Jamison McAdam, jun., phase relations of the system: sodium carbonate and water, 1907, A., ii, 542.

Wells, Roger Clark. See also Frank Lee Hess, and Theodore William

Richards.

Wells, Robert J. See John Bernard Ekelev.

Welmans. Paul, estimation of theobromine in cocoa, 1903, A., ii, 250.

Welsbach, Carl Auer von, elements of the ytterbium group, 1907, A., ii, 26. employment of spark spectra in prov-

ing homogeneity, 1907, A., ii, 209. resolution of ytterbium into its elements, 1908, A., ii, 591.

resolution of ytterbium, 1910, A., ii,

chemical investigation of actiniumcontaining residues of radium extraction. I., 1911, A., ii, 7.

elements in thulium, 1911, A., ii, 607. Welsch, August. See Adolf Windaus.

Welsh, David Arthur, positive and negative phases of blood-coagulation in man, 1911, A., ii, 618.

Welsh, David Arthur, and H. G. Chapman, precipitin anti-sera and their standardisation, 1906, A., ii, 688.

differentiation of proteins of closely related species by the precipitin reaction, 1910, A., ii, 975.

the interpretation of the precipitin reaction, 1911. A., ii, 809.

Welsh, M. D. See Frederick Jacob Alway.

Welsh, T. W. B. See Arthur Wesley Browne.

Welt, H. See J. Hudig

Welter, Adolf, reversibility of enzyme action, 1911, A., i, 409.

Welter, Otto A., nephrite occurrences in the Alps and in the Frankenwald, 1912, A., ii, 175.

Welti, E. See Alfred Werner.

Welwart, N. See F. Wittels. Wen, Ching Yu, and Edward F. Kern, the effect of organic and inorganic "addition agents" on the electrodeposition of copper from electrolytes containing arsenic, 1912, A., ii, 555.

Wendel, Adolf. See Felix Ehrlich. Wendel, Fritz. See Richard Josef Meyer. Wendelstadt, Hermann, and Arthur Binz, fermentation vats, 1906, A., i, 432.

Wender, Neumann, enzymes of milk, 1903, A., i, 590.

yeast catalase, 1904, A., i, 542. estimation of starch in yeast, 1904,

A., ii, 97.

estimation of sugar by reduction of colouring matters, 1910, A., ii, 1116. the influence of inactive substances on the rotation of lævulose, 1911, A., i. 114.

Wender, Neumann, and D. Lewin, catalytic properties of grain and meal,

1904, A., ii, 584.

Wendt, Georg, investigation of mercury lines; structure; changes in the lines and spectrum on dilution of the metal vapour; Zeeman effect in weak and strong fields, 1912, A., ii, 313.

Wendt, Georg. See also Johannes Stark. Wendt, Georg von, metabolism (albuminous and saline) in man, 1905, A., i,

action of alcohol on the body temperature of men, 1907, A., ii, 377.

the variability of milk; the influence of the addition of various salts to fodder on the composition and quantity of the milk, 1909, A., ii,

the influence of the climate of high altitudes on the metabolism of man,

1911, A., ii, 506.

Wendt, Gustav, constitution of the terpenes, 1907, A., i, 542.

Wenger, G., and Hector H. Alvarez, reduction of solutions of potassium permanganate by the alternate current, 1912, A., ii, 624.

Wenger, Paul, and D. Midhat, reduction of potassium dichromate in solution by alternating currents, 1912, A., ii, 1038.

Wenger, T. See Max Wunder.

Wenghöffer, Ludwig [Johann], preparation of acetone, 1904, A., i, 290.

Wénk, Walther, influence of substances in solution on the velocity of crystallisation and the crystal-habit of potassium sulphate, 1910, A., ii, 23.

Wenk, Walther. See also Fritz Fichter.

and Robert Marc.

Wennekes. Hermann. See August Michaelis.

Wenner, Paul. See Fritz Ullmann.

Wennmann, D. A., apparatus for the estimation of sulphur [in iron or steel], 1911, A., ii, 653, 938.

new apparatus for the estimation of sulphur and carbon in iron and

steel, 1911, A., ii, 1026.

Wentworth, Arthur Howard. See Otto Folin.

Wentzel, Fritz. See Friedrich Kehr-Wentzki, O., estimation of urea, 1905,

A., ii, 214. new method for the estimation of

mixtures of chlorides, iodides, and bromides, 1905, A., ii, 478.

theory of the lead chamber process, 1911, A., ii, 273.

the reduction of nitrosylsulphuric acid by mercury, 1911, A., ii, 878. Wenyon, Charles Morley, action of the

benzidine dyes on mice infected with trypanosoma, 1907, A., ii, 495.

Wenz, Wilhelm, determination of the velocity of sound in potassium vapour and the monatomicity of its molecules, 1910, A., ii, 1061.

Wenzel, Franz, the resolution ytterbium, 1909, A., ii, 891.

Wenzel, Franz, and Arthur Schreier, constitution of trihydroxytetramethylfluorone, 1904, A., i, 913.

Wenzel, Franz, and Hugo Weidel, prepentahydroxybenzene, paration of

1904, A., i, 48.

Wenzel, Franz. See also Franz Haiser, Josef Herzig, Moritz Kohn, J. Liebschütz, and Arthur Schreier.

Wenzel. Friedrich. Eduard Pflüger.

Wenzell, William T., ergoxanthein,

1910, A., i, 693. Werchowsky, W[adim Nikandrovitsch].

See Wladimir N. Ipatieff. Werder, examination of liquid carbon dioxide, 1906, A., ii, 900.

Werdermann, Arthur. See Hans Stobbe.

Werdmüller, J. O. See Alexander Tschirch.

Werncken, Gerhard, theory of the curdling of milk by rennet, 1909, A., i,

Werner and Fraatz, samsonite, a manganiferous silver mineral from the

Harz, 1910, A., ii, 620.

Werner, Alfred, ammonia salts as the simplest ammonio-metallic pounds, 1903, A., i, 234.

new synthesis of hydrocarbons by means of organo-magnesium com-

pounds, 1904, A., i, 25. researches in the phenanthrene series,

1904, A., i, 863.

construction of the periodic system,

1905, A., ii, 308, 514.

triamminechromium salts; a contribution to the chemistry of hydrates. V. Chromium compounds, 1906, A., ii, 760.

theory of hydrolysis and stereoisohydroxoaquodiethylenediaminecobalt salts, 1907, A., i,

189.

hydroxoaquodipyridinediamminecobalt and diaquodipyridinediamminecobalt salts, 1907, A,, i, 238.

structurally isomeric thiocyanates and nitrites, 1907, A., i, 291.

the constitution and configuration of inorganic compounds, 1907, A., ii,

theory of hydrolysis. III. Ammonioruthenium compounds, 1907, A., ii, 560.

theory of bases, 1907, A., ii, 945.

constitution of basic salts and analogously constituted complex salts. I., 1907, A., ii, 945.

hydroxylopentamminecobalt salts.

1907, A., ii, 961.

hydroxyloaquotetramminecobalt salts, 1907, A., ii, 962.

hydroxylonitrotetramminecobalt salts,

1907, A., ii, 963.

abnormal inorganic oxonium salts: a new class of basic salts, 1907, A., ii,

salts, chloronitrotetramminecobalt

1907, A., ii, 964.

complex metal ammonias. V. Octamminedioldicobalt saits, 1907, A., ii, 965.

dihydroxylotetrammineplatinum compounds, 1907, A., ii, 969.

theory of mordant dyes, 1908, A., i, 669.

1:2-dichlorotetramminecobalt salts; ammoniovioleo-salts, 1908, A., ii, 42.

Werner, Alfred, complex metal ammonia derivatives. VI. Octammineμ-amino-ol-dicobalt salts

 $(NH_3)_4$ Co $\frac{NH_2}{OH_2}$ Co $(NH_3)_4$ X_4 , 1908, A., ii, 42.

iodopentamminecobalt salts, 1908, A., ii, 950.

complex metal ammonias. VIII. Transformation of hexamminetrioldicobalt salts into octamminedioldicobalt salts, 1909, A., ii, 49.

complex metal ammonias. IX. Decammine-µ-aminodicobalt salts.

1909, A., ii, 49.

theoretical basis of structural formula for inorganic substances, 1909, A., ii, 990.

colour and constitution, 1910, A., i, 20. compounds of chromium. VIII. Triamminechromium salts, 1910, A., ii, 960.

spatial change of position during reactions of stereoisomeric compounds,

1911, A., i, 424.

the asymmetric cobalt atom, 1911, A., i, 838; 1912, A., i, 10, 166.

mirror image isomerism with chromium compounds. I., 1911, A., i,

951; 1912, A., i, 417, 938. optically active compounds of cobalt

and chromium, 1912, A., i, 96. mirror image isomerism with iron compounds, 1912, A., i, 298.

mirror image isomerism with rhodium compounds. I., 1912, A., i, 418.

metallic compounds with molecular asymmetry, 1912, A., ii, 822.

Werner, Alfred, and Ernst Berl, hexahydroxylaminecobalt salts, 1905, A., ii, 323.

Werner, Alfred, Ernst Berl, Gustav Jantsch, and Ernst Zinggeler, complex metal ammonias. III. Dodecamminehexoltetracobalt and hexaethylenediaminehexoltetracobalt salts, 1907, A., i, 482.

Werner, Alfred, and Emil Bindschedler, trichlorotriamminecobalt

hydrates, 1906, A., ii, 760.

Werner, Alfred, Emil Bindschedler, J. Fürstenberg, (Frl.) Marie Grigorieff, Adolf Grün, Erich Kindscher, (Frl.) Signe Malmgren, Jos. Rapiport, Franz Salzer, M. Pieper, and E. Welti, complex metal ammonias. X., 1910, A., ii, 857.

Werner, Alfred, Emil Bindschedler, and Adolf Grün, complex metal ammonia compounds. VII. Hexamminetrioldicobalt salts, 1908, A., ii, 43. Werner, Alfred, W. E. Böes, R. Bossherd, L. Cohn, Ludwig Gerb, N. Goslings, R. Hartmuth, K. R. Lange, G. Lindenberg, S. Lorie, Marie Pokrowska, Jos. Rapiport, C. Rix, R. Samanek, and R. Schmidt, stereoisomeric cobalt compounds, 1912, A., i, 74.

Werner, Alfred, Fritz Brännlich. Eugenie Rogowina, and Christian Kreutzer, stereoisomeric hexammine salts, 1907, A., i, 290.

Werner, Alfred, and W. Costachescu, chromium compounds. VII. Hydrates of chromium fluoride and an example of co-ordinate isomerism among hydrates, 1909, A., ii, 51.

Werner, Alfred, and Karl Dawe, diisothiocyanodipropylenediaminedipropylenediaminediammine- cobalti-

salts, 1907, A., i, 294.

Werner, Alfred, and Theodor Detscheff, Beckmann's rearrangement in oximes of ketone-alcohols of the benzoin type, 1905, A., i, 225.

Werner, Alfred, and Karl Dinklage, nitrilobromo-osmonates, 1906, A., ii,

176.

Werner, Alfred, and J. V. Dubsky, dihydroxylodiaquodiamminechromium salts, 1907, A., ii, 966.

Werner, Alfred, and A. Egger, B-dibromophenanthrene, 1904, A., i, 863.

Werner, Alfred, and Rudolf Feenstra. saturated series of dicobaltammine compounds, 1905, A., ii, 323. dichlorotetrapyridinecobalt salts, 1906,

A., i, 450.

Werner, Alfred, and Adolf Fröhlich, stereoisomeric dichlorodipropylenedi-

amine cobalt salts, 1907, A., i, 590. Werner, Alfred, Ph. Gerhardt, G. Schöler, A. Summerer, and W. Zipser, the varying values of single bonds, 1906, A., i, 436.

Werner, Alfred, and N. Goslings, carbonatopentamminecobalt salts, 1903,

A., ii, 600.

Werner, Alfred, and Armin Grob, 9:10diphenylphenanthrene, a product of intramolecular rearrangement, 1904,

A., i, 864.

Werner, Alfred, and Adolf Grun, triamminecobalt salts; a new case of hydrate isomerism, 1905, A., ii, 93. mixed triamminecobalt salts contain-

ing ethylenediamine and ammonia,

1906, A., i, 70.

Werner, Alfred, and Alois Gubser, chromium compounds. IV. Hydrated chromium chlorides, 1906, A., ii, 452. Werner, Alfred, and Johann (Ritter) von Halban, thiocyanoamminechromium salts. VI. Chromium salts, 1906, A., i. 816.

Werner, Alfred, and Robert Huber, chromium salts, 1906, A., ii, 170.

Werner, Alfred, and Gustav Jantsch, stereoisomeric diaquodiethylenediaminecobalt salts, 1907, A., i.

complex metal ammonias. IV. Tetraethylenediaminediaquotetrolcobaltodicobaltic salts, 1907, A., i, 1012.

Werner, Alfred, Johann Jovanovits, Gabriel Aschkinasy, and Josef Posselt, metallic salts of organic acids. Formates and acetates of chromium, A., i, 935.

Werner, Alfred, V. L. King, and E. Scholze, the asymmetric cobalt atom.

I., 1911, A., i, 613.

Werner, Alfred, and Johannes Kunz. hydroxyphenanthrenecarboxylic acids, 1903, A., i, 173.

Werner, Alfred, and Walter Peters, condensation of phenylhydrazine with ethyl 4-chloro-3-nitrobenzoate, 1906, A., i, 220.

Werner, Alfred, and Alfred Piguet, Beckmann's rearrangement by means of benzenesulphonic chloride in the presence of alkali or pyridine, 1905, A., i, 66.

Werner, Alfred, Paul Schorndorff, and Ch. Chorower, influence of alkyloxy. groups on the reactivity of a-bromine atoms in aromatic compounds, 1906, A., i, 180.

Werner, Alfred, and W. Seybold, a new method of esterifying organic acids,

1904, A., i, 1013.

Werner, Alfred, and Ernst Thomann, theory of mordant dyes, 1908, A., i, 440.

Werner, Alfred, and Otto de Vries, complex iridium compounds, 1909, A., ii,

Werner, Alfred, and Adam Alexander Wolberg, dibromotetra-amminecobalt salts, 1905, A., ii, 322.

bromoaquotetra-amminecobalt salts, 1905, A., ii, 528.

Werner, Alfred, and Franz Zilkens, a new synthesis of hydrocarbons, 1903, A., i, 615.

Werner, Armin. See Karl Bernhard Lehmann.

Werner, Emil Alphonse, the decomposition of chloral hydrate by sodium hydroxide and by certain salts, 1904, T., 1376; P., 184.

Werner, Emil Alphonse, researches on ; chromorganic acids; the behaviour of chromic hydoxide towards oxalic acid and certain other organic acids, 1904, T., 1438; P., 186.

the condensation of formaldehyde with acetone: preliminary note, 1904,

P., 196.

derivatives of multivalent iodine; the action of chlorine on organic including iodo-derivatives. sulphonium and tetra-substituted ammonium iodides, 1906, T., 1625; P., 258.

note on a compound of thiocarbamide and potassium iodide, 1906, P.,

interaction of succinic acid and potassium dichromate; note on a black modification of chromium sesqui-

oxide, 1906, P., 257. the interaction of iodine and thiocarbamide; the properties of formamidine disulphide and its salts, 1912, T., 2166; P., 240.

the action of nitrous acid on thiocarbamide and on formamidine disulphide; a new structural formula for thiocarbamide, 1912, T., 2180;

the interaction of azoimide and nitrous acid; preliminary note, 1912, P.,

257.

Werner, Emil Alphonse. See also William Ringrose Gelston Atkins, William Caldwell, and James Emerson Revnolds.

Werner, Franz Felix, analysis of cobalt and nickel, 1910, A., ii, 352. detection of zinc, 1912, A., ii, 687.

Werner, Fritz, condensation of aa'lutidine [2:6-dimethylpyridine] with aldehydes, 1903, A., i, 574.

Werner, Fritz. See also Heinrich Ley. Werner, Georg. See Otto Dimroth.

Wernher, Georg. See Rudolph Fittig. Werra, Josef de. See Eugen Bamberger.

Werschinin, N., action of the digitalin group on the heart, 1909, A., ii,

the systolic and diastolic heart-action of strophanthin, 1910, A., ii, 1094. action of barium ions on the heart, 1911, A., ii, 1117.

Wersilowa, M. A. See Efim Semen London.

Wertenstein, Louis, action of gravity on the induced activity of radium, 1909, A., ii, 713.

the range of radioactive recoil-products (projections), 1910, A., ii, 476.

Wertenstein, Louis, radioactive recoil products (projections), 1910, A., ii, 816.

a readily absorbable, ionising radiation emitted by radium-C, 1911, A., ii. 684.

ionisation by radioactive recoil products, 1912, A., ii, 222.

the absorption of radioactive projections (recoil products) and the ionisation produced by them, 1912, A., ii, 887.

Wertenstein, Louis. See also B. Bianu.

Wertheimer, Emile, action of acid and of chloral on the secretion of bile. 1903, A., ii, 441.

Wertheimer, Friedrich, constitution of α- and β-benzopinacolins, 1906, A., i.

Wesch, Alfred. See Ernst Hermann Riesenfeld.

Wesendonk, Karl von, the Swan

spectrum, 1908, A., ii, 241. Wesener, J. A., and George L. Teller, ageing of flour and its effect on digestion, 1912, A., ii, 657.

Wessely, Leo, assay of barium sulphide,

1907, A., ii, 198.

Wessely, Leo. See also Siegfried Kohn, and H. Raab.

Wesson, M. B. See James R. Bailey. West, Augustus Price, and Harry Clary Jones, conductivity, dissociation, and temperature coefficients of conductivity at 35°, 50°, and 65°, of aqueous solutions of a number of salts. XIV., 1911, A., ii, 10.

West, Augustus Price. See also Harry

Clary Jones.

West, C. J. See Lee Holt Cone, and Moses Gomberg. West, Franklin L. See Herbert Newby

McCoy.

West, George H. See Edgar Fahs Smith. West, Rodney. See George Bell Frankforter.

Westdeutsche Thomasphosphat-Werke, G.M.B.H., synthetical preparation of ammonia, 1905, A., ii, 314.

[preparation of nitrogen peroxide from nitrogen and oxygen at high temperatures], 1907, A., ii, 863. Westenryk, N. van, reaction of the

blood after intravenous injection of acid and alkali, 1908, A., ii, 1048.

Wester, D. H., chitin, 1909, A., i, 659. Westergard, Anton Hilmer, clinozoisite

from Tyrol, 1906, A., ii, 684.

esterkamp, Arthur, electrolytic estimation of lead in tin alloys and Westerkamp, tinned iron, 1907, A., ii, 506.

Westerkamp, Arthur. See also Julius Tröger.

Westhausser, F., estimation of phosphoric acid in Thomas slag, 1905, A., ii, 419.

protein estimation and peptic digestion of protein, 1911. A., ii, 674.

Westhausser, F., and Willy Zielstorff, influence of calcium and magnesium manuring on phosphate manure, 1907, A., ii, 296.

Westhausser, F. See also August Morgen.

Westhaver, James B., behaviour of anodes of iridium, platinum and rhodium in the electrolysis of dilute sulphuric acid, 1905, A., ii, 226.

Westhoff, F. See Hermann Ost.

Edwin, Weston, Frank explosive crystallisation, 1908, A., ii, 759. detection of sodium sulphite in the presence of sodium sulphate and sodium thiosulphate, 1909, A., ii, 934.

Weston, Frank Edwin, and Henry Russell Ellis, action of aluminium powder on silica and boric anhydride, 1908, A., ii, 385.

interaction of aluminium powder and carbon, 1908, A., ii, 849.

heats of combustion of aluminium, calcium, and magnesium, 1909, A., ii, 46, 484.

modified apparatus for estimation of nitrogen by the Kjeldahl process, 1909, A., ii, 828.

thermic reactions in a vacuum. I., II., and III., 1911, A., ii, 398.

Weston, Frank Edwin, and Charles W. Jeffreys, detection of sodium sulphite in the presence of sulphate and thiosulphate, 1908, A., ii, 320.

Weston, Robert Spurr, [colorimetric] estimation of nitrogen as nitrites in waters, 1905, A., ii, 352.

estimation of manganese in water, 1907, A., ii, 817.

Westphal, C. See Otto Schumm. Westphal, W. See J. Franck.

Weszelszky, Julius von, a new apparatus for radioactive measurements, 1911, A., ii, 453.

Wetter, Alexander. See Eugen Bamberger, and Hans Rupe.

Wetter, Otto. See Siegmund Reich. Wetterkamp, H. See Adolf Grün.

Wetzel, H. See Ivan Koppel.

Wetzel, Johannes, new form of gaswashing flask and absorption apparatus for elementary analysis, 1903, A., ii, 237.

Wetzel, Johannes, new apparatus for the distillation of mercury, 1909, A., ii,

Wewer, Hermann. See Theodor Curtius. Weyberg, Zygmunt, basic alumino-silicates containing haloids, 1905, A., ii. 89.

the sodalite series, 1905, A., ii, 98.

action of barium and strontium chlorides on kaolin at high temperatures, 1905, A., ii, 262.

lithium alumino-silicates, 1906, A., ii.

the silicate Na₂Fe₂Si₄O₁₂, 1906, A., ii,

compounds allied to spinel, 1906, A., ii, 865.

the alumino-silicate, K2Al2SiO6, 1908, A., ii, 697.

potassium alumino-silicate. K2Al2Si2O8, 1908, A., ii, 697. sodium chromisilicates, 1908, A., ii,

crystallisation, dissolution, and regeneration polyhedra of potassium and ammonium-aluminium alums in aqueous solutions containing hydrochloric and nitric acid, 1911, A., ii, 263.

Weydert, L. See Paul Bary. Weyl, O. See Max Le Blanc.

Weyl, Theodor, historical note on the fixation of ozone by oleic acid, 1906, A., i, 925.

action of hydrogen peroxide on phosphorus, 1906, A., ii, 350.

a new method of reduction. I. and II. Reductions with amorphous phosphorus, 1907, A., i, 118,

reductions with amorphous phosphorus. III. Action of amorphous phosphorus and hydrochloric acid, D 1.19, on nitrobenzene, 1907, A., i, 907.

the proteins. I. Behaviour of protein solutions with acetone, 1910, A., i, 287.

the behaviour of commercial eggalbumin to hydriodic acid, 1910, A., i, 792.

the behaviour of proteins to acetone, 1910, A., ii, 468.

simple apparatus for determining melting points, 1910, A., ii, 483.

Weyrich, E., suprarenine [epinephrine], the substance of the suprarenal glands which causes increase of the pressure of the blood, 1905, A., i, 152.

Wheatley, Robert. See Harry Medforth

Dawson.

Wheeler, Alvin Sawyer, estimation of methoxyl groups in some lignocelluloses, 1905, A., i, 574.

new colour reaction for lignocelluloses,

1907, A., ii, 511.

5-bromo-2-aminobenzoic acid: method of preparation, 1909, A., i, 382. instability of alloxan, 1910, A., i, 466. transformation of ammonium cyanate into carbamide, 1912, A., i, 751.

new thermometers for melting-point determinations, 1912, A., ii, 932.

Wheeler, Alvin Sawyer, and Stroud Jordan, condensation of chloral with primary aromatic amines. III., 1909, A., i, 673.

Wheeler, Alvin Sawyer, C. W. Miller, W. S. Dickson, and Stroud Jordan, condensation of chloral with primary aromatic amines. II., 1908, A., i, 332.

Wheeler, Alvin Sawyer, and W. M. Oates, bromination of anthranilic acid,

1910, A., i, 481.

Wheeler, Alvin Sawyer, and H. R. Weller, condensation of chloral with the nitroanilines, 1903, A., i, 246.

Wheeler, Alvin Sawyer, See also Hel-

muth Scheibler.

Wheeler, Charles Edwin. See Harold Meakin.

Wheeler, Edward. See Henry Edward Armstrong.

Wheeler, Homer Jay, Burt Laws Hartwell, and G. E. Adams, function of the sodium when used in sodium nitrate, 1905, A., ii, 650.

Wheeler, Homer Jay. See also Burt

Laws Hartwell.

Wheeler, Henry Lord, pyrimidines. XXII. Salts of cytosine, isocytosine, 6-aminopyrimidine, and 6-oxypyrimidine, 1907, A., i, 879.

synthesis of iodogorgonic acid, 1907,

A., i, 929.

pyrimidines. XXIII. Uraciloxylic acid, 1907, A., i, 972. XXIII. Uraeil-4-carb-

Wheeler, Henry Lord, and Alling Prudden Beardsley, action of phenylhydrazine on benzoyl-4-thiocarbamides; 3-amino-1:5-diphenylpyrro-[3-amino-1:5-diphenylaß'-diazole 1:2:4-triazole] derivatives, 1903, A., i, 293.

Wheeler, Henry Lord, and Charles Andrew Brautlecht, hydantoins. II. Aldehyde condensation products of phenylthiohydantoins, 1911, A., i,500.

Wheeler, Henry Lord, Charles Andrew Brautlecht, and Charles Hoffman, iodine derivatives of toluene, 1911, A., i, 27.

Wheeler, Henry Lord, Charles Andrew Brautlecht, Charles Hoffman, and Samuel Ray Scholes, action of iodine on m-toluidine, 1910, A., i, 662.

Wheeler, Henry Lord, and Howard Stanley Bristol, pyrimidines; action of potassium thiocyanate on certain imide chlorides. IX., 1905, A., i, 483.

Wheeler, Henry Lord, Howard Stanley Bristol, Samuel Hopkins Clapp, and Treat Baldwin Johnson, pyrimidines. VIII. Structure of certain derivatives, 1905, A., i, 482.

Wheeler, Henry Lord, and Samuel Hopkins Clapp, halogen amino-acids: 3:5-dibromophenylalanine, 1908.

A., i, 897.

halogen amino-acids; p-iodophenyl-

alanine, 1908, A., i, 981.

Wheeler, Henry Lord, and Charles Hoffman, alkylation of aromatic amino-III. Aminomethylbenzoic acids. acids, 1910, A., i, 666.

[aminoaminomethylbenzoic acids toluic acids], 1911, A., i, 50.

alkylation of aromatic amino-acids. 3-Amino-2:4-dimethylbenzoic acid, 1911, A., i, 446.

hydantoins; synthesis of phenylalanine and of tyrosine. I., 1911,

A., i, 498.

Wheeler, Henry Lord, Charles Hoffman, and Treat Baldwin Johnson, hydantoins. V. Synthesis of 3:5-dichlorotyrosine, 1911, A., i, 923.

Wheeler, Henry Lord, and George Samuel Jamieson, some aldehyde condensation products of aryl-4-thiohy-

dantoins, 1903, A., i, 521.

a class of \u03c4-thiocarbamides described as normal carbamides, 1903, A., i, 751. pyrimidines; 4:6-diamino-2-oxypyrimidine, 1904, A., i, 940.

synthesis of iodogorgonic acid, 1905, A., i, 350.

picrolonates. VII. Guanidines, 1908, A., i, 253.

Wheeler, Henry Lord, and Carl Oscar Johns, pyrimidines. XXVI. Synthesis of cytosine-5-carboxylic acid, 1907, A., i, 1083.

pyrimidines. XXXVI. Synthesis of cytosine-5-carboxylamide, 1908, A.,

halogen-amino-acids. VIII. Position of the iodine atoms in di-iodotyrosine (iodogorgonic acid), 1910, A., i, 114.

alkylation of aromatic amino-acids. II. 5-Iodo-2-aminobenzoic acid and 3:5-di-iodo-2-aminobenzoic 1910, A., i, 381.

Wheeler, Henry Lord, and Carl Oscar Johns, alkylation of aromatic aminoacids. IV. Nitroamino- and iodoamino-acids, 1910, A., i, 842.

Wheeler, Henry Lord, and Treat Baldwin Johnson, cytosine or 6-amino-2oxypyrimidine from tritico-nucleic

acid, 1903, A., i, 526.

syntheses of amino-oxypyrimidines having the composition of cytosine; 2-amino-6-oxypyrimidine and 6amino-2-oxypyrimidine, 1903, A., i,

molecular rearrangement of imino-acid anhydrides, 1903, A., i, 692.

pyrimidine derivatives; 5-methylcytosine, 1904, A., i, 624.

isomerism in the amidine series: diphenylbenzenylaminoamidine phenylbenzenylphenylaminoamidine, 1904, A., i, 628. pyrimidines. IV. A colour test for

uracil and cytosine, 1907, A., ii,

826.

pyrimidines. XLIII. Preparation of 3-methyl- and 3-benzyl-uracil, 1909, A., i, 677.

Pechmann's isomeric hydrazines, 1911,

A., i, 166.

Wheeler, Henry Lord, Treat Baldwin Johnson, and Carl Oscar Johns, pyrimidines: synthesis of uracil-5carboxylic acid, 1907, A., i, 559.

Wheeler, Henry Lord, Treat Baldwin Johnson, and David Ford McFarland, molecular rearrangement of unsymmetrical acylamidines into isomeric symmetrical derivatives, 1903, A., i, 858.

Wheeler, Henry Lord, and Leonard Merritt Liddle, pyrimidines. XXXI. Synthesis of uracil-3-acetic acid,

1908, A., i, 692.

pyrimidines. XXXII. Synthesis of uracil-4-acetic acid, 1908, A., i, 693.

pyrimidines. XL. Thio-derivatives of uracil and the preparation of uracil in quantity, 1909, A., i, 60.

halogen-amino-acids. VI. Iodo-derivatives of p-toluidine; 3:5-di-iodo-4-aminobenzoic acid, 1910, A., i, 17.

VII. Iodine halogen-amino-acids. derivatives of o-toluidine; 3-iodoaminobenzoic acids, 1910, A., i, 19.

Wheeler, Henry Lord, and David Ford McFarland, pyrimidines. XLIV. 1:4-dimethyluracil of Preparation and of the monobenzyl derivatives of 4-methyluracil, 1909, A., i, 677.

Wheeler, Henry Lord, and David Ford McFarland, pyrimidines. XLVII. Action of methyl iodide and of benzyl chloride on 6-methylthiol-4-methyl-2pyrimidone, 1909, A., i, 969.

Wheeler, Henry Lord, David Ford Mc-Farland, and Walter Frederick Storey, pyrimidines. XLIX. Thio-derivatives of thymine and the preparation of

thymine, 1910, A., i, 138.

Wheeler, Henry Lord, and Lafayette Benedict Mendel, the iodine complex in sponges, 1910, A., ii, 143. iodoproteins, 1911, A., i, 97.

Wheeler, Henry Lord, and Henry Franklin Merriam, condensation products of ψ-thiocarbamides; synthesis of uracil, thymine, and similar compounds, 1903, A., i, 524.

Wheeler, Henry Lord, Ben H. Nicolet, and Treat Baldwin Johnson, hydan-VI. Action of acylthioncarbamates, acylthiocarbamates, acyldithiocarbamates, and acylimidodithiocarbonates on a-amino-acids; 2-thiolhydantoin, 1911, A., i, 1031.

Wheeler, Henry Lord, and Johannes Gabriel Statiropoulos, some urazole and iminothiodiazoline derivatives,

1905, A., i, 720.

Wheeler, Lynde Phelps. See Henry Andrews Bumstead.

Wheeler, Plumer. See Gilbert Newton

Wheeler, Richard Vernon. See William Arthur Bone, Maurice John Burgess, and Thomas Fred Eric Rhead.

Wheeler, Sybil May, chemistry of the bacterial cellular proteins, 1909, A.,

i. 979.

Wheeler. IV. F. See Samuel Wilson Parr. Wheelock, Frank Elbert, nature of the ionisation produced by a-rays, 1910, A., ii, 1021.

Wheldale, (Miss) Muricl, nature of anthocyanin, 1909, A., ii, 604. chemical differentiation of species,

1911, A., ii, 760.

direct guaiacum reaction given by plant extracts, 1911, A., ii, 818.

formation of authocyanin, 1912, A., ii,

Wheldale, (Miss) Muriel. See also Maximilian Nierenstein.

Wherry, Edgar T., a new occurrence of

carnotite, 1912, A., ii, 774. Wherry, Edgar T., and William H. Chapin, occurrence of boric acid in

vesuvianite, 1909, A., ii, 57. estimation of boric acid in insoluble

silicates, 1909, A., ii, 92.

Wherry, Edgar T., and Edgar Fahs Smith, use of a rotating anode in the electrolytic precipitation of uranium and molybdenum, 1907, A., ii, 721.

Wherry, Edgar T. See also Carl Boyer. Wherry, William Buchanan, amounts of nitrates and nitrites in Witte-peptone; with special reference to the indole and cholera reaction, 1906, A., ii. 382.

Whetham, William Cecil Dampier. electrical conductivity of solutions at the freezing point of water, 1903, A., ii, 405.

electrical conductivity of dilute solutions of sulphuric acid, 1906, A., ii,

69.

Whetham, William Cecil Dampier, and H. H. Paine, electrolytic properties of dilute solutions of sulphuric acid, 1908, A., ii, 802.

Whiddington, R., electrical behaviour of fluorescing iodine vapour, 1910, A.,

ii, 6.

the production of characteristic Röntgen radiations, 1911, A., ii, 568.

Whipple, George C., and Melville C. Whipple, solubility of oxygen in seawater, 1911, A., ii, 271.

Whipple, Melville C. See George C.

Whipple.

Whitby, George Stafford, pilolite from China, 1910, A., ii, 313. the solubility of sparingly soluble

silver salts, 1910, A., ii, 612.

the detection and estimation of very small quantities of silver, 1910, A., ii. 654.

Whitby, George Stafford. See also Gilbert Thomas Morgan.

Whitcomb, William H. See Arthur

Amos Noyes. White, Alex. D., action of solutions of

bleaching powder and of hypochlorous acid on metals, 1903, A., ii, 296.

White, Alex. D. See also Leonard Dobbin.

White. Alfred Holmes, and Edward DeMille Campbell, improvements in gas analysis apparatus, 1905, A., ii, 607.

White, Alfred Holmes, and L. Kirschbraun, nitrides of zinc, aluminium, and iron, 1906, A., ii, 853.

White, Alfred Holmes, and Wm. Melville, decomposition of ammonia at high temperatures, 1905, A., ii, 384.

White, Albert Simpson. See Frederick

George Donnan.

White, Benjamin. See Lafayette Benedict Mendel.

White, Charles Henry, colorimeter for rapid work with widely varying standards, 1912, A., ii, 597.

White, Charles Powell, so-called fatty degeneration of the suprarenal, 1908.

A., ii, 968.

crystals in tumours, 1908, A., ii, 972. fatty acid combinations with cholesterol, 1909, A., i, 152.

cell-proliferation, 1910, A., ii, 734.

White, Edmund, kino: an investigation of its constituents; the constitution of kino-tannic acid, 1904, A., i, 172. tragacanth and acacia; comparative

viscosity of the simple and mixed mucilages, 1905, A., i, 685.

White, Edward John. See Humphrey Owen Jones.

White, F. S. See John Charles Olsen. White, George Frederic, a new viscometer, 1912, A., ii, 22.

a new viscometer and its application to viscosity measurement of blood and serum, 1912, A., ii, 61.

White, George Frederic, and William Crozier, comparative proteolysis experiments with trypsin, 1912, A., ii,

White, George Frederic, and Harry Clary Jones, effect of temperature and dilution on the conductivity of organic acids in aqueous solution, 1910, A., ii, 13.

conductivity and dissociation of organic acids in aqueous solution at different temperatures, 1910, A., ii,

821.

White, George Frederic, and Adrian Thomas, absorption of metallic salts by fish in their natural habitat. Absorption of copper by Fundulus heteroclitus, 1912, A., ii, 576.

White, George Frederic. See also Eugene C. Bingham, and Donald D. van

Slyke.

White, George R., ferromanganese anodes in solutions of sodium hydroxide, 1906, A., ii, 725.

electrolytic corrosion of some metals, 1912, A., ii, 15.

White, John, some double salts of lead,

1904, A., i, 134. reactions between lead chloride and lead acetate in acetic acid and water

solutions, 1906, A., i, 229. White, John, and John Maurice Nelson, reactions involved in the formation of certain complex salts of lead, 1906, A.,

White, John. See also Emil Joseph Constam.

William Hale, intra-ocular lipæmia and diabetes, 1906, A., ii, 566.

White, Walter P., specific heats of silicates and of platinum, 1909, A., ii. 966.

determination of melting points, 1909,

A., ii, 970.

methods at melting-point temperatures, 1909, A., ii, 970. White, Walter P. See also Eugene

Thomas Allen.

Whitehead, Richard Henry, fat absorption, 1909, A., ii, 498.

Whitehouse, Norman, fixation of nitro-

gen, 1907, A., ii, 680. Whiteley, Edward. See Benjamin Moore. Whiteley, (Miss) Martha Annie, the action of barium hydroxide on dimethylvioluric acid, 1903, T., 18.

the oxime of mesoxamide and some allied compounds. Part II. Di-substituted derivatives, 1903, T., 24.

the oxime of mesoxamide (isonitrosomalonamide) and some allied compounds. Part III. Tetra-substituted derivatives, 1904, P., 92.

1:3-diphenylbarbituric acid and some coloured derivatives: synthesis of 1:3-diphenyluric acid, 1906, P., 200.

studies in the barbituric acid series. I. 1:3-Diphenylbarbituric acid and some coloured derivatives, 1907, T., 1330; P., 180, 203.

liberation of iodine from hydriodic acid by certain halogenated malonyl

derivatives, 1908, P., 288.

Whiteley, (Miss) Martha Annie, and Harold Mountain, studies in barbituric acid series. Part II. 1:3-Diphenyl-2-thiobarbituric acid some coloured derivatives, 1909, P.,

Whitfeild, Bernard Wyndham. See

Samuel Shrowder Pickles.

Whitley, Edward, effect of acid and alkali and certain indicators in arresting or otherwise influencing the development of the eggs of Pleuronectes platessa and Echinus esculentus, 1906, A., ii, 180.

Whitley, Edward. See also Edward S. Edie, and Benjamin Moore.

Whitlock, Herbert . P., minerals from Lyon Mountain, Clinton Co., New York, 1907, A., ii, 629.

Whitman, H. A. See Percy Hargraves

Walker.

Whitman, W. G., and Henry Clapp Sherman, effect of pasteurisation on the development of ammonia in milk, 1908, A., ii, 881.

Whitman, W. G. See also Henry Clarp Sherman.

Whitney, David D., the relative toxicity of methyl and ethyl alcohols as determined by the rate of reproduction in Hydatina senta, 1912, A., ii, 968.

Whitney, J. B. See Samuel Auchmuty Tucker.

Whitney, James Lyman. See Wilhelm Falta.

Whitney, Willis Rodney, electrolysis of water, 1903, A., ii, 406.

corrosion of iron, 1903, A., ii, 430.
Whitney, Willis Rodney, and John Charles Blake, migration of colloids, 1904, A., ii, 809.

Whitney, Willis Rodney, and Arthur C. Melcher, ammonio-silver compounds in solution, 1903, A., ii, 290.

Whitney, Willis Rodney, and Alonzo Straw, suspensions in dilute alkaline solutions, 1907, A., ii, 443.

Whitson, A. R., and Charles IV. Stoddart, soil acidity in its relation to lack of available phosphates, 1907, A., ii, 573.

Whitson, A. R., F. J. Wells, and A. Vivian, influence of the soil on the protein contents of crops, 1906, A., ii, 47.

Whitson, A. R. See also Franklin Hiram King.

Whittaker, Edmund Taylor, theory of

capillarity, 1908, A., ii, 817.
Whittelsey, Theodor, new occurrence of l-camphor, 1910, A., i, 184.

Whittemore, Charles F., and Charles James, quantitative estimation of

yttrium, 1912, A., ii, 690.
Whittemore, Charles F. See also Charles James, and Charles Lathrop Parsons.

Whitteridge, Percy. See Alfred Chaston

Chapman.

Whittier, A. C., estimation of inorganic phosphorus in animal tissues, 1912, A., ii, 90.

Whymper, Robert, studies of the processes operative in solutions. III. The sucroclastic action of nitric acid as influenced by nitrates, 1907. A., ii, 849.

Whymper, Robert. See also Robert John Caldwell.

Whytlaw-Gray, Robert, the density of nitrie oxide, 1903, P., 66.

the atomic weight of nitrogen, 1905, T., 1601; P., 156.

a possible source of error in Stas' nitrogen ratios, 1906, T., 1173; P.,

the density of hydrogen chloride, 1907, P., 119.

Whytlaw-Gray, Robert, and Frank Playfair Burt, the relative atomic weights of hydrogen and chlorine, 1908, P., 215.

the atomic weight of chlorine, 1909,

T., 1633; P., 216.

Whytlaw-Gray, Robert, and (Sir) William Ramsay, some physical properties of radium emanation, 1909, T., 1073; P., 161; discussion, P., 162.

liquid and solid radium emanation,

1909, P., 82.

the half-life period of radium; a correction, 1910, T., 185; P., 25.

the density of niton (radium emanation) and the disintegration theory, 1911, A., ii, 173.

atomic weight of radium, 1912, A., ii,

413.

Whytlaw-Gray, Robert. See also Frank Plaufair Burt, Hubert Stafford Patterson, and (Sir) William Ramsay.

Wibaut, Johan Pieter, equilibrium in the system: ammonium sulphate, ammonium chloride, ethyl alcohol, and water, 1909, A., ii, 558.

Wibaut, Johan Pieter. See also Arnold Frederik Holleman, and Andreas Smits.

Wichelhaus, [Karl] Hermann, derivatives of β-naphthalene-indigotin, 1903, A., i, 632.

action of phosphorus on carbon compounds. I., 1903, A., i, 818; 1905, A., i, 432.

molecular weight of indigotin, 1906,

A., i, 901.

sulphur dyes. II., 1910, A., i, 868.
Wichelhaus, Hermann, and Walter
Vieweg, cellulose, 1907, A., i,
186.

sulphur dyes, 1907, A., i, 232.

Wichern, G. See Wilhelm Meigen.

Wichern, Heinrich, estimation of the reducing power of bacteria and animal organs, 1908, A., ii, 1063.

Wichern, Heinrich. See also Georg Lockemann.

Wichers, (Jonkheer) Louis, and Bernhard
Tollens, constituents of asparagus,
1910, A., ii, 885.

carbohydrates of asparagus, 1910, A., ii, 886.

the pentosan content of various fungi, 1911, A., ii, 63.

Wichers, (Jonkheer) Louis. See also

Siegfried Seydel.

Wichmann, Alexis, simplified method for the estimation of the acid and saponification number of waxes, 1911, A., ii, 550.

Wichmann, Arthur, resin balsam of Pinus cambodgiana, 1912, A., i, 883.

Wichrowski, Caesar. See Stefan von Niementowski.

Wick, Frances G., spectrophotometric investigations on the absorption and fluorescence of resordin, 1907, A., ii, 834.

fluorescence absorption in resorufin, 1907, A., ii, 835.

Wickdorff, H. Hess von, pickeringite from Thuringia, 1912, A., ii, 266. Wicke, G. See Albin Köhler.

Wickersheimer, E., new laws of tonometry which can be deduced from Raoult's experiments, 1903, A., ii, 634.

Widakowich, Viktor. See Felix Reach. Widal, F., and Adolphe Javal, variations in the permeability of the kidney for sedium chloride in the course of Bright's disease, 1904. A., ii, 194.

Widdows, (Miss) Sibyl Taite. See

William Hobson Mills.

Widemann, Max, apparatus for the estimation of carbon in iron, 1908, A., ii, 984.

replacement of the platinum capillaries in the estimation of carbon in iron by the chromic acid method, 1909, A., ii, 1053.

Widman, Oskar, usnic acid, 1903, A., i, 96.

constitution of the so-called halogendiphenacyls, 1909, A., i, 822.

cinnoline compounds, 1909, A., i, 970. α-acylated phenylhydrazines, 1910, A., i, 777.

Widman, Oskar, and Erik J. Virgin, attempts to convert oxalyldiaceto-phenone and other oxalyl compounds into hexaketones, 1909, A., i, 656.

Widman, Oskar, and Erik Wahlberg. cyanopinacolin and some compounds derived from it, 1911, A., i, 702.

Widman, Ragnar, the ammonia compounds of mercuric bromide, 1910, A., ii, 852.

Widmann, Karl Th. See Julius Schmidt.
Widmark, Erik Matteo Prochet, the
chemical conditions necessary for the
maintenance of the normal cell
structure. I, and II., 1911, A., ii, 56.

Widmer, Albert. See Stanislaus von Kostanecki.

Widmer, Max. See Siegmund Reich. Widmer, Robert. See Adolf Kaufmann.

Widnmann, Eduard. See Andreas Lipp. Widtsoe, John Andreas, influence of soil moisture on the composition of certain plant parts, 1904, A., ii, 285. Wiebe, Hermann Friedrich, relation between the melting point and the coefficient of expansion of the solid elements, 1906, A., ii, 331.

Wiebelitz, H., estimation of morphine

in opium, 1912, A., ii, 106.

Wiechmann, Ferdinand Gerhard, a source of error still remaining in optical sugar analysis, 1903, A., ii, 699.

estimation of sucrose and reducing sugars in liquid sugar products,

1907, A., ii, 407.

Wiechowski, Siegfried, condensation of naphthalaldehydic acid with mtolyl methyl ketone, pinacolin, and acenaphthenone, 1905, A., i, 707. simple apparatus for layering two

miscible liquids of different densi-

ties, 1912, A., ii, 1140.

Wiechowski, Wilhelm, contractility of intracranial vessels, 1905, A., ii, 401.

hippuric acid synthesis, 1905, A., ii,

846.

chemical and biological investigation of surviving organs, 1907, A., ii, 283. the products of fermentative uric acid

decomposition in animal organs, 1907, A., ii, 284.

the importance of allantoin in uric acid metabolism, 1908, A., ii, 119. the decomposition of uric acid in the

human body, 1909, A., ii, 329. allantoin in normal urine and its

metabolic significance, 1909, A., ii,

the fate of the intermediate uric acid in human metabolism, and the allantoin content of human urine; the recognition and stability of allantoin, 1910, A., ii, 634.

Wiechowski, Wilhelm, and Wiener, the uricolytic ferment of oxkidney and dog's liver, 1907, A., ii,

Wiechowski, Wilhelm., See also Erich von Knaffl-Lenz.

Wiedemann, Alfred. See Max Scholtz. Wiedemann, [Ernst] Eilhard [Gustav], history of alchemy, 1912, A., ii, 547.

Wiedemann, Eilhard, K. Stelzner, and G. Niederschulte, vapour pressure of some solids, 1906, A., ii, 9.

Wiedemann, H. K. See Efim Semen

London.

Wiedmann, Gebhard, the arc spectrum of mercury in the visible and red regions, 1912, A., ii, 877.

Wiegand, Gustav. See Conrad Will-

gerodt.

Wiegand, Otto, and Martin Lehmann. estimation of cineole (eucalyptol) in encalyptus oils, 1908, A., ii, 233, Wiegandt, Friedrich. See Carl Hell.

Wiegner, Georg (Göttingen), estimation of nitrogen by Kjeldahl's method, especially in milk, 1909, A., ii, 517.

emulsion colloids (emulsoids) and observations on the methods of counting ultra-microscopic particles, 1911, A., ii, 194.

ultra-microscopic investigations of certain colloids coagulated by elec-

trolytes, 1911, A., ii, 591.

exchange of bases in the soil, 1912,

A., ii, 677, 981.

Wiegner, Georg, and Frerik Burmeister. the adsorption of sugar in aqueous solution, 1911, A., ii, 259.

Wiegner, Georg (Göttingen). See also Fleischmann, Wolfgang Wilhelm Heubner, and S. Graf Rostworowski. Wiegner, Georg (Leipzig). See Arthur

Hantzsch, and Heinrich Ley.

Wiekmann, W., behaviour of ammonium cyanide with ketones of the series, $CO(C_nH_{2n,7})_2$, 1906, A., i, 433.

Wieland, Heinrich, action of nitrogen peroxide on organo-magnesium compounds, 1903, A., i, 685.

so-called styrene nitrosites; preparation of hyponitrous acid, 1903, A., i. 690.

additive reactions with nitrous gases, 1903, A., i, 764.

reduction of benzylidene-a-nitroacetophenone, 1903, A., i, 836.

formation of a 1:2-dioxime by addition of N₂O₃ to a carbon double linking, 1903, A., i, 837.

preparation of hyponitrous acid, 1903, A., ii, 592.

pseudonitrosites, 1904, A., i, 54, 415. aromatic ketones, 1904, A., i, 432. p-nitrodibenzovlmethane, 1904, A., i, 432.

action of cyanogen bromide on hydroxylamine, 1904, A., i, 628;

1905, A., i, 420.

dicyclopentadienes. I., 1906, A., i, 417. new synthesis of fulminic acid: the formation of fulminic acid from alcohol and nitric acid, 1907, A., i, 196.

acethydroxamic chloride, 1907, A., i, 492.

aliphatic azo- and nitroso-compounds, I. Constitution of azaurolic acids. II. Ethylnitrosolic and ethylhydroxyazaurolic acids, 1907, A., i, 494.

WIEL

Wieland, Heinrich, tertiary aromatic hydrazines and amines. III., 1907, A., i, 1076.

decomposition of tetra-arylhydrazines.

IV., 1908, A., i, 1014.

aromatic tetrazens. V., 1908, A., i, 1026.

fulminic acid. II. Two new methods of preparation of fulminic acid,

1909, A., i, 215.

nitrile oxides. II., 1909, A., i, 216. nitrile oxides. III. The salts of Graul and Hantzsch's leuconitrolic acid, 1909, A., i, 217.

hydrazine derivatives of triphenylmethane; constitution of triphenyl-

methyl, 1909, A., i, 836.

hydrazide-oximes, 1909, A., i, 884.

fulminic acid. IV. Action of halogens on mercury fulminate, 1909,

A., i, 892.

nitrile oxides. IV. Relations of nitrile oxides to the reactions of Hofmann and Curtius, 1909, A., i, 923.

formation of fulminic acid from alcohol, 1911, A., i, 23.

triphenylmethyl peroxide; the chemistry of free radicles, 1911, A., i, 851.

hydrogenation and dehydrogenation,

1912, A., i, 247.

ditertiary hydrazines and bivalent nitrogen, 1912, A., i, 902.

mechanism of oxidation processes,

1912, A., i, 944.

observations on the hydrogenation of aromatic compounds, 1912, A., i, 956.

the catalytic change of sulphur dioxide into sulphuric acid, 1912, A., ii, 343. combustion of earbon monoxide, 1912, A., ii, 347.

Wieland, Heinrich, and Hugo Bauer, benzenylnitrosolic acid, 1906, A., i, 412.

cyanogen bromide and hydroxylamine. III., 1907, A., i, 491.

nitrile oxides, 1907, A., i, 527.

Wieland, Heinrich, and Artur Baumann, fulminic acid. VI. Polymeric fulminic acids, 1912, A., i, 838.

Wieland, Heinrich, and Siegfried Bloch, action of nitrous gases on 1:3-diketones, 1904, A., i, 596.

dibenzoyldiazomethane, 1904, A., i, 656.

ψ-nitrosites of unsaturated ketones, 1905, A., i, 706.

diazotation of dibenzoylmethane, 1906, A., i, 466.

Wieland, Heinrich, and Hans Fressel, experiments on the preparation of derivatives of hydroxyhydrazines, 1911, A., i, 495.

aromatic hydrazines. XI. Dissociation of tetrazens, 1912, A., i, 903.

Wieland, Heinrich, and Stefan Gambarjan, oxidation of diphenylamine, 1906, A., i, 453.

substituted diphenylhydroxylamines,

1906, A., i, 830.

Wieland, Heinrich, and Erwin Gmelin, indigotin group, 1908, A., i, 1013. furoxans. III. Behaviour of ethyl

furoxans. III. Behaviour of ethyl furoxandicarboxylate towards ammonia and amines, 1909, A., i, 610.

Wieland, Heinrich, Erwin Gmelin, and Alexander Roseeu, furoxans. IV. Action of amines on dibenzoylfuroxan,

1910, A., i, 784.

Wieland, Heinrich, and Hermann Hess, fulminic acid. III. Polymerisation of fulminic acid, 1909, A., i, 369.

methylnitrosolic acid and allied com-

pounds, 1909, A., i, 882.

Wieland, Heinrich, and Paul Kappelmeier, morphine. I., 1911, A., i, 748.

Wieland, Heinrich, and Hans Lecher, aromatic hydrazines. IX. Tetraphenylhydrazine and hexaphenylethane, 1911, A., i, 569.

aromatic hydrazines. XII. Dissociation of tetra-arylhydrazines and of diarylnitrosoamines, 1912, A., i,

904.

ditertiary hydrazines. XV. Tetraanisylhydrazine, 1912, A., i, 907.

Wieland, Heinrich, and Alexander Roseeu, the stability of the nitrogen linking in ketazines, 1911, A., i, 571.

diphenylhydroxylamine, 1912, A., i, 253.

Wieland, Heinrich, Alexander Roseeu, and Stefan Gambarjan, aromatic hydrazines. XIV. Nitration of tetraphenylhydrazine; cyanoarylhydroxylamines, 1912, A., i, 906.

Wieland, Heinrich, and Leopold Semper, phenylnitrolic acid, 1906, A., i, 643. constitution of the glyoxime perox

ides, 1908, A., i, 108.

Wieland, Heinrich, Leopold Semper, and Erwin Gmelin, furoxans. II. Degradation of ethyl furoxandicarboxylate (ethyl glyoximeperoxide-dicarboxylate), 1909, A., i, 609.

Wieland, Heinrich, and Hans Stenzl, phenylisocrotophenone, 1908, A., i, 35.

Wieland, Heinrich, and Hans Stenzl, addition of the higher oxides doubly unsaturated hydrocarbons; a new case of addition in the 1:4-position. 1908, A., i, 517.

Wieland, Heinrich, and Arthur Süsser, aromatic hydrazines. X. Tetradiphenyl-

hydrazine, 1911, A., i, 570.

Wieland, Heinrich, Arthur Süsser, and Hans Fressel, aromatic hydrazines. XIII. Some new ditertiary hydrazines and tetrazens of the aromatic series,

1912, A., i, 905.

Wieland, Heinrich, and Ernst Wecker. coloured additive products of aromatic amines; the question of the mechanism of substitution in the benzene nucleus. VII., 1910, A., i,

oxidation of p-anisidine and of dimethyl-p-anisidine, 1910, A., i, 243. aromatic hydrazines. VIII. Oxida-

tion of diphenylhydrazine, 1911, A., i. 82.

Wieland, Heinrich, and Friedrich Josef Weil, cholic acid. I., 1912, A., i, 830.

Wieland, Heinrich. See also Kurt Hein-

rich Meyer.

Wieland, Hermann, etiology of beri-beri. I. The phosphorus content of animals ill from nutrition defects, 1912, A., ii,

Wielen, Pieter van der, estimation of narcotine and codeine in opium,

1903, A., ii, 519.

peppermint oil from Java, 1905, A., i, 223.

estimation of morphine, narcotine, and codeine in opium and its galenical preparations, 1910, A., ii, 558.

Wieler, Arwed, action of sulphur dioxide on plants, 1903, A., ii, 324;

1908, A., ii, 887.

Wielowieyski, Jan. See Carl Adam Bischoff.

Wiemers, Franz, osmosis of the alkali

haloids, 1909, A., ii, 126. Wien, Max, influence of the metal of the spark gap on the frequency of electrical vibrations, 1910, A., ii,

Wien, Wilhelm, positive rays, 1908, A., ii, 1006; 1912, A., ii, 1031.

positive rays of mercury, 1909, A., ii, 956.

positive and negative ions in canalrays of hydrogen, oxygen, and nitrogen, 1910, A., ii, 475. Wieneke, Leo. See Hermann Gross-

mann.

Wiener, Hugo, density of ammonium sulphate solutions, 1911, A., ii. 394.

estimations of globulin by means of ammonium sulphate, and the preparation of pure globulins, 1911, A., ii, 1144.

Wiener, Hugo. See also Wilhelm

Wiechowski.

Wiener, Joseph. See Karl Bernhard Lehmann.

Wiener, Karl, the existence of a proteolytic ferment and the detection of amino-acids in exudates, 1912, A., ii.

Wiener, Karl. See also Efim Semen London, and Alfred Schittenhelm.

Wiener, Otto, the theory of refraction constants, 1911, A., ii, 557.

Wienhaus, Heinrich. See Otto Wallach. Wienhaus, Otto, the biochemistry of

plasin, 1909, A., ii, 682. Wiesel, Rudolf. See Otto Warburg. Wiesemann, C. See Adolf Beythien.

Wiesler, Arthur, estimation of dextrose

in urine, 1906, A., ii, 810. Wiesner, Franz. See Leo Liebermann.

Wiesner, J. von, chemical constitution of the latex of Euphorbia species: relation between chemical constitution and systematic classification of plants, 1912, A., ii, 674.

Wigand, Albert, specific heat and specific gravity of allotropic modifications of solid elements, 1907, A., ii, 70.

variation with temperature of the specific heat of solid elements, 1907, A., ii, 70.

Dulong and Petit's law, 1908, A.,

ii, 13.

statics and kinetics of the transition which occurs in liquid sulphur; heat of fusion of monoclinic sulphur, 1908, A., ii, 677.

electrical conductivity of liquid sulphur, 1908, A., ii, 800.

statics of liquid sulphur in the dark and under the influence of light, 1909, A., ii, 228.

solidification of fused sulphur, 1910, A., ii, 602.

solubility of "insoluble" sulphur (Su), 1910, A., ii, 1055.

reversible light reaction of sulphur. 1911, A., ii, 878, 1084.

Wigdorow, S. See Gustav Jantsch.

Wigger, Otto, character of a- and y-rays, 1906, A., ii, 139.

Wigger, Otto. See also Eduard Ricke. Wiggers, Carl J., action of adrenaline on cerebral vessels, 1905, A., ii, 846.

Wiggers, Carl J., action of drugs on cerebral vessels, 1907, A., ii, 901.

Wiggin, John David. See Marston Taylor Bogert.

Wigham, Joseph Theodore, agglutinin test in tuberculosis, 1906, A., ii, 296. Wigham, Joseph Theodore. See also Henry H. Dixon.

Wightman, E. P., and Harry Clary Jones, conductivity and dissociation of organic acids in aqueous solution between 0° and 35°, 1911, A., ii, 689.

conductivity and dissociation certain organic acids at 35°, 50°, and 65°, 1912, A., ii, 1035.

Wigner, John Harrison, nitrates of mannitol and dulcitol, 1903, A., i, 394.

Wijk. See Wyk. Wijs. See Wys.

Wikander, E. Hjalmar. See Conrad

Willgerodt.

Wilcke, Karl. See Conrad Willgerodt. Wilcox, Burton B. See William Maurice Dehn.

Wilcox, Caroline, fruits of Ilicioides mucronata, 1910, A., ii, 441.

Wilcox, Wendell G., validity of Faraday's law at low temperatures, 1909, A., ii, 540.

osmotic phenomena, 1910, A., ii, 623. Wilcox, Wendell G. See also Ebenezer

Henry Archibald.

Wild, Alfred. See Louis Pelet-Jolivet. Wild, Wilhelm, determination of the atomic weight of rare earths, 1904, A., ii, 173.

estimation of cyanates in the presence of cyanides, 1906, A., ii, 405.

Wilde, Henry, some points of chemical philosophy involved in the discovery of radium and the properties of its compounds, 1907, A., ii, 149. the atomic weight of radium, 1908, A., ii, 141.

atomic weight of radium and other elementary substances, 1908, A., ii,

Wilde, P. de, gold in sea water, 1905, A., ii, 532.

Wilderman, Meyer, velocity of reaction before complete equilibrium and the point of transition are reached, etc. III., 1903, A., ii, 13.

relation between freezing points, boiling points, and solubility, 1903, A.,

ii, 267.

influence of non-electrolytes and electrolytes on the degree of dissociation, 1904, A., ii, 232.

Wilderman, Meyer, galvanie cells produced by the action of light, 1905, A., ii, 499.

galvanic cells produced by the action of light. II. Chemical statics and dynamics of reversible and irreversible systems under the influence of light, 1906, A., ii, 325.

velocity of molecular and chemical reactions in heterogeneous systems.

I., 1909, A., ii, 556.

Wilderman, Meyer. See also Robert Ludwig Mond.

Wildi, S. See Eugen Bamberger. Wildt, Edwin. See Georg Frerichs. Wildt, J. C. de Ruyter de. See Ruyter de Wildt.

Wilenko, G. G., the action of intravenous injections of concentrated solutions of sugar and salt, 1911, A., ii, 1015.

the influence of adrenaline on the respiratory quotient and its mode of

action, 1912, A., ii, 789.

Wilenko, G. G., and Sigmund Moty-lewski, action of sodium and amyl alcohol on cholesterol, 1909, A., i, 228. Wilenko, G. G. See also Hans Schiro-

kauer.

Wiley, Harvey Washington, disappearance of reducing sugar in sugar-cane, 1903, A., ii, 747.

excretion of boric acid from the human

body, 1907, A., ii, 493.

Wilfarth, Hermann, Hermann Römer, and Gustav Wimmer, assimilation by plants during different periods of growth, 1906, A., ii, 44.

destruction of nematodes by treating the soil with carbon disulphide, and its effect on sugar beet, 1906, A., ii,

485.

Wilfarth, Hermann, and Gustav Wimmer, effect of deficiency of nitrogen, phosphoric acid, and potassium on plants, 1903, A., ii, 506.

influence of mineral manure on fixation of nitrogen by lower organisms in soil, 1907, A., ii, 809.

Wilfarth, Hermann. See also Gustav Wimmer.

Wilhelmi, Arthur, apparatus for the estimation of sulphur and carbon with single or double receiver, 1906, A., ii, 390.

exact gas analysis, 1911, A., ii, 652. Wilhelmj, A., pectins, 1909, A., i, 768. Wilhelms, Otto. See Wilhelm Manchot.

Wilhelmy, Gerrit. See Arnold Frederik Holleman.

Wilhoit, A. D. See George Bell Frankforter.

- Wilk, Leopold. See Viktor Zailer.
- Wilke, Ernst. See Georg Bredig.
- Wilke, K. See Oscar Piloty.
- Wilke, Richard. See Daniel Vorländer. Wilke-Dörfurt, Ernst, so-called amorphous silicon, 1910, A., ii,
 - phous silicon, 1910, A., ii, 204.

 a spectroscopic method for the estima-
 - a spectroscopic method for the estimation of small quantities of rubidium in presence of much potassium, 1912, A., ii, 686.
 - estimation of potassium in potassium silicate, 1912, A., ii, 1211.
- Wilke-Dörfurt, Ernst, and Gerhard Heyne, double salts of rubidium and cæsium chlorides with ferrous chloride, 1912, A., ii, 554.
- Wilke-Dörfurt, Ernst. See also Wilhelm Biltz, and Richard Zsigmondy.
- Wilkening, L. See Hermann Ost.
- Wilkie, John Matthew, volumetric estimation of phosphoric acid, monoalkali and di-alkali phosphates, 1909, A., ii, 266.
 - colorimetic estimation of lead in the presence of iron; preparation of lead-free reagents by means of ferric hydroxide, 1909, A., ii, 703.
 - [modification of] Ronchèse's method of estimating ammonia, 1910, A., ii,
 - estimation of phosphoric acid by means of standard silver nitrate, 1910, A., ii, 752.
 - analysis of commercial phosphates, 1910, A., ii, 753.
 - the action of iodine on phenols and its application to their volumetric estimation. I. Phenol, salicylic acid, \$\beta\$-naphthol, 1911, \$\Lambda\$., ii, 546.
 - a sensitive test for the detection of phenol and salicylic acid, 1911, A., ii, 547.
 - the action of iodine on phenols. II.

 The catalytic decomposition of triiodophenol, 1912, A., i, 346.
- Wilkinson, John Anderson, phosphorescence of some inorganic salts, 1910, A., ii, 5.
- Wilkinson, John Anderson, and Horace Wadsworth Gillett, polarisation voltages of silver nitrate solutions, 1907, A., ii, 598.
- Wilkinson, W. Percy, and Ernest R. C.

 Peters, a new reaction for distinguishing between heated and
 unheated milk and for the detection
 of hydrogen peroxide in milk, 1908,
 A., ii, 907.
 - detection of hydrogen peroxide in milk, 1908, A., ii, 1069.

- Wilks, William Arthur Reginald, double fluorides of sodium, 1909, A., ii,
 - the absorption of bromine by lime, 1910, A., ii, 1063.
 - the absorption of the halogens by dry slaked line, 1911, P., 308; 1912, T. 366
- T., 366.

 Wilks, William Arthur Reginald. See also Henry John Horstman Fenton.
- Will, Hermann, length of life of dried yeasts, 1904, A., ii, 581.
- Will, Hermann, and F. Schöllhorn, production of hydrogen sulphide by yeast, 1905, A., ii, 547.
- Will, [Carl] Wilhelm, progress of the technology of explosives since the development of organic chemistry, 1904, A., i, 227.
- Will, Wilhelm, Haanen, and Stöhrer, glyceryl nitrates, 1908, A., i, 384.
- Willaman, J. J. See Edwin Bret Hart. Willanen, K., the source of thiocyanate in the organism, 1906, A., ii, 784.
 - behaviour of ovo-mucoid in the organism, 1907, A., ii, 39.
- Willard, Hobart Hurd, preparation of perchloric acid, 1912, A., ii, 1163.
- Willard, Hobart Hurd. See also Theodore William Richards.
- Willcock, (Miss) Edith Gertrude, note on the influence of certain salts and organic substances on the oxidation of guaiacum, 1904, P., 197.
 - action of radium on simple animals, 1904, A., ii, 197.
 - action of radium rays on tyrosinase, 1906, A., i, 548.
 - crystalline egg-albumin, 1908, A., i,
- Willcock, (Miss) Edith Gertrude, and William Bate Hardy, presence of phosphorus in crystalline egg-albumin, 1907, A., i, 366.
- Willcock, (Miss) Edith Gertrude, and Frederick Gowland Hopkins, importance of individual annino-acids in metabolism; addition of trytophan to zein, 1907, A., ii, 109.
- Willcock, (Miss) Edith Gertrude. See also William Bate Hardy.
- Willeox, Oswin Willy, reactions of ethyl chlorosulphonate, 1905, A., i, 45.
 - reactions between acid chlorides and potassium ethylxanthate, 1906, A., 1, 726.
 - decomposition curves of some nitrocelluloses of American manufacture, 1908, A., i, 606.
- Willcox, Oswin Willy. See also Solomon Farley Acree.

Willcox, William Henry, examination of gastric contents, 1905, A., ii, 837.

Willem, V. See A. Miele.

Willen, Louis, detection of dextrose in urine in presence of mercury, 1906, A., ii, 810.

Willers, Fr. A. See Emil Bose.

Willert, Walter. See August Michaelis.

Willett, (Miss) Winifred Isabel. See John Theodore Hewitt.

Willey, Ogden G. See Allen P. Ford.
Willgerodt, [Heinrich] Conrad [Christoph], derivation of organic multivalent iodine compounds from existing or hypothetical inorganic iodine compounds, 1904, A., ii, 23.

three lecture experiments on the preparation of iodochlorides and iodoxy- and iodonium compounds,

1908, A., i, 408.

preparation of acids and amides by the action of ammonium sulphide on aliphatic aromatic ketones, 1909, A., i, 716.

Willgerodt, Conrad, and Bruno Albert, acylated phenanthrenes and some of their derivatives, 1911, A., i,

882.

Willgerodt, Conrad, and Willy Bergdolt, derivatives of p-iodoethylbenzene containing multivalent iodine, 1903, A., i, 745.

Willgerodt, Conrad, and Mathias Böllert, derivatives of 1:3-dichloro-4-iodobenzene with a multivalent iodine

atom, 1910, A., i, 827.

Willgerodt, Conrad, and Hans Bogel, di-p-benzaldehydeiodonium hydroxide and its derivatives, 1905, A., i, 901.

p-iodobenzaldehyde, p-iodobenzophenone, and derivatives of the latter containing multivalent iodine, 1905,

A., i, 901.

Willgerodt, Conrad, and Louis Brandt, iodoso-, iodoxy-, and iodinium-compounds of 4-iodo-1-methyl-3-ethylbenzene, 1904, A., i, 657.

Willgerodt, Conrad, and Karl Burkhard, iodoketones and their derivatives with uni- and with multi-valent iodine,

1912, A., i, 630.

Willgerodt, Conrad, and Alfred Desaga, derivatives of m-di-iodobenzene with multivalent iodine, 1904, A., i, 483.

Willgerodt, Conrad, and Paul Frischmuth, derivatives of iodoquinolines with multivalent iodine, 1905, A., i, 547. Willgerodt, Conrad, Paul Frischmuth, Albert Landenberger, and Reinhold Thiele, derivatives of p-dichloro-, pdibromo-, and v-m-dibromo-iodobenzenes with imultivalent iodine, 1905, A., i, 580.

Willgerodt, Conrad, and Rudolf Gartner, derivatives of 2-iodo-p-toluidine and 2-iodo-4-nitrobenzoic acid containing uni- and ter-valent iodine, 1908, A., i.

876.

Willgerodt, Conrad, and Wilhelm Hambrecht, preparation of acids and amides from phenyl alkyl ketones by means of yellow ammonium sulphide, 1910, A., i, 117.

Willgerodt, Conrad, and Hans Harter, p-ethylphenylhydrazine, and picryland op-dinitrophenyl-p-ethylphenylhydrazines and their derivatives, 1905,

A., i, 551.

Willgerodt, Conrad, and Franz Herzog, picryl-, op-dinitrophenyl-, and 5chloro-2-nitrophenyl-2:4:5-trimethylphenylhydrazines and their derivatives,

1905, A., i, 549.

Willgerodt, Conrad, and Karl Heusner, derivatives of p-iododiphenyliodinium chloride and of iodoaceto-o-toluidide containing multivalent iodine; preparation of chloroacylamines containing iodine, 1907, A., i, 1026.

Willgerodt, Conrad, and Gustav Hilgenberg, derivatives of 4:4'-di-iododiphenyl with multivalent iodine and the iodination of diphenyl, 1909, A., i, 908.

Willgerodt, Conrad, and Max Jahn, 6iodo-1-methyl-3-ethylbenzene and its derivatives containing multivalent iodine, 1912, A., i, 21.

Willgerodt, Conrad, and Max Klinger, iodothio-ethers, iodo-sulphones, iodo-sulphonic esters, and their derivatives with multivalent iodine, 1912, A., i, 255.

Willgerodt, Conrad, and B. R. Kok, derivatives of 2-iodo-4-nitrotoluene with multivalent iodine, 1908, A., i, 620.

Willgerodt, Conrad, and Paul Lewino, derivatives of 4'.iodo-2:3'-dimethylazo-benzene and of m-bromoiodobenzene with multivalent iodine, 1904, A., i, 635.

Willgerodt, Conrad, and Willy Lindenberg, p-xylylhydrazine, and picryl-, op-dinitrophenyl-, and 5-chloro-2-nitrophenyl-p-xylylhydrazines, 1905, A., i, 550.

Willgerodt, Conrad, and Francesco Maffezzoli, anthraquinone-2;3-dicarboxylic anhydride, 1910, A., i, 678. Willgerodt, Conrad, and Franz Hubert Merk, preparation of acids and amides from phenyl alkyl ketones by means of yellow ammonium sulphide, 1909, A., i, 716.

Willgerodt, Conrad, and Robert Meyer, 5-iodo-\(\psi\)-cumene and its derivatives.

1912, A., i, 22.

Willgerodt, Conrad, and Walter Nägeli. derivatives of p-iodoacetanilide containing multivalent iodine, and paminodiphenyliodinium compounds, 1907, A., i, 1025.

Willgerodt, Conrad, and Max Plocksties, iodosulphones and their derivatives with multivalent iodine, 1912, A. i. 256.

Willgerodt, Conrad, and Reinhold Ricke. derivatives of the iodobenzaldehydes containing uni- and ter-valent iodine. 1905, A., i, 442.

Conrad. and Willgerodt, Schloss, o. and m-iodo-p-tolyl methyl ether and derivatives with multivalent

iodine, 1911, A., i, 715.

Conrad, and Friedrich Willgerodt, Schmierer, iodoso-, iodoxy-, and iodonium compounds from s-iodo-

xylene, 1905, A., i, 425.

Willgerodt, Conrad, and Theodor Scholtz, preparation of hydrocarbons. acids, amides, and thiophens by the action of ammonium sulphide on fatty aromatic ketones, 1910, A., i, 392.

Willgerodt, Conrad, and Paul Scherl. derivatives of p-iodopropylbenzene containing multivalent iodine, 1903,

A., i, 746.

Willgerodt, Conrad, and Max Simonis, ortho-substituted iodo-compounds with uni- and multi-valent iodine, 1906, A., i, 155.

Willgerodt, Conrad, and George McPhail Smith, derivatives of p-iodoazobenzene and m-chloroiodobenzene with multivalent iodine, 1904, A., i, 485.

Willgerodt, Conrad, and Alexis Ucke, p-iodobenzaldehyde and derivatives with uni- and multi-valent iodine,

1912, A., i, 774.

Willgerodt, Conrad, and Theodor Umbach, derivatives of m-iodotoluene containing multivalent iodine, 1903, A., i, 743.

Willgerodt, Conrad, and Gustav Wiegand, derivatives of aromatic p-monoiodophenyl ethers with multivalent

iodine, 1909, A., i, 912.

Willgerodt, Conrad, and E. Hjalmar Wikander, derivatives of m-iodonitrobenzene, m-iodoaniline, and m-iodoacetanilide containing multivalent iodine, 1907, A., i, 1024.

Willgerodt, Conrad, and Karl Wilcke. limits of activity of chloromonoiodobenzenes with regard to the formation of compounds with multivalent iodine, 1910, A., i, 828.

Willheim, Robert, See Fritz Ober-

mayer.

Williams, Charles B., estimation of total phosphoric acid and potassium in soils, 1903, A., ii, 511.

Williams, Charles B. See also Jumes Marion Pickel.

Williams, Charles Hanson Greville, obituary notice of, 1911, T., 606.

Williams, Elrick. See William Maurice Dehn.

Williams, F. M., modified Westphal balance for solids and liquids, 1906, A., ii, 277.

Williams, Gwilym. See John Joseph

Sudborough.

Williams, Horatio B., animal calorimetry. I. A small respiration calorimeter, 1912, A., ii, 1184.

Williams, Horatio B., J. A. Riche, and Graham Lusk, the hourly chemical and energy transformations in the dog after an abundant meat diet, 1912, A., ii, 270.

animal calorimetry. II. Metabolism of the dog following the ingestion of meat in large quantities, 1912,

A., ii, 1189.

Williams, Horatio B., and Charles George Lewis Wolf, protein metabolism in cystinuria, 1909, A., ii, 820.

Williams, H. Earnest, the preparation of ferrous chloride by the electrolysis of an ethereal solution of ferric chloride, 1912, A., ii, 944. Williams, Herbert Ernest, some hydrogen

ferrocyanides, 1912, P., 317. estimation of ferrocyanides, 1912, A.,

ii, 704.

Williams, Herbert Goulding, a new method for the estimation of hypo-

chlorites, 1912, P., 327.

Williams, (Miss) Katherine I., chemical composition of cooked vegetable foods, 1903, P., 66.

cooking and composition of some English fish, 1912, A., ii, 70.

Williams, Leon Franklin. See John Bishop Tingle.

Williams, Owen Thomas, influence of X-rays on nitrogenous metabolism and on the blood in myelogenous leucæmia, 1906, A., ii, 378.

abnormal fat assimilation in disease,

1907, A., ii, 900.

microchemical changes occurring in appendicitis, 1908, A., ii, 1057.

Williams, Owen Thomas, nature of Bence-Jones protein, 1910, A., ii, 981.

Williams, Owen Thomas. See also Hugh MacLean.

Williams, R. H., methods for estimating formaldehyde, 1905, A., ii, 488.

Williams, R. H., and Henry Clam Sherman, detection, estimation, and rate of disappearance of formaldehyde in milk, 1906, A., ii, 206.

Williams. R. H. See also A. D. Emmett. and Henry Clapp Sherman.

Williams, R. R. See Harry Drake Gibbs.

Williams, Robert S., antimony-thallium alloys, 1906, A., ii, 673.

alloys of antimony with manganese, chromium, silicon, and tin, of bismuth with chromium and silicon, and of manganese with tin and lead, 1907, A., ii, 783.

Williams, Robert Stenhouse.

Benjamin Moore.

Williams, Thomas, and John Joseph Sudborough, the hydrolysis and saponification of esters of saturated and unsaturated acids, 1912, T., 412; P., 41.

Williams, Walter Scott, valuation of tannic acid, 1905, A., ii, 772.

Williams, William Whitridge, perfusion experiments on excised kidneys. VIII. Effect on histological appearance of the kidney, 1907, A., ii, 637.

Williamson, Alexander William, presidential remarks on the death of,

1904, P., 121.

obituary notice of, 1905, T., 605.

Williamson, Ernest Henry. See Herbert Samuel Elworthy.

Williamson, George Scott. See Isaac Walker Hall.

Williamson, Oliver Key, relation between uricacid excretion and white corpuscles, 1904, A., ii, 62.

Willimsky, Walther, the behaviour of aerobic organisms towards complete withdrawal of oxygen, 1906, A., ii,

Willke, Johannes. See Karl Bernhard Lehmann.

Willmann, Adolf. See Fritz Fichter. Willner, Kurt. See Kurt Arndt.

Willner, M., Loango copal, 1910, A., i, 497.

Sierra Leone copal, 1910, A., i, 498.

Willott, F. J. See Richard Seligman. Wills, F., and Philip Bouvier Hawk, effects of copious water drinking with meals on gastric secretion, 1911, A., ii, 214.

Willson, Howard Samuel, iso'ation of Bacillus typhosus from infected water,

1905, A., ii, 748.

Willstätter, Richard [Martin], synthesis in the tropine group. IV. Monocyclic alkamines of the tropine group and a second synthesis of tropidine, 1903, A., i, 359.

synthesis of tropine, 1903, A., i, 360. hydrogen peroxide of crystallisation,

1903, A., ii, 537.

action of hydrogen peroxide on sodium thiosulphate, 1903, A., ii, 543.

separation of gold and platinum, 1903, A., ii, 576.

theory of dyeing, 1904, A., i, 1040. composition of chlorophyll, 1907, A.,

linking of the iron in the colouring matter of the blood, 1909, A., i,

calcium and magnesium in plant seeds, 1909, A., ii, 336.

phylloporphyrin, 1910, A., i, 330. Willstätter, Richard, and Yasuhiko Asahina, chlorophyll. IX. Oxidation of chlorophyll derivatives, 1910, A., i, 499.

lorophyll. XVIII. Reduction of chlorophyll, 1912, A., i, 41. chlorophyll.

hæmopyrrole, 1912, A., i, 127.

Willstätter, Richard, and Max Benz, azophenols, 1906, A., i, 990; 1907, A., i, 566.

quinoneazines, 1906, A., i, 997. chlorophyll. VI. Crystalline chloro-

phyll, 1908, A., i, 199.

Willstätter, Richard, and Adolf Bode, synthesis of r-cocaine, 1903, A., i, 361.

Willstätter, Richard, and G. Alessandro Brossa, aß-dimethyl-lævulic 1911, A., i, 707.

Willstätter, Richard, and James Bruce, reduction of trimethylene [cyclopropane], 1907, A., i, 1018.

derivatives of cyclobutane. II., 1907, A., i, 1018.

constitution of cyclobutene, 1908, A., i, 402.

Willstätter, Richard, and Carl Cramer, quinonoid compounds. XXIV. Aniline-black. IV., 1911, A., i, 90, 736.

Willstätter, Richard, and Stefan Dorogi, quinonoid compounds. XIII. Anilineblack. II. and III., 1909, A., i, 535, 975.

Willstätter, Richard, and Heinrich H. Escher, colouring matter of tomatoes, 1910, A., i, 330.

lutein from yolk of egg, 1912, A., i, 125.

Willstätter, Richard, and Friedrich Ettlinger, synthesis of hygric and of 2-pyrrolidinecarboxylic acids, 1903, A., i, 362.

Willstätter, Richard, and Hermann Fritzsche, chlorophyll. VIII. Degradation of chlorophyll by alkalis, 1910,

A., i, 126.

Willstätter, Richard, and Max Goldmann, amino-derivatives of tetraphenylethylene; quinonoid compounds. X., 1906, A., i, 980.

Willstätter, Richard, and David Hatt. conversion of cyclohexane into benz-

ene, 1912, A., i, 544. hydrogenation of aromatic compounds by means of platinum and hydrogen, 1912, A., i, 545.

Willstätter, Richard, and Emil Hauenstein, Caro's acid, 1909, A., ii, 566.

Willstätter, Richard, and Wolfgang Heubner, a new base from the Solanaceæ, 1907, A., i, 959.

Willstätter, Richard, and Ferdinand Hocheder, chlorophyll. III. Action of acids and alkalis on chlorophyll,

1907, A., i, 784.

Willstatter, Richard, Ferdinand Hocheder, and Ernst Hug, chlorophyll. VII. Comparative investigation of the chlorophyll of different plants, 1910, A., ii, 150.

Willstätter. Richard, and Charles Hollander, synthesis of ecgonic acid,

1903, A., i, 361.

Willstätter, Richard, and Valentin Hottenroth, ethyl bromonitromalouate, 1904, A., i, 472.

Willstätter, Richard, and Ernst Hug, chlorophyll. XV. Isolation of chloro-

phyll, 1911, A., i, 393.

Willstätter, Richard, Ernst Hug, and Edgar Percy Hedley, scopolamine,

1912, A., i, 576.

Willstätter, Richard, and Max Isler, chlorophyll. XIV. Comparative experiments with chlorophyll from different plants. III., 1911, A., i,

Willstätter, Richard, Max Isler, and Ernst Hug, chlorophyll. XX. The two components of chlorophyll, 1912, A., i, 710.

Willstätter, Richard, and Walter Kahn, aromatic betaines. II., 1904, A., i,

235.

III. 8-Trimethylvalerobebetaines.

taine, 1904, A., i, 560.

betaines. IV. Behaviour of aromatic betaines towards sodium amalgam, 1904, A., i, 561.

Willstätter, Richard, and Ludwig Kalb, quinonoidal derivatives of benzidine. Î., 1904, A., i, 1050.

quinonoid derivatives of diphenyl.

II., 1905, A., i, 361.

the oxidation of benzidine, 1906, A... i, 996.

Willstätter, Richard and Tokuhci Kametaka, cyclononanone, 1907, A., i, 936.

cyclo-octane and cycloheptane, 1908, A., i, 401.

Willstätter, Richard, and Heinrich Kubli, reduction of nitro-compounds by Zinin's method, 1908, A., i, 522. durene, 1909, A., i, 899.

polymerisation of quinonedi-imines,

1909, A., i, 976.

Willstätter, Richard, and Karl Lüdecke,

lecithin, 1904, A., i, 1067.

Willstätter, Richard, and Antonio Madinaveitia, estimation of glycerol in fats, 1912, A., ii, 1104.

Willstätter, Richard, and Riko Majima. quinonoid compounds. XXII. The estimation of quinones, 1910, A., ii,

quinonoid compounds. XXIII. Oxidation of aniline, 1910, A., i, 748.

Willstätter, Richard, and Wilhelm Marx, lupinidine and sparteine, 1904, A., i, 613.

oxidation of sparteine, 1905, A., i, 544. Willstätter, Richard, and Eugen Mayer, quinonedi-imide, 1904, A., i, 511.

Willstätter, Richard, and Erwin W. Mayer, reduction with platinum and hydrogen at the ordinary temperature. I., 1908, A., i, 383.

reduction with platinum and hydrogen. II. Dihydrocholesterol, 1908, A., i,

Willstätter, Richard, Erwin W. Mayer, and Ernst Hüni, chlorophyll.

Phytol. I., 1911, A., i, 144. Willstätter, Richard, and Walter Mieg, chlorophyll. I. Separation and characterisation of chlorophyll derivatives, 1907, A., i, 69. chlorophyll. IV. Yellow substances

which accompany chlorophyll, 1907,

A., i, 865.

Willstätter, Richard, and Charles Watson Moore, quinonoid compounds. XII. Aniline-black. I., 1907, A., i,

Willstätter, Richard, and Fritz Müller, quinonoid compounds. XVI. Two forms of o-quinones, 1908, A., i, 731. quinonoid compounds.

Quinones, 1911, A., i, 728.

Willstätter, Richard, and Hans Eduard Müller, quinonoid compounds. XXVII. Chloro-derivatives of catechol and of o-benzoquinone, 1911, A., i, 729.

Willstätter, Richard, and Alfred Opp6, chlorophyll. X. Comparative investigation of chlorophyll from different plants. II. 1911, A., i, 140.

Willstätter, Richard, and Jakob Parnas, quinonoid compounds. XI. 2:6-Naphthaquinone, 1907, A., i, 425.

quinouoid compounds. XIV. amphi-Naphthaquinones. II. 1907, A., i, 1056.

Willstätter, Richard, and Adolf Pfannenstiel, quinone imines. III., 1905, A., i, 69.

o-benzoquinone, 1905, A., i, 144.

quinonedimethylimine (quinonoid compounds, IV.), 1905, A., i, 669.

oxidation of o-phenylenediamine, 1905, A., i, 723.

chlorophyll. V. Rhodophyllin, 1908, A., i, 198.

Willstätter, Richard, and Jean Piccard, quinonoid compounds. XV. Wurster's dye salts, 1908, A., i,

quinonoid compounds. XVII. and XVIII. meri-Quinoneimines, 1908, A., i, 915; 1909, A., i, 517.

Willstätter, Richard, and Rudolf Pummerer, ethyl acetonedioxalate (desmotropy and the origin of colour), 1904, A., i, 973.

pyrone, 1904, A., i, 1043; 1905, A., i, 457.

Willstätter, Richard, and Wolfgang von Schmaedel, derivatives of cyclobutane,

1905, A., i, 514.
Willstätter, Richard, and Arthur Stoll,
reaction of nitrosoamides with
phenylhydrazine, 1910, A., i, 134.

chlorophyll. XI. Chlorophyllase, 1911, A., i, 141, 172.

chlorophyll. XIII. Decomposition and formation of chlorophyll, 1911, A., i, 391.

chlorophyll. XIX. Chlorophyllides, 1912, A., i, 285.

Willstätter, Richard, Arthur Stoll, and Max Utzinger, chlorophyll. XVII.

Absorption spectra of the components and of the primary derivatives of chlorophyll, 1912, A., i, 40.

Willstätter, Richard, and Max Utzinger, chlorophyll. XVI. The primary decompositions of chlorophyll, 1911, A.,

i, 659.

Willstätter, Richard, and Hans Veraguth, cyclo-octenes, 1905, A., i,515. some derivatives of ψ-pelletierine, 1905, A., i, 543.

the cyclo-octane series, 1907, A., i,

303.

quinonoid compounds. XII. Transformation of benzoquinonephenylhydrazones into oxyazo-compounds, 1907, A., i, 453.

Willstätter, Richard, and Ernst Waser, the cyclo-octane series. IV., 1910,

A., i, 366.

the cyclo-octane series. V. Cyclo-octatetraene, 1912, A., i, 17.

Willstätter, Richard, and Theodor Wirth, thioformamide, 1909, A., i, 459.

Willums, August. See Carl Adam Bischoff.

Wilm, Alfred, aluminium alloys containing magnesium, 1911, A., ii, 493.

Wilms, Johann. See Conrad von Seelhorst.

Wilner, E. See Hermann Finger.

Wilsdon, Bernard Howell. See Frederick Daniel Chattaway, and Nevil Vincent Sidgwick.

Wilsmore, Norman Thomas Mortimer, [standard cells], 1904, A., ii, 695. keten, 1907, T., 1938; P., 229; dis-

eussion, P., 230.

Wilsmore, Norman Thomas Mortimer, and Alfred Walter Stewart, a note on certain pyrogenic reactions, 1907, P., 309.

keten, 1907, A., i, 478; 1908, A., i, 318.

Wilsmore, Norman Thomas Mortimer. See also (Miss) Frances Chick, (Miss) Stella Deakin, and Frederick Murray Godschall Johnson.

Wilson, A. See R. H. McCrea.

Wilson, Alexander. See William Porter Dreaper.

Wilson, Andrew, efficiency of Berkefeld filters. I., 1909, A., ii, 509.

Wilson, Charles Richard. See Arthur George Perkin.

Wilson, Charles Thomson Rees, radioactivity from rain, 1903, A., ii, 194. a method of making visible the paths of ionising particles through a gas, 1911, A., ii, 565.

Wilson, Ernest, alternate current elec-

trolysis, 1905, A., ii, 673.

Wilson, F. B. See Frederick Hutton
Getman.

Wilson, Francis Daniel, o-sulphaminebenzoic and o-carbaminebenzenesulphonic acids, 1904, A., i, 51. Wilson, Francis Daniel. See also Arthur Michael.

Wilson, Forsyth James, and Archibald Boon, the elimination of bromine from phenyl p-methoxystyryl ketone dibromide, 1911, P., 197.

Wilson, Forsyth James. See also Alfred Archibald Boon, Isidor Morris Heil-

bron, and Hans Stobbe.

Wilson, Frederick Perera, biochemical relations of various lipoid substances in the liver, 1911, A., ii, 1111.

cell stimulation by prolonged ingestion of alkaline salts, 1912, A., ii,

Wilson, Frederick Perera. See also

Benjamin Moore.

Wilson, Frederick Robert Leyland, a new laboratory method for the preparation of hydrogen sulphide, 1906, P., 312; discussion, P., 313.

Wilson, George Haswell, detection of protein in urine, 1909, A., ii, 452.

Wilson, George Haswell, See also Carl

Hamilton Browning.

Wilson, Harold Albert, velocities of the ions of alkali salt vapours at high temperatures, 1909, A., ii, 420.

the velocity of the ions of alkali salt vapours in flames, 1911, A., ii,

the number of electrons in the atom,

1911, A., ii, 593.

the relation between the ranges of aparticles and the periods of transformation of radioactive substances, 1912, A., ii, 617.

diffusion of alkali salt vapours in flames, 1912, A., ii, 744.

Wilson, John. See John Ernest Mason. Wilson, John Hunt, some concentration cells in methyl and ethyl alcohols,

1906, A., ii, 144. Wilson, John Hunt. See also Gregory Paul Baxter, and Theodore William

Richards.

Wilson, James W., and Charles Dickson, a rapid gravimetric method of standardising vaccines, 1912, A., ii, 708.

Wilson, Leonard Philip, extraction apparatus, 1912, A., ii, 341.

Wilson, Leonard Philip, and G. S. Heaven, new oxygen absorption method for oils, 1912, A., ii, 815.

Wilson, Margaret B., the growth of sucking-pigs on a diet of skimmed cows' milk, 1903, A., ii, 89.

Wilson, Roger. See James Bert Garner. Wilson, R. A. See Wilhelm Cramer.

Wilson, Robert William. See Albert Ernest Dunstan.

Wilson, Thomas M., clinical measurement of electrical conductivity. 1905, A., ii, 263.

comparison of conductivity and freezing points of small quantities of body-fluids in health and disease,

1906, A., ii, 687. conductivity of blood in coagulation,

1907, A., ii, 562. action of quinine sulphate on human

blood, 1907, A., ii, 792.

Wilson, W., radioactive products present in the atmosphere, 1909, A., ii, 202.

effect of pressure on the natural ionisation in a closed vessel, and the ionisation produced by the y-rays. 1909, A., ii, 205.

the absorption law of B-rays, 1910,

A., ii, 175.

the variation of ionisation with velocity for the \$-particles, 1911, A., ii,

the 8-particles reflected by sheets of matter of different thicknesses, 1912, A., ii, 887.

the absorption and reflexion of homogeneous β-particles, 1912, A., ii,

Wilson, W. See also J. A. Gray, and Alois F. Kovarik.

Wilson, William E. See John McCrae. Wilson, W. H., action of scorpion venom, 1904, A., ii, 630.

immunity of certain desert animals to scorpion venom, 1904, A., ii, 630.

Wimmer, Gustav, Gerhard Geisthoff, Wilhelm Krüger, O. Ringleben, Hermann Roemer, J. Storck, and Hermann Wilfarth, assimilation of potassium from soils, 1909, A., ii, 340.

Wimmer, Gustav. See also Hermann

Wilfarth.

Wimmer, W., how far can protein katabolism in inanition be diminished by feeding on carbohydrates? 1911, A., ii, 1003.

Winans, Paul, preparation of nitrogen

peroxide, 1908, A., ii, 487.

Windaus, Adolf, cholesterol, 1904, A., i, 49, 667; 1905, A., i, 128; 1906, A., i, 174, 579, 580; 1907, A., i, 212, 610; 1908, A., i, 264, 728; 1909, A., i, 920.

formation of succharins from hexoses,

1905, A., i, 510. separation of animal from vegetable cholesterol, 1906, A., ii, 904.

decomposition of dextrose by ammoniacal zinc hydroxide in the presence of acetaldehyde, 1907, A., i, 90. Windaus, Adolf, action of a solution of zinc hydroxide in ammonia on ugars, 1907, A., i, 288.

cholesterol as an antidote to the sapon-

ins, 1909, A., i, 172.

synthetical experiments in the iminazole [glyoxaline] group, 1909, A., i, 258.

opening of the glyoxaline ring, 1910,

A., i. 283.

estimation of cholesterol and cholesterol esters in some normal and pathological kidneys, 1910, A., ii, 462.

the amount of cholesterol and cholesterol esters in the normal and atheromatous aorta, 1910, A., ii, 733.

colchicine. I. and II., 1911, A., i, 904.

the behaviour of some degradation products of cholesterol on heating, 1912, A., i, 449.

cholesterol. XV. New degradation products of cholesterol, 1912, A., i,

Windaus, Adolf, and Johannes Adamla, cholesterol. XIII. Cholesterylamine, 1911, A., i, 961.

Windaus, Adolf, and August Hauth, stigmasterol, a new phytosterol from the Calabar bean, 1907, A., i, 129.

phytosterol, 1907, A., i, 921.

Windaus, Adolf, and Franz Knoop, transformation of dextrose into methyliminazole, 1905, A., i, 381. constitution of histidine, 1906, A., i,

Windaus, Adolf, and Hermann Opitz, synthesis of iminazole [glyoxaline] derivatives, 1911, A., i, 752.

Windaus, Adolf, and Gustav Stein, cholesterol. III., 1904, A., i, 1010.

Windaus, Adolf, and Wolfram Vogt, synthesis of iminazolylethylamine [4-\beta-\betaaminoethylglyoxaline], 1907,

a.chloro-\(\beta\)-iminazolylpropionic

1908, A., i, 694.

Windaus, Adolf, and August Welsch, resin of Antiaris toxicaria, 1908, A., i, 903.

phytosterol from rape seed oil, 1909, A., i, 228.

Franz Windaus, Adolf. See also Knoop.

Adolf. See Alfred Windelschmidt.

Windisch, Karl, detection of fluorine in beer and wine, 1903, A., ii, 40.

Windisch, Karl, natural occurrence of salicylic acid in strawberries and raspberries, 1903, A., ii, 567.

estimation of boric acid, 1905, A., ii, 554.

Windisch, Karl, and Karl Boehm. chemistry of fruits, 1904, A., ii, 766. Windisch, Karl, and Theodor Roettgen,

estimation of the volatile acids in wine, 1905, A., ii, 212, 361; 1911. A., ii, 942.

Windisch, Richard, composition buffalo milk, 1904, A., ii, 752.

Windisch, Wilhelm, phosphoric acid in

barley, 1908, A., ii, 528.

Windisch, Wilhelm, and H. Boden. influence of calcium sulphate on the decomposition of starch and albumin in the mashing process, 1905, A., ii, 188.

Windisch, Wilhelm, and Walter Vogelsang, nature of the phosphoric acid compounds in barley and their changes during brewing processes, 1907, A., ii,

Windrath, Heinrich. See Emil Abderhalden.

Winfield, Herbert Ben. See Gilbert

Thomas Morgan.
Winiwarter, E. von. See Lucien Louis

de Koninck. Winkelblech, K., measurement of the gelatinising points and specific gravities of solutions of various glues, 1906, A., ii, 639.

chemistry of colloids, 1907, A., ii, 17. Winkelmann, Adolf [August], influence of temperature and pressure on the absorption and diffusion of hydrogen in palladium, 1905, A., ii, 397.

diffusion of nascent hydrogen through iron, 1905, A., ii, 682.

diffusion of hydrogen through hot platinum, 1906, A., ii, 336.

[calorimetric studies], 1907, A., ii, 846. Winkelmann, Albert. See Friedrich Kehrmann.

Winkler, Br., rapid estimation of copper in coarse metal, 1910, A., ii, 655.

Winkler, Clemens [Alexander], composition of the iron of Ovifak, Greenland; bituminous coal from Sweden, 1903, A., ii, 305.

remarks on the fifth communication of the committee on atomic weights. 1904, A., ii, 113.

radioactivity and matter, 1904, A., ii, 462.

Winkler, Hans. See Heinrich Ley. Winkler, Ludwig Wilhelm, estimation of iron in natural waters, 1903, A., ii, 108.

Winkler, Ludwig Wilhelm, estimation of carbon dioxide in natural waters. 1904, A., ii, 215.

preparation of pure ethyl alcohol,

1905, A., i, 850.

regularity in the absorption of gases by liquids, 1906, A., ii, 342.

estimation of dissolved oxygen, 1911, A., ii, 329, 532.

estimation of the saponification num-

ber, 1911, A., ii, 550.

Winmill, Thomas Field, asymmetric quaternary arsonium compounds and their attempted resolution, 1912, T., 718; P., 93.

Winmill, Thomas Field. See also John Theodore Hewitt, Tom Sidney Moore.

and William Jackson Pope.

Winninghoff, W. J. See William Crowell Bray, and William Draper Harkins.

Winograd-Finkel, Mariam. See Erich

Beschke.

Winogradoff, N. See Alex. D. Bogo-

jawlenski.

Winogradsky, Sergei, Clostridium pastorianum, its morphology and its properties as a butyric ferment, 1903, A., ii, 93.

Winokurow, Eugen. See Carl Adam

Bischoff.

Winston, James Henry Curry, action of alcohols on the tetrazonium chlorides derived from benzidine and o-tolidine, 1904, A., i, 274.

Winston, L. G., electrical induction in chemical reactions, 1911, A., ii, 692.

Winston, L. G., and Harry Clary Jones, conductivity, temperature-coefficients of conductivity, and dissociation of certain electrolytes in aqueous solution from 0° to 35°; probable inductive action in solution and evidence for the complexity of the ion, 1911, A., ii, 961.

Winteler, F., formation of bleaching powder, 1903, A., ii, 145, 291. assay of high-grade nitric acid, 1905,

A., ii, 553.

Winter, Friedrich. See Wilhelm Traube. Winter, Heinrich, yellow and red arsenic

trisulphide, 1905, A., ii, 245. Winter, Herbert. See Richard Josef

Meyer. Winter, Harold Witham. See George Druce Lander.

Winter, Justin, quantity of secretion in a given gastric fluid, 1910, A., ii, 786.

gastric acidity, 1912, A., ii, 270. Winter, O. B. See Moses Gomberg. Winter, William Phillips, new reducing agent for the preparation of thiophenol, 1904, A., i, 581.

sodamide and certain of its reaction

products, 1905, A., ii, 30.

Winterberg, Heinrich, action of camphor on the mammalian heart and vessels. 1903, A., ii, 307.

influence of certain poisons in the fibrillary contraction of the heart,

1908, Å., ii, 521. Winterberg, Heinrich. See also C.

Julius Rothberger.

Winterfeld, G. See David Holde. Winterfeld, Georg. See Otto Ruff.

Winternitz. Friedrich. See Karl Auwers.

Winternitz, Hugo. See Wilhelm Cas-

Winternitz, Milton Charles, and Walter Jones, nuclein metabolism, and its relationship to the nuclein ferments in the human organism, 1909, A., ii,

Winternitz, Milton Charles. See also Samuel Amberg, and Walter Jones. Winterson, William George. See Edward

Stanhope Kitchin.

Winterstein, Ernst [Heinrich], constituents of Emmenthaler cheese. II., 1904, A., ii, 585

isolation of lysine, 1905, A., 726.

proteins obtained from ricinus seeds, 1905, A., i, 727.

constitution of phytin, 1909, A., i, 5. vegetable phosphatides. III., 1909, A., ii, 338.

estimation of morphine, 1910, A., ii,

Winterstein, Ernst, and W. Bissegger, constituents of Emmenthaler cheese. III., 1906, A., ii, 248.

Winterstein, Ernst, and H. Blau. saponins, 1912, A., i, 39.

Winterstein, Ernst, and E. Herzfeld, simple process for the estimation of iodine, 1910, A., ii, 68.

Winterstein, Ernst, and O. Hiestand. vegetable lecithins, 1906, A., i,

478.

vegetable phosphatides. H., 1908, A., ii, 218.

Winterstein, Ernst, and Paul Huber, constituents of asparagus, 1904, A., ii, 582.

Winterstein, Ernst, and Albert Küng, homologues of arginine, 1909, A., i,

constituents of Emmenthaler cheese. IV., 1909, A., ii, 423.

Winterstein, Ernst, and Enrico Pantanelli, amino-acid obtained by the hydrolysis of the proteins of lupine seeds, 1905, A., i, 687.

Winterstein, Ernst, and Camille Reuter. the nitrogenous constituents of higher

fungi, 1912, A., ii, 1204.

Winterstein, Ernst, and Kazimir Smolenski, vegetable phosphatides. IV., 1909, A., ii, 338.

Winterstein, Ernst, and L. Stegmann, vegetable phosphatides. VI., 1909,

A., ii, 338.

Winterstein, Ernst, and Edwin Strickler. composition of colostrum, 1906, A., ii,

See also Ernst Winterstein. Ernst. Schulze.

Winterstein, Hans, respiratory metabolism of the isolated spinal cord of the frog, 1908, A., ii, 509.

blood gases of invertebrate marine animals, 1909, A., ii, 746.

alterations in the oxygen in sea-water collected in the dark, 1909, A., ii, 746. the regulation of breathing by the blood, 1911, A., ii, 211.

Wintgen, M., detection of yeast extract in meat extract, 1904, A., ii, 848. amount of solanine in potatoes, 1906,

A., ii, 701.

Wintgen, M., and O. Keller, composition

of lecithins, 1906, A., i, 331.

Wintgen, Robert, conductivity and ionic concentration in mixtures of molybdic acid with organic acids, 1912, A., ii, 321.

Wintgen, Robert. See also Eberhard Rimbach.

Winther, Hans Christian, polarimetric researches. II. Rotation dispersion in solutions, 1904, A., ii, 4.

rotation of optically active substances, 1905, A., ii, 493.

theory of optical activity, 1906, A., ii, 320, 822.

researches on catalytic racemisation, 1906, A., ii, 736, 835.

separation of d- and i-tartaric and racemic acids, 1906, A., ii, 813. polarimetric researches. III., 1907,

A., ii, 831.

theory of optical rotation. III., IV., V. (General theory of solution. I.-III.), 1907, A., ii, 832.

calculation of photochemical reactions,

1909, A., ii, 283.

Eder's solution. I. and II., 1910, A., ii, 115, 564.

solarisation in aqueous solution, 1910, A., ii, 373.

Winther, Hans Christian, optical sensitisation, 1911, A., ii, 239.

the theory of colour sensitiveness. 1911, A., ii, 239; 1912, A., ii, 4. electric light accumulator, 1912, A., ii,

direct and indirect light reactions.

1912, A., ii, 510.

the reduction of mercuric salt by ferrous salt and light, 1912, A., ii.

Winton, Andrew Lincoln, and Edward Monroe Bailey, estimation of vanillin, coumarin, and acetanilide in vanilla extract, 1905, A., ii, 620.

Winton, Andrew Lincoln, and Joseph Lehn Kreider, determination of the "lead number" in maple syrup and maple sugar, 1906, A., ii, 811.

Winton, Andrew Lincoln, and Max Silverman, analysis of vanilla extract.

1903, A., ii, 341.

Wintrebert, L., complex salts of sexavalent osmium, 1903, A., ii, 219. some osminitrites and an osmium

nitrite, 1905, A., ii, 261.

Winzheimer, Erich, identity of methysticol and piperonyleneacetone, 1908, A., i, 656.

kawa root [of Piper methysticum],

1908, A., i, 804.

Wirbelauer, Wilhelm. See Martin Blix. Wirsing, Adolf. See Kurt Brand, and Martin Freund.

Wirth, Alfred. See Ferdinand Henrich. Wirth, Ernst, and Heinrich Schott, dinitrocarbazolesulphonic acid, 1903, A., i, 54.

Wirth, Fritz, transition concentrations. I. Conversion of lanthanum oxalate into sulphate by sulphuric acid, 1908, A., ii, 570.

the chemistry of thorium and the rare earths; the solubility of the oxalates and of the sulphates in sulphuric acid, 1912, A., ii, 766.

the preparation of pure thoria from monazite sand by means of hypophosphoric acid, 1912, A., ii, 948.

Wirth, Fritz. See also Hugo Erdmann, and Otto Hauser.

Wirth, Joseph, the degradation of isoleucine in the liver, 1910, A., ii, 789. the degradation of carbohydrates in the liver, 1911, A., ii, 629.

Wirth, Joseph. See also Gustav

Embden.

Wirth, Peter Hermann, cherry-laurel water and solutions of benzaldehyde and hydrocyanic in water, 1911, A., i, 875; 1912, A., i, 702.

Wirth, Theodor. See Richard Willstätter.

Wirther, R., thioindigo-red B, 1906, A., i, 528.

Wirthle, Ferdinand, detection of methyl alcohol, 1912, A., ii, 607. detection and estimation of methyl

alcohol, 1912, A., ii, 1002.

Wirthwein, Heinz. See Arthur Stähler. Wischniakoff, M. N. See Vetscheslav E. Tischtschenko.

Wise, Archibald. See Harold Hibbert. Wise, Louis Elsberg. See Marston

Taylor Bogert, and J. R. Rippetoe. Wishart. Mary B. See Gertrude Fisher.

Wiske, D., estimation of raffinose, 1903, A., ii, 188.

Wislicenus, Hans, analysis of tannin materials with exfoliated alumina, 1905, A., ii, 363.

fibre-like developed alumina (fibrealumina) and its surface actions (adsorption), 1908, A., ii, 261.

filtration apparatus, 1908, A., ii, 576. Wislicenus, Hans. See also Georg.

Wislicenus, Johannes [Adolph], memorial lecture on (Perkin), 1905, T., 501;

Wislicenus, Wilhelm, intramolecular migration of acyl groups, 1905, A., i, 170.

ester condensations with chloroacetic

ester, 1911, A., i, 107. isomerism of ethyl formylphenylacetate. III., 1912, A., i, 623.

Wislicenus, Wilhelm, and Paul Berg. desmotropy and fluorescence of ethyl oxalosuccinonitrile, 1908, A., i, 965.

Wislicenus, Wilhelm, Emil Böklen, and Felix Reuthe, ethyl formylsuccinate and its relationship with aconic acid, 1909, A., i, 9.

Wislicenus, Wilhelm, and Ernst Breit, action of phenylhydrazine on ethyl formylglutaconate, 1907, A., i, 967.

Wislicenus, Wilhelm, and Hubert William Bywaters, the hydrazones of ethyl formylacetate, 1907, A., i, 968.

Wislicenus, Wilhelm, and Heinrich condensation of ethyl nitrate and p-bromobenzyl cyanide, 1909, A., i, 29.

preparation and reactivity of 3-methylquinoline, 1909, A., i, 420.

ethyl oxalosuccinonitrile and diethyl dioxalosuccinonitrile, 1910, A., i, 158.

Wislicenus, Wilhelm, and Anton Endres, stilbene from phenylnitromethane, 1903, A., i, 472.

Wislicenus, Wilhelm, and Max Fischer. condensation of ethyl nitrate with obromophenylacetonitrile, 1910, A., i. 621.

Wislicenus, Wilhelm, and Hermann Göz, conversion of the nitro- into the

keto-group, 1912, A., i, 52.

Wislicenus, Wilhelm, and Rudolf Grützner, condensation of alkyl nitrates or nitrites with ethyl phenylacetate, 1909, A., i, 477.

Wislicenus, Wilhelm, and Emil Kleisinger, synthesis of ethyl quinaldineoxalate and lepidineoxalate by means of potassium ethoxide, 1909, A., i,

Wislicenus, Wilhelm, and Otto Penndorf, condensation of ethyl oxalate with o- and p-xylylene cyanides, 1910, A., i, 560.

the ethyl ester of naphthalic acid, 1912, A., i, 263.

Wislicenus, Wilhelm, and Karl Russ, 9-formylfluorene or diphenyleneacetaldehyde [fluorene-9-aldehyde].

1910, A., i, 839. Wislicenus, Wilhelm, and Alexander Ruthing, desmotropism of formyldeoxybenzoin, 1911, A., i, 303.

Wilhelm, and Robert Wislicenus. Schäfer, preparation of benzoyl evanide, 1909, A., i, 99.

Wislicenus, Wilhelm, and Wilhelm Silberstein, ester condensation: ethyl oxalate and propionitrile, 1910, A., i,

Wislicenus, Wilhelm, and Martin Waldmüller, condensation of fluorene with alkyl nitrites and nitrates by means of potassium ethoxide, 1908, A., i, 973.

9-formylfluorene. I., 1909, A., i,

ethyl oxalylsuccinate, 1911, A., i, 603. Wislicenus, Wilhelm, and Margarita von Wrangell, ethyl formylglutaconate and its isomerides, 1911, A., i, 521.

Wislicenus, Wilhelm, and Henry Wren, syntheses of arylnitromethanes and of stilbene derivatives, 1905, A., i, 284.

Wislicenus, Wilhelm. See also Otto Dimroth.

Waslaw. See Herman Wisloki. Decker.

Wissell, Ludwig ron, analysis of curdled milk, 1905, A., ii, 774.

Witham, Ernest. See James Kenner. Withers, John Charles. See Martin Onslow Forster, and Wilhelm Manchot.

Withers, William Alphonso, and George Stronach Fraps, nitrification of different fertilisers, 1905, A., ii, 110.

nitrification of ammonia fixed by chabazite, 1905, A., ii, 111.

nitrifying power of typical North Carolina soils, 1905, A., ii, 111.

Withers, William Alphonso, and Burton Justice Ray, modification of the diphenylamine test for nitrous and nitric acids, 1911, A., ii, 656.

Withrow, James Renwick, electrolytic precipitation of gold with the use of a rotating anode, 1906, A., ii, 903.

influence of temperature on the electrolytic precipitation of copper from nitric acid, 1908, A., ii, 432.

Withrow, James Renwick. See also Josiah Simpson Hughes, and George McPhail Smith.

Witkowski, August Wiktor, expansion of hydrogen, 1906, A., ii, 7.

Witmer, Luther Ferree, electrolytic estimation of tin with the use of a rotating anode, 1907, A., ii, 584.

Witt, Felix H., o-aminoazobenzene, 1912, A., i, 921.

Witt, Johannes. See Einar Biilmann.
Witt, Otto Nikolaus, diazotisation of feebly basic, sparingly soluble primary amines, 1909, A., i, 855.

Witt, Otto Nikolaus, and Eduard Kopetschni, derivatives of azobenzene, 1912,

A., i, 517.

Witt, Otto Nikolaus, and Kurt Ludwig, preparation of barium nitrite, 1904, A., ii, 124, 171.

Witt, Otto Nikolaus, and Siegfried Toeche-Mittler, preparation of chloroanil, 1904, A., i, 174.

Witt, Otto Nikolaus, and Alfred Utermann, a new method of nitrating, 1907, A., i, 27.

Witt, Otto Nikolaus, and Erhard Witte, nitration of aniline and its derivatives, 1908, A., i, 874.

Witt, Reinhold. See Hugo Schrötter, and Zdenko Hanns Skraup.

Witte, Adolf. See Walther Borsche. Witte, Erhard. See Emilio Noelting, and Otto Nikolaus Witt.

Witte, Karl. See Richard Meyer. Witte, Klaus. See Jakob Meisenheimer. Witte, Kurt. See Johann Howitz.

Wittels, F., and N. Welwart, detection of biliary acids, lævulose, glycuronic acid, and pentoses in urine, 1909, A., ii, 1057.

Wittenberg, Fritz. See Emil Erlenmeyer, jun. Wittich, Walter J. See Louis Kahlenberg.

Wittmann, C. See Hans Bünzly. Wittmann, Jacob. See Emil Fromm. Wittmann, Johann, solanin, 1905, A., i,

456.
Wittmann, Johann. See also Simon
Zeisel.

Wittmann, Karl, chemistry of hips, 1904, A., ii, 435.

Wittorf, Nicolaus M. von, action of silica on the melting of alkali carbonates, 1904, A., ii, 400.

melting point diagram for mixtures of N₂O₄ and NO, 1904, A., ii, 646.

first crystallisation and subsequent physico-chemical transformations in iron-carbon alloys containing more than 4% of carbon, 1912, A., ii, 259.

Wituynj, J., amounts of chlorine and sulphuric acid in rain-water, 1911, A.,

ii, 432.

Witzemann, Edgar John. See William Lloyd Evans.

Witzmann, Walter. See Lothar Wöhler. Wlodeck, Johann von, volatilisation of ammonia and changes of ammonia in soils, 1912, A., ii, 85.

Wlodeck, Johann von. See also Otto Lemmermann.

Wobig, F. See Gottfried Kümmell. Wodzinsky, Gabriel von. See Care Adam Bischoff.

Wöber, A. See Zdenko Hanns Skraup. Wöhler, Lothar, oxidisability of platinum, 1904, A., ii, 44.

molecular weight of fulminic acid, 1905, A., i, 419.

oxidation of palladium, 1906, A., ii, 94. solid solutions in the dissociation of palladous oxide and cupric oxide, 1907, A., ii, 33.

the platinum compound analogous to purple of Cassius, 1909, A., ii, 245. fulminic acid, 1910, A., i, 231.

solid solutions in the dissociation oxides, 1911, A., ii, 259.

silver fluoride and silver subfluoride, 1912, A., ii, 1169.

Wöhler, Lothar, and Walther Becker, Guignet's green, 1908, A., ii, 765; 1911, A., ii, 401.

Wöhler, Lothar, and C. Condrea, different colours of ferric oxide, an effect of the size of the grains, 1908, A., ii, 287.

Wöhler, Lothar, A. von Dieterich, and F. Strube, platinum oxides, 1904, A., ii, 664.

Wöhler, Lothar, and Wilhelm Engels, mutual influence of colloidal tungstic and molybdic acids, 1910, A., ii, 871. Wöhler, Lothar, A. Foss, and Werner Plüddemann, sulphuric acid contact process, 1906, A., ii, 846.

Wöhler, Lothar, and Wilhelm Frey, solid solutions in the dissociation of cupric oxide, 1909, A., ii, 238.

solid solutions in the dissociation of the oxides of platinum, 1909, A., ii, 322. estimation of the acidity of hydrogen peroxide, 1911, A., ii, 149.

Wöhler, Lothar, and Zacharias Hirschberg, test for cadmium in the presence of copper by means of hydrogen sulph-

ide, 1910, A., ii, 349.

Wöhler, Lothar, and H. Kasarnowski, coloration of the halogen salts of the alkalis and alkaline earths, 1906, A., ii, 22.

Wöhler, Lothar, and James König, the oxides of palladium, 1905, A., ii.

722; 1906, A., ii, 176.

Wöhler, Lothar, and Friedrich Martin. new stage of oxidation of palladium, 1908, A., ii, 392.

platinum trioxide; a new oxide of platinum, 1909, A., ii, 898.

the decomposition of platinous hydroxide into platinum dioxide and metal, 1909, A., ii, 1024.

tervalent platinum. I. and II., 1909.

A., ii, 1024.

Wöhler, Lothar, Werner Plüddemann, and Paul Wöhler, new method for determining the tension of sulphates. 1908, A., ii, 290.

sulphuric acid contact process, 1908,

A., ii, 581.

Wöhler, Lothar, and Gustav Rodewald. old and new sub-haloids, 1909, A., ii,

Wöhler, Lothar, and A. Spengel, red platinum as analogue of purple of Cassius, 1910, A., ii, 1075.

separation of platinum and tin, 1911,

A., ii, 338.

Wöhler, Lothar, and K. Theodorovits, the formation of mercury fulminate,

1905, A., i, 418.

Wöhler, Lothar, and Walter Witzmann. oxides of iridium, 1908, A., ii, 300. solid solutions in the dissociation of iridium oxides, 1908, A., ii, 301.

Wöhler, Lothar, and Paul Wöhler, dissociation of chromium oxides and of the double oxides of chromium and copper, 1908, A., ii, 387.

Wöhler, Lothar. See also A. von

Dieterich.

Wöhler, Paul, preparation of metallic calcium in the laboratory 1905, A., ii, 708.

Wöhler, Paul. See also Wilhelm Kerp. and Lothar Wöhler.

Wöhlk, Alfred, new reaction for lactose (and maltose), 1905, A., ii, 122.

tests for the purity of hexamethylenetetramine, 1906, A., ii, 133.

new reaction for tar constituents (pyridine) in ammonia and ammonium salts, 1912, A., ii, 704.

Wölbling, Fritz, chrysazin derivatives,

1903, A., i, 841.

Wölbling, Hans, 1-isobutylphthalazine,

1906, A., i, 48.

action of hydrazine on B-deoxybenzoino-carboxylic acid and on its lactone (3-phenylisocoumarin), 1906, A., i, 49.

nitrogen sulphide, 1908, A., ii, 272

Woelfel, Albert, distribution of the salts in hemolysins, 1908, A., ii, 402.

the transfer of protein in inanition, 1909, A., ii, 497.

the place of retention or reconjugation of the amino-acids in the body, 1912, A., ii., 274.

Woelfel, Albert. See also Anton Julius

Carlson.

Wölfl, Valentin. See Karl Andreas Hofmann.

Wölz, Ewald. See Hugo Bauer.

Wörmann, A., heat of neutralisation of strong acids and bases, as affected by temperature and concentration, 1906, A., ii, 148.

temperature-coefficient of the electrical conductivity of certain acids and bases in aqueous solution, 1909, A.,

ii, 462.

Wörner, Emil, bismuth cholate, 1908. A., i, 393.

estimation of phosphorus in phosphorised oils, 1908, A., ii, 629.

simple arrangement for continuous extraction with a solvent of inconstant boiling point, 1908, A., ii, 681.

estimation of phosphoric acid in foods, 1908, A., ii, 732.

Martin. See Alexander Woernle, Gutbier.

Wogau, Max von, diffusion of metals in mercury, 1907, A., ii, 606.

calculation of the diffusion constants of non-electrolytes in solution, 1908, A., ii, 817.

Wogrinz, Alfred, a-isopropyl- and adimethyl-8-hydroxybutyric 1903, A., i, 604. hydrolysis of trisaccharides by dilute

acids, 1903, A., ii, 721.

Wogrinz, Alfred, and Johann Kittel, estimation of boric acid in nickel plating baths, 1912, A., ii, 601.

Wogring, Alfred. See also Karl Elbs. Wohl, Alfred, gas analysis in flasks. I. Estimation of the quantity of gas by the measurement of a certain volume of liquid, 1903, A.,

gas analysis in flasks. II. Estimation of the amount of gas by determinations of the pressure, 1903, A., ii. 39.

manometer with zero-adjustment, 1903, A., ii, 281.

gas analysis in flasks. III., 1903, A., ii, 451.

gasometric estimation of carbon dioxide by the measurement of liquid or determination of pressure, 1903, A., ii, 453.

interaction between nitrobenzene and aniline in the pressure of alkali,

1904, A., i, 155.

chlorination by means of sulphuryl chloride, 1904, A., i, 283; 1906, A., i, 9.

preparation of acetyl chloride, 1904,

A., i, 795.

calculation of the results of gas analyses, 1904, A., ii, 202.

aminoacetals and aminoaldehydes. 1906, A., i, 105; 1908, A., i, 46.

depression of the temperature of reaction in syntheses with organic chloro-compounds, 1906, A., 559.

[distillations in high vacua], 1906, A., ii, 148.

hydroxyfumaric and hydroxymaleic

acids, 1907, A., i, 583.

Wohl, Alfred, and O. Ahlert, azoxycompounds, 1904, A., i, 201.

Wohl, Alfred, and Erich Berthold, preparation of aromatic alcohols and their acetates, 1910, A., i, 619.

Wohl, Alfred, and Paul Claussner, [constants of] hydroxymaleic and hydroxyfumaric acid, 1907, A., i, 585.

Wohl, Alfred, and Richard Eickmann, complete gas analysis by means of pressure measurements, 1904, A., ii, 203.

estimation of zinc in zinc dust, 1904, A., ii, 211.

Wohl, Alfred, and Wilhelm Freund, anhydride and anil of hydroxymaleic acid, 1907, A., i. 584.

Wohl, Alfred, and Engelhardt Glimm, amylase (diastase), 1910, A., i, 799.

Wohl, Alfred, and Fritz Goldenberg, diazoaminophenols and hydroxyl-

aminophenols, 1904, A., i, 209. Wohl, Alfred, and Erich Grosse, a tertiary triacetal base and arecaidine-

aldehyde, 1908, A., i, 49.

W. Hertzberg, and Wohl, Alfred. Milivoj S. Losanitsch, hydrogenated pyridine-aldehydes, 1906, A., i. 106.

Wohl, Alfred, and A. Johnson, arecaidine and arecoline, 1908, A., i, 49.

Wohl, Alfred, and Franz Koch, sulphanilide, 1911, A., i, 36.

Wohl, Alfred, and Max Lange, anilinoacetal, 1908, A., i, 17.

synthesis of lactaldehyde, 1908, A., i, 943.

aminophenazines, 1910, A., i, 645. Wohl, Alfred, and Carl Hermann Lips, amides of pyruvic acid, 1907, A., i,

oxalacetic acid, 1907, A., i, 584.

Wohl, Alfred, and Milivoj S. Losanitsch, free aminoaldehydes, 1906, A., i, 107.

distillation in high vacua by means of Dewar's air absorption method and a shortened MacLeod vacuum gauge, 1906, A., ii, 72.

tetrahydropyridine-3-aldehyde piperidine-3-aldehyde, 1908, A., i,

46.

synthesis of the racemic cincholeuponic acids, 1908, A., i, 47.

1-ethylnipecotinic acid and w-amino-1ethyl-\(\beta\)-pipecoline, 1908, A., i, 50. a-methylallyl alcohol (Aa-buten-y-ol),

1908, A., i, 934.

Wohl, Alfred, and Rudolf Maag, resolution of the racemic cincholeuponic acids into their active forms, 1909, A., i, 254.

preparation of pyruvic acid, 1910, A., i, 606.

preparation of aldehyde diacetates, 1911, A., i, 13.

synthetical experiments in the cincholeupone series, 1911, A., i, 24.

Wohl, Alfred, and Bruno Mylo, tartardialdehyde, 1912, A., i, 161.

preparation of acraldehyde, 1912, A., i, 677.

Wohl, Alfred, and E. Nagelschmidt, ester-acids and amido-acids of the isophthalic acid series; the question of equivalence of positions 2 and 6 in the benzene nucleus, 1911, A., i, 57.

Wohl, Alfred, and Otto Poppenberg, estimation of nitrogen in nitrates and

nitric esters, 1903, A., ii, 328.

Wohl, Alfred, and Heinrich Roth. aa-dichloroisopropyl alcohol and the preparation of dichloroacetaldehyde, 1907, A., i, 170.

Wohl, Alfred, Kurt Schäfer. Albrecht Thiele, y-aminobutyraldehyde and pyrrolidine, 1906, A., i, 105,

Wohl, Alfred, and Hugo Schweitzer, preparation of aliphatic dialdehydes, 1906, A., i, 232.

aminolactaldehyde, 1907, A., i, 194.

Wohl, Alfred, Hugo Schweitzer, A. Köppen, Heinrich Roth, and Max Köppen, Heinrich Roth, and Lange, the tricarbon series, 1908, A., i, 941.

Wohl, Julius, See Julius Schmidlin, Wohlers, Hans Emil, adsorption phenomena of inorganic salts, 1908, A., ii,

Wohlers, Hans Emil. See also Ernst Hermann Riesenfeld.

Wohlfahrt, Theodor, o- and p-nitrobenzenesulphonic acids, 1903, A., i,

See also Karl Wohlfahrt, Theodor. Elbs.

Wohlgemuth, Henri. See Jules Minguin.

Wohlgemuth, Julius, nucleo-protein of the liver, 1903, A., ii, 440; 1904, A., ii, 751; 1905, A., i, 620.

origin of sulphur-containing products of metabolism in the animal organism, 1904, A., ii, 186.

hydrolysis of the liver protein, 1905, A., i, 103.

the source of substances containing sulphur in animals, 1905, A., ii,

the urine in phosphorus poisoning, 1905, A., ii, 338, 470.

localisation of ferments in the hen's

egg, 1905, A., ii, 541. the behaviour of stereoisomerides in the animal organism. II. Inactive amino-acids, 1905, A., ii, 543.

the liver in phosphorus poisoning, 1907, A., ii, 43.

activation of trypsin in man, 1907, A., ii, 107.

milk curdling ferment in human pancreatic juice, 1907, A., ii, 107.

amino-acid metabolism in gout, 1907, A., ii, 116.

chemical examination of human bonemarrow under different pathological conditions, 1907, A., ii, 187.

human pancreatic juice, 1907, A., ii, 564; 1912, A., ii, 460, 959.

investigation of diastases, 1908, A., ii, 403.

Wohlgemuth, Julius, a new method for estimating diastatic ferments, 1908, A., ii, 444.

the hæmolysin of human pancreatic juice. II., 1909, A., ii, 70.

diastases. III. The behaviour of the diastase in the blood, 1909, A., ii, 1036.

diastases. V. The behaviour of the diastase of the urine, 1909, A., ii,

diastases. VI. The influence of the bile on diastases, 1909, A., ii, 1038.

a new method for estimation of fibrin ferment and fibrinogen in bodyfluids and organs, 1910, A., ii,

chemical changes in phosphorus livers,

1911, A., ii, 517.

the diastases. IX. The influence of serum, lymph, and the expressed juice of organs on diastatic action, 1911, A., ii, 743.

takadiastase, 1912, A., i, 402.

[the relationship between the pancreas and suprarenals], A., 1912, ii, 959.

Wohlgemuth, Julius, and J. Benzur, diastases. VII. The diastase content of different organs of the rabbit under normal and pathological conditions; a contribution to the subject of the nature of phloridzin diabetes, 1909, A., ii, 1038.

Wohlgemuth, Julius, and Carl Neuberg, amino-acids in normal urine, 1906, A.,

ii, 874.

Wohlgemuth, Julius, and Hans Roeder, the relationship of pepsin and rennin in the child's stomach, 1907, A., ii, 106.

Wohlgemuth, Julius, and Michael Strich, ferments of milk and their origin, 1910, A., ii, 633.

Wohlgemuth, Julius. See also Rud. Ehrmann, Ernst Fuld, Simon Loewenthal, and Carl Neuberg.

Wohlleben, William J., monohalogen-phenols, 1910, A., i, 27.

Wohltmann, Ferdinand, importance of chemical investigation of soils in their amelioration, 1903, A., ii, 97. action of sodium chloride on crops,

1905, A., ii, 759.

Wohltmann, Ferdinand, Hugo Fischer, and Philipp Schneider, bacteriological and chemical studies of soils from the experimental fields, 1906, A., ii, 119.

Wohltmann, Ferdinand, and Philipp Schneider, new apparatus for de-termining the ammonia-absorption power of soils, 1905, A., ii, 649.

Wohlwill, Friedrich, the potassium in human urine in altered circulatory conditions of the kidney, 1906, A., ii, 469.

action of metals of the nickel group,

1907, A., ii, 495.

Woinarowskaja, (Miss) S., and (Miss) S. Naumova, oil from water-melon seeds, 1903, A., ii, 171.

Woinitsch-Sianoschensky, S. See Michael I. Konowaloff.

Woitaschewsky, A., dependence of the integral heat of solution on the temperature, 1911, A., ii, 1066.

Woithe, Carl Fr. Ed., improved pipette,

1908, A., ii, 827.

Wojciechowski, Adolf von. See Karl Bernhard Lehmann.

Woker, (Frl.) Gertrud, a-naphthaflavonol, 1906, A., i, 447.

the theory of fluorescence, 1906, A., ii, 511.

relations between structure and odour in organic compounds, 1906, A., ii, 739.

Woker, (Frl.) Gertrud, Stanislans von Kostanecki, and Jusef Tambor, syntheses of 3:4-dihydroxyflavone, 1904, A., i, 184.

Wolberg, Adam Alexander. See Alfred Werner.

Wolbring, Wilhelm. See Max Busch.
Woldenberg, Maximilian. See Adolf
Grün.

Wolesensky, Edward. See Victor Lenher.

Wolf, Bertram. See Otto Diels.

Wolf, Charles George Lewis, effect on blood-pressure of proteolytic products, 1905, A., ii, 264.

protein metabolism in inanition, 1907,

A., ii, 634.

creatine and creatinine metabolism,

1912, A., ii, 270.

Wolf, Charles George Lewis, and Williams McKim Marriott, the estimation of ammonia and urea in blood, 1910, A., ii, 762.

Wolf, Charles George Lewis, and Emil Österberg, protein metabolism in carbon monoxide poisoning, 1909, A., ii, 422.

estimation of urea in urine, 1909, A., ii. 448.

11, 440.

estimation of sulphur and phosphorus, 1911, A., ii, 67.

protein metabolism in phloridzin diabetes, 1911, A., ii, 512.

protein metabolism in the dog, 1911, A., ii, 1003.

Wolf, Charles George Lewis, and Emil
Osterberg, the time of exerction of
nitrogen, sulphur, and carbon after
ingestion of proteins and their
hydrolysis products. I. The time of
exerction after protein ingestion.
II. The time of exerction after
ingestion of the degradation products, 1912, A., ii, 581.

the time of secretion of nitrogen, carbon, sulphur, and phosphorus after ingestion of proteins and their hydrolysis products. II. Experiments on the dog, 1912, A., ii, 664.

Wolf, Charles George Lewis, and Philip Anderson Shaffer, protein metabolism in cystinuria, 1907, A., ii, 639.

Wolf, Charles George Lewis, Philip Anderson Shaffer, Emil Österberg, and Michael Somogyi, protein metabolism in cystinuria, 1908, A., ii, 717.

Wolf, Charles George Lewis. See also Barney Joachim Dryfuss, Eduard Grafe, Robert Anthony Hatcher, Alexander Lambert, Adolf Loevy, R. H. Macumber, Williams McKim Marriott, Emil Österberg, Letchworth Smith, A. E. Thayer, and Horatio B. Williams.

Wolf, Hubert. See Johannes Scheiber.
Wolf, Hugo, condensation products of anthranilic acid with aromatic aldehydes, 1910, A., i, 735.

Wolf, Johannes. See Fritz Foerster. Wolf, Josef. See Rudolf von Hasslinger. Wolf, Kurt. See Hermann Thiele.

Wolf, Max. See Franz Fischer.

Wolfbauer, Hans, p-tolyltaurine, 1904, A., i, 869.

Wolfes, Otto, preparation of 5:5-dialkylbarbituric acids, 1907, A., i, 350.

Wolff, Albert, preparation of dialkylethylenedibarbituric acids, 1911, A., i, 690.

preparation of solutions of aluminium and chromium formates, 1912, A., i. 408.

Wolff, Albert, and Richard Wolffenstein, estimation of the active oxygen in organic persulphates, 1904, A., ii, 775.

Wolff, Albert. See also Richard Wolffenstein.

Wolff, Carl, estimation of caffeine in raw coffee, 1906, A., ii, 507.

Wolff, Ernst, spectrum of lanthanum,

1906, A., ii, 409. Wolff, Ernst. See also Georg von Hevesy,

and Richard Lorenz.

Wolff, Franz von. See Franz Sachs.

Wolff, Hans, melanotic pigments, 1904, A., i, 839.

Wolff, Hans, estimation of ethyl ether and benzene in alcohol, 1910, A., ii, 1116.

Wolff, Hans. See also Ferdinand Blumen-

thal, and Carl Neuberg.

Wolff, Heinrich, influence of putrefaction on the amount of succinic acid in meat, 1903, A., ii, 660.

milky ascites in carcinoma, 1904, A.,

ii, 359.

Wolff, Heinrich, and Alfons Ott, action of sulphur chloride on ethyl and methyl malonates, 1904, A., i, 8.

Wolff, Hermann, salts of cerium, 1905,

A., ii, 457.

volume changes in the formation of solutions, 1911, A., ii, 968.

Wolff, Jules, estimation of maltose or dextrose in presence of starch paste,

1905, A., ii, 487.

[approximate] estimation of reducing sugars and dextrins in presence of starch and soluble starch, 1905, A., ii, 558.

separation of starch coagulum and amylocellulose, 1905, A., ii, 866.

mineral compounds which may possess the rôle, like diastase, of liquefying malt, 1906, A., i, 66.

estimation of sugars, 1906, A., ii, 57.

estimation of insoluble amyloses in starches, 1906, A., ii, 500.

comparative action of barley extracts and malt on the more resistant dextrins, 1907, A., i, 676.

some mineral salts which play the part of peroxydases, 1908, A., i,

137.

some artificial peroxydiastases; the important rôle of iron in their action, 1908, A., i, 490.

detection of methyl alcohol in fermented liquids, 1908, A., ii, 72.

artificial peroxydiastases, 1908, A., ii,

some oxydasic phenomena produced by colloidal ferrous ferrocyanide, 1908, A., ii, 1022.

some new properties of the oxydases of Russula delica, 1909, A., i, 279.

new analogies between natural and artificial oxydases, 1909, A.,

specific action of oxydases, 1909, A., i,

action of dibasic alkali phosphates on tyrosinase, 1910, A., i, 346. reduction of oxyhemoglobin, 1911,

A., i, 590.

Wolff, Jules, exciting action of alkalis, especially ammonia, on peroxydases, 1912, A., i, 817.

new properties of peroxydases and their behaviour in the absence of per-

oxides, 1912, A., i, 928.

Wolff, Jules, and Auguste Fernbach, the coagulation of starch, 1904, A., i, 211.

diastasic coagulation of starch, 1905,

A., i, 312.

circumstances which influence the physical condition of starch, 1905, A., i, 510.

influence of some mineral matters on the liquefaction of starch, 1906, A.,

i. 803.

inequality of the resistance of natural starch and artificial amylose towards extract of barley, 1907, A., i, 482.

Wolff, Jules, and Eloi de Stoecklin, influence of certain iron compounds and of peroxydases on the catalysis of hydriodic acid by hydrogen peroxide, 1908, A., i, 746.

peroxydase character of oxyhæmo-

globin, 1910, A., i, 802.

new method for the preparation of a catalase from blood and its properties, 1911, A., i, 412.

the specific action of different compounds of iron from the point of view of their action as peroxydases, 1911, A., ii, 795.

Wolff, Jules. See also C. Gessard, Auguste Fernbach, and Léon Ma-

quenne.

Wolff, John Eliot, a new chlorite from Northern-Wyoming, 1912, A., ii, 1181. Wolff, Ludwig, azines of ethyl β-keto-

carboxylates, 1904, A., i, 722.

azine of ethyl acetoacetate, 1905, A., i, 839.

olff, Ludwig, Paul Bock, Guido Lorentz, and Paul Trappe, diazoan-Wolff, hydrides, 1903, A., i, 203.

Wolff. Ludwig, and G. K. Grau, addition of phenylazoimide to quinones, 1912,

A., i, 1034.

Wolff, Ludwig, R. Greulich, and R. Krüche, diazoanhydrides (1:2:3-oxadiazoles or diazo-oxides) and diazoketones, 1912, A., i, 1028.

Wolff, Ludwig, and Archibald A. Hall, diazoanhydrides and 1-amino-1:2:3-tri-

azole, 1904, A., i, 120.

Wolff, Ludwig, and Friedrich Kolasius, behaviour of phenylazoimide with aniline and with p-toluidine, 1912, A., i, 1028.

Wolff, Ludwig, Hans Kopitzsch, and Archibald A. Hall, 1:2:3-thiodiazoles, 1904, A., i, 828.

Wolff, Ludwig, and Hans Lindenhavn. triazines, 1904, A., i, 197.

fatty-aromatic diazoamino-compounds (triazens), 1904, A., i, 701.

Wolff, Ludwig, and Richard Marburg, diacetalylamine and triacetalylamine,

1909, A., i, 14.

Wolff, Ludwig, Hans Mayen, E. Nolte, E. Thielepape, and Gerhard Weiland, replacement of oxygen in ketones and aldehydes by hydrogen, 1912, A., i,

Wolff, Ludwig, and Wilhelm Schreiner, lactones of the pyrazole series, 1908,

A., i, 291.

Ludwig Karl. See Cornelis Adriaan Lobry de Bruyn, and Andreas Smits.

Wolff, Max. See Alexander Tschirch.

Wolff, Ottomar, the U.-V filter-lamp as a valuable aid in determining the purity of chemical products, 1912, A., ii, 388.

luminescence analysis, 1912, A., ii, 878. Wolff, Salomon. See Hans Theodor Bucherer, Arthur George Green, and Carl Gustav Schwalbe.

Wolff, Wilhelm, See Franz Sachs,

Wolffenstein, Richard, preparation of perhydroxide bases and their, salts, 1908, A., ii, 830.

percarbonates, 1910, A., ii, 291.

preparation of acetonechloroform acetylsalicylate [o-acetoxybenzoate],

1912, A., i, 556, 768.

Wolffenstein, Richard, and Oskar Böters, preparation of aromatic hydroxylated nitro-compounds, 1908, A, i, 629. preparation of aromatic nitrohydroxycompounds, 1910, A., i, 27.

Wolffenstein, Richard, and Leonard Mamlock, atropine, 1908, A., i, 281.

Wolffenstein, Richard, and Erich Peltner, percarbonates, 1908, A., ii, 180. barium percarbonate [barium dioxide

carbonate], 1908, A., ii, 183. Wolffenstein, Richard, and Johannes Rolle, halogen-substituted tropeines,

1908, A., i, 282.

Wolffenstein, Richard, and Albert Wolff, pseudomorphism of organic persulph-

ates, 1908, A., i, 283.

Wolffenstein, Richard. See also Carl Fischer, Felix Haase, Paul Kattwinkel, T. Kumagai, Rudolf Wackernagel, and Albert Wolff.

Wolfrum, Richard, See Max Scholtz. Wolfsleben, Kurt. See Richard Meyer. Wolfsohn, J. M., and L. W. Ketron. gaseous metabolism of the dog's heart during vagus inhibition, 1910, A., ii,

Wolgast, Karl, See Max Bodenstein. Richard Escales, and Arthur Michael.

Wolk, Daffy, barium nitride and its relation to nitrogen in presence of iron, 1910, A., ii, 849. preparation and fusion of aluminium

nitride, 1910, A., ii, 854.

Wollemann, J. See Walther Borsche. Wollenberg, W. See Theodor Zincke.

Wollenweber, Wilhelm, filicitannic acid, 1907, A., i, 72.

Wollman, (Mme.) E. See Jacques Duclaux. Wolochowitsch, L. See Michael M.

Tichwinsky. Wolodkowitsch, G. von. See Roland

Scholl. Wologdine, L. See D. Tschernobéeff.

Wologdine, S., magnetic properties of certain compounds of iron, 1909, A., ii, 374.

See also Henri Wologdine, S. Chatelier.

Wolokitin, A[rkadi Vasilivitsch], formation of nitric oxide during the combustion of hydrogen, 1910, A., ii, 1059.

Wolokitin, A. See also Conway von Girsewald.

Wolosewicz, Josef Edmund von. Albert Stutzer.

Wolpert, Heinrich, combustible gaseous carbon compounds in the air, 1905, A., ii, 160.

Wolter. H. See Otto Fischer.

Wolter, Ludwig, action of iodine on phosphorus sesquisulphide: detection of the latter in matches, 1907, A., ii, 652.

preparation and properties of zirconium tetrafluoride, 1908, A., ii, 701.

generation of oxygen in a Kipp's apparatus, 1908, A., ii, 1028.

estimation of tungsten in tungstensteel, 1910, A., ii, 160.

some reactions and compounds of tin tetrafluoride, 1912, A., ii, 262.

Wolter, Ludwig. See also Friedrich Willy Hinrichsen.

Wolter, Otto, the iron of the urine. The estimation of iron in urine, 1910, A., ii, 327.

the iron of the urine. II. The quantity of iron in urine, 1910, A., ii, 327.

Wolter, Peter, the ultra-violet bands of the carbon monoxide spectrum, 1911, A., ii, 678.

Woltereck, Herman Charles, preparation of hydrogen cyanide, 1904, A.,

synthesis of ammonia, 1904, A., ii, 115; 1908, A., ii, 174.

synthesis of ammonia and of hydrogen cyanide, 1908, A., i, 400.

temperature of dissociation of ammonia of carbon monoxide, 1908, A., ii, 820.

synthesis of ammonia by means of

peat, 1909, A., ii, 138.

production of ammonia and the economy of nitrogen with peat, 1911, A., ii, 598.

Wolters, Adolf, the ternary system: sodium sulphate-sodium fluoride-sodium chloride, 1910, A., ii, 775.

Wolvekamp, Mari. See Arthur Hantzsch.

Wood, Alexander. See Norman Robert Campbell.

Wood, Arthur Samuel. See Frank

George Pope.

Wood, D. Orson, the liberation of helium from minerals by the action of heat, 1910, A., ii, 610.

Wood, Horatio C., modification of the Soxhlet extractor, 1908, A., ii, 424.

Wood, James. See Francis Robert Japp. Wood, John Kerfoot, the affinities of some feebly basic substances, 1903,

T., 568; P., 67. bromo- and hydroxy-derivatives of BBB'B'-tetramethylsuberic acid.

1906, T., 604; P., 104.

the acidic constants of some ureides and uric acid derivatives, 1906, T., 1831; P., 271.

the affinity constants of xanthine and its methyl derivatives, 1906, T., 1839; P., 271.

amphoteric metallic hydroxides. Parts İ. and II., 1908, T., 411; P., 15;

1910, T., 878; P., 94.

Wood, John Kerfoot, and (Miss) Emma Alexander Anderson, the constitution of the salts of barbituric acid, 1909,

T., 979; P., 154. Wood, John Kerfoot, and (Miss) Janet Drummond Scott, freezing-point curve for mixtures of camphor and phenol, 1910, T., 1573; P., 194.

See also James Wood, John Kerfoot.

Walker.

Wood, Joseph Turney, Henry Julius Salomon Sand, and Douglas John Law, employment of the electrometric method for the estimation of the acidity of tan liquors. II., 1911, A., ii, 942.

Wood, Robert Williams, scintillations produced by radium, 1905, A., ii, 664. fluorescence of sodium vapour and the

resonance radiation of electrons.

1905, A., ii, 783.

fluorescence of sodium vapour caused by monochromatic light, 1906, A.,

fluorescence, magnetic rotation, and temperature emission spectra of iodine vapour, 1906, A., ii, 714.

fluorescence and magnetic rotation spectra of sodium vapour and their analysis, 1906, A., ii, 821.

magnetic rotation of sodium vapour at the D lines, 1907, A., ii, 595.

the existence of positive electrons in the sodium atom, 1908, A., ii, 150. anomalous magnetic rotary dispersion of neodymium, 1908, A., ii, 244.

the resonance spectra of sodium vapour, 1908, A., ii, 546.

extension of the principal series of the sodium spectrum, 1909, A., ii, 106.

absorption, fluorescence, magnetic rotation, and anomalous dispersion of mercury vapour, 1909, A., ii, 713.

ultra-violet absorption, fluorescence, and magnetic rotation of sodium vapour, 1909, A., ii, 845.

a new radiant emission from the spark, 1910, A., ii, 915; 1912, A., ii, 114.

the resonance spectra of iodine, 1911, A., ii, 82.

the destruction of the fluorescence of iodine and bromine vapour by other gases, 1911, A., ii, 169.

the resonance spectra of iodine vapour and their destruction by gases of the helium group, 1911, A., ii, 950. magneto-optical effects in chlorine and

iodine, 1912, A., ii, 325.

resonance spectra of iodine by multiplex excitation, 1912, A., ii, 1018.

Wood, Robert Williams, and J. Franck, the transformation of the resonance spectrum of fluorescing iodine into a banded spectrum by addition of helium, 1911, A., ii, 170.

Wood, Robert Williams, and J. H. Moore, fluorescence and absorption spectra of sodium vapour, 1903, A.,

ii, 621.

Wood, Robert Williams. See also J. Franck, and Heinrich Rubens.

Wood, Sydney Herbert. See Ian Quiller Orchardson.

Wood, Thomas Barlow, new chemical test for strength in wheat flour, 1907, A., ii, 310.

Wood, Thomas Barlow, and William Bate Hardy, electrolytes and colloids; the physical state of gluten, 1909, A., i. 341.

Wood, Thomas Barlow, and Humphrey Owen Jones, complex carbonates, 1907,

A., ii, 620.

Woodbridge, R. G., jun., cellulose esters, 1909, A., i, 768.

Woodbridge, R. G., jun. See also Forris Jewett Moore.

Woodbury, J. C. See Daniel Francis Calhane.

Woodcock, Reginald C. See Charles Thomas Kingzett.

Woodhams, Edwin LeGrand. See Edward DeMille Campbell.

Woodhead, Arthur Edmund. See Arthur

George Green.

Woodhead, German Sims, the sterilisation of chalk waters by the use of minute quantities of bleaching powder, 1911, A., ii, 63.

Woodhead, German Sims, and W. A. Mitchell, opsonins in milk, 1907, A.,

ii, 113.

Woodhead, German Sims. See also R. R. Fasson.

See William

Woodhouse, John Obins.

Robert Lang.

Woodiwiss, George, the chemical elements; a new classification, 1906,

A., ii, 431. chemical elements; periodicity, weight, and valency, 1908, A., ii, 368.

non-metallic elements in connexion with valency and specific gravity, 1908, A., ii, 574.

Woodland, W. N. F., gas production in teleostean fishes, 1911, A., ii, 1113.

Woodman, Alphous Grant, estimation of atmospheric carbon dioxide by the Walker method, 1903, A., ii, 332.

Woodman, Alpheus Grant, and A. L. Burwell, detection of formic acid in

foods, 1908, A., ii, 639.

Woodman, Alpheus Grant, and E. F. Lyford, colorimetric estimation of benzaldehyde in almond extracts, 1908, A., ii, 1079.

Woodman, Alpheus Grant, and Henry Paul Talbot, the etching tests for small amounts of fluorine, 1906, A., ii, 895.

Woodmansey, Arnold. See Julius Berend Cohen.

Woodruff, Lorande Loss, and George Alfred Baitsell, the temperature-coefficient of the rate of reproduction of Paramaccium aurelia, 1912, A., ii, 58. Woodruff, Lorande Loss, and Herbert Horace Bunzel, relative toxicity of various salts and acids towards Paramæcium, 1910, A., ii, 59.

Woods, Herbert S. See Harry Sands Grindley, and Waldemar Koch.

Woods, James Royle, a new indicator, 1906, A., ii, 194.

Woods, Samuel Hamilton. See Bert Edwin Curry.

Woodward, Truman S. See Gregory Paul Baxter.

Woodyatt, Rollin Turner, phloridzin glycocholia, 1910, A., ii, 227.

Woog, Paul, direct oxidation of toluene by catalysis, 1907, A., i, 753.

Woog, Paul. See also Pierre Breteau, and Léon Brunel.

Woolley, (Miss) Bertha Elizabeth. See Herbert Henstock.

Woolley, V. J., temperature-coefficient of rate of conduction and latent period in muscle, 1908, A., ii, 711.

Woolley, V. J. See also John Mellanby.

Wootton, Fred. See John Kenneth Harold Inglis.

Wootton, Hubert Arthur. See Humphrey Owen Jones.

Wootton, William Ord, aromatic amides and imides of camphoric acid, 1907, T., 1890; P., 250.

amides and imides of camphoric acid; preliminary note, 1909, P., 308.

attempted resolution of racemic aldehydes, 1910, T., 405; P., 43.

Wootton, William Ord. See also William Holdsworth Hurtley, and Gilbert Thomas Morgan.

Worden, Edward Chancey, solubility of potassium permanganate, 1907, A., ii,

Worden, Edward Chancey, and John Motion, preparation of volumetric solutions, 1905, A., ii, 280.

Worgitzki, Franz. See Franz Wach-holtz.

Woringer, Pierre, the composition of Prussian blue, 1912, A., i, 170.

Woringer, Pierre, See also Wilhelm Manchot.

Worley, Frederick Palliser, bromine in solutions of potassium bromide, 1905, T., 1107; P., 209.

studies of the processes operative in solutions. Part XII. The apparent hydration values of acid-systems and of salts deduced from a study of the hydrolytic activities of acids, 1910, P., 298; 1911, T., 349. Worley, Frederick Palliser, and Walter Hamis Glover, studies of the processes operative in solutions. Part XVI. The determination of optical rotatory power, 1910, P., 298. Worley, Frederick Palliser.

See also Henry Edward Armstrong,

Adrian John Brown.

Worms, Wladimir W [asilevitsch], albumins from the white of rooks' eggs, 1904, A., ii, 190.

albumins of the white of turkeys' eggs. I. Crystalline albumin, 1907, A., i,

Worms, Wladimir W. See also Emil Abderhalden.

Wornast, K. See Julius Bredt.

Woroshzoff. See Voroschtsoff.

Worrall, (Miss) Elizabeth. · See Arthur

Walsh Titherley.

Worstall, Robert Arthur, some chemical constants of fossil resins, 1903, A., ii, 764.

action of fuming sulphuric acid on isoamvl chloride, 1904, i. 1.

iodine absorption of oil of turpentine,

1904, A., ii, 370. Wortmann, Wilhelm. See Emilio Noelting.

Wortsmann, Chaskel, See Fritz Fighter.

Wosnessensky, E., and E. Elisséeff, respiration-coefficient of different yeasts on various nitrogenous nutritive media, 1903, A., ii, 745.

Wosnessensky, Nicolas, ay-pentadiene,

1904, A., i, 641.

Wosnessensky, Nicolas. See also Fritz

Ullmann.

Woudstra, Herman Wijbe, action of some electrolytes on colloidal silver solutions; the process of coagulation, 1908, A., ii, 160.

the internal friction of colloidal solu-

tions, 1908, A., ii, 464.

accuracy of the colorimetric estimation of lead, 1908, A., ii, 633.

viscosity of colloidal silver solutions,

1908, A., ii, 818.

reaction radiation, 1909, A., ii, 9.

the hydrosol of chromium oxide, 1909, A., ii, 582.

degree of dispersity and viscosity, 1911, A., ii, 190.

Woudstra, Herman Wijbe. Willem Paulinus Jorissen. See also

Wourtzel, Eugène, atomic weight of nitrogen, 1912, A., ii, 248.

density and compressibility of nitrosyl chloride, 1912, A., ii, 843.

Wourtzel. Eugène, synthesis of nitrosyl chloride gas and the atomic weight of chlorine, 1912, A., ii, 934.

Wourtzel, Eugène. See also Philippe

Auguste Guye.

Woy, [Ernst Friedrich] Rudolf, apparent loss of potassium salts by ignition, 1903, A., ii, 182.

incrustation on bricks, 1903, A., ii, 370. estimation of citrate-soluble phos-phoric acid, 1903, A., ii, 390.

the solubility of aluminium in nitric

acid, 1903, A., ii, 483. "Bad Reinerz" in Silesia and its new medicinal springs, 1911, A., ii, 617.

Woytaček, Karl, new water decomposition apparatus with a dividing wall, 1911, A., ii, 877.

a new drying apparatus, 1912, A., ii, 445. Wozasek, O. See Walther Hausmann.

Wozelka, Hermann. See Adolf Franke. Wrangell, Margarita von. See Wilhelm

Wislicenus.

Wreath, S. R., and Philip Bouvier Hawk, fasting studies. IV. (Studies on water-drinking. VII.) Allantoin and purine excretion of fasting dogs, 1911, A., ii, 1012.

Wrede, Franz, measurement of heats of combustion with the calorimetric bomb and platinum resistance thermometer.

1910, A., ii, 1038.

Wrede, Franz, See also Emil. Fischer. Theodore William Richards, and Alfred Stock.

Wrede, Hans. See August Michaelis. Wren, (Miss) Gertrude Holland. Arthur William Crosslev.

Wren, Henry, some derivatives of lbenzoin, 1909, T., 1583; P., 219.

racemisation phenomena observed in the study of l-benzoin and its derivatives, 1909, T., 1593; P., 219.

See also Alexander Wren, Henry. McKenzie, and Wilhelm Wislicenus.

Wright, (Sir) Almroth Edward, increase in coagulability of blood by an admixture with lymph, 1903, A., ii, 87.

Wright, Frederic Eugene, contact minerals (gehlenite, spurrite, and hillebrandite) from Mexico, 1909, A., ii, 61.

Wright, Frederic Eugene. See also Eugene Thomas Allen, William Francis Hillebrand, George Atwater Rankin, Earnest Stanley Shepherd, and Henry Stephens Washington.

Wright, J. R., the positive potential of aluminium as a function of the wavelength of the incident light, 1911, A.,

ii, 456.

Wright, Robert, a sublimation apparatus, 1911, A., ii, 384.

a simplified combustion calorimeter,

1911, A., ii, 1064.

molecular-weight determinations from the relative lowering of the vapour pressure of ethereal solutions, 1912, P., 96.

Wright, Robert. See also Cecil Reginald Crymble, Edward Henry Farr, Alexander Killen Macbeth, and Alfred Walter Stewart.

Wright, Ralph Garrigue. See Marston

Taylor Bogert.

Wright, W. G. See Walter Bradford Cannon.

Wroblewski, Augustin, soluble ferments of the brain, 1911, A., ii, 627.

Wrochem, J. von, apparatus for the determination of the specific gravity of solid substances in powder or in a granular form, 1905, A., ii, 506.

Wroczynski, Adam, mutual action of dissolved substances as deduced from their vapour pressures, 1908, A., ii,

662.

Wroczynski, Adam, and Philippe Auguste Guye, molecular compounds in binary organic systems, 1910, A., ii, 699.

Wroczynski, Adam. See also Emil

Briner.

Wülfing, Friedrich. See Geory Schroeter.

Wilfing, Hanns von. See Peter Bergell.
Wilfing, Johann A., preparation of an anhydrous crystalline compound of dextrose and sodium iodide, 1908, A., ii. 765.

Wünsch, Donald Frederick Sandys. See Frederick Daniel Chattaway.

Würfel, Walter. See Friedrich Wilhelm Küster.

Würker, Walter. See Theodor Zincke. Würsch, August. See Herman Decker.

Wirth. See Karl Bernhard Lehmann. Wirtz, Ad., the distribution of phosphoric acid between urine and fæces, 1912, A., ii, 1194.

Wüst, Friedrich, iron-carbon alloys of high carbon content, 1906, A., ii, 232.

the decarburisation of iron, 1908, A., ii. 286.

influence of phosphorus on the system iron-carbon, 1908, A., ii, 287.

influence of manganese on the system iron-carbon, 1909, A., ii, 241.

the contraction of metals and alloys during cooling, 1910, A., ii, 260. iron-carbon alloys, 1910, A., ii, 414. Wüst, Friedrich, and Carl Geiger, "temper" carbon and graphite in iron, 1906, A., ii, 88.

Wüst, Friedrich, and Nicolai Gutowsky, the equilibrium diagram of iron-carbon

alloys, 1909, A., ii, 1017.

Wüst, Friedrich, Jos. Kreiten, and Paul Putz, influence of foreign elements on the separation of graphite from cast iron, 1906, A., ii, 362.

Wust, Friedrich, and L. Laval, the Thomas steel process, 1908, A., ii,

851.

Wüstenfeld, Heinrich. See Karl Schaum. Wüstenfeld, Hermann, arrangement for preventing an overflow in open waterfed gas-holders, 1909, A., ii, 394.

Wüstenfeld, Hermann. See also Eduard

Buchner.

Wüstenfeld, Richard. See Theodor Curtius.

Wugk, E. See Theodor Zincke.

Wuite, Jacob Pieters, possibility of determining the composition of a mixture by indirect analysis, 1907, A., ii, 194.

gas analysis, 1908, A., ii, 891.

heat of hydration of sodium sulphate, 1910, A., ii, 392.

pressure-temperature sections, 1911, A., ii, 1064.

Wuite, Jacob Pieters. See also Andreas Smits.

Wulf, Theodor, photoelectric action, 1903, A., ii, 123.

influence of pressure on the E.M.F. of gas electrodes, 1904, A., ii, 533.

atmospheric radiation of high penetrating power, 1909, A., ii, 285.

radioactivity as a general property of matter, 1911, A., ii, 709.

Wulf, Theodor. See also Albert Gockel. Wulff, Carl, natrium arsenicum, 1906, A., ii, 444.

Wulff, Georg, optical characters of isomorphous crystals, 1907, A., ii, 83.

the nature of liquid ("flüssige" and "fliessende") crystals, 1909, A., ii, 473.

the so-called nucleus and convergence points of the "crystalline-liquid phase" of p-azoxyphenetole, 1911, A., ii, 593.

Wulffius, Hellmuth. See Carl Adam

Bischoff. Wulzen, Rosalind, cytolysis in para-

meecium, 1909, A., ii, 748.

Wunder, Max, and (Mlle.) Nina
Chéladzé, separation of aluminium
and glucinum, 1911, A., ii, 773.

Wunder, Max, and B. Jeanneret, action of syrupy phosphoric acid on alloys prepared by the electric furnace, 1911, A., ii, 719.

separation of zirconium from iron and aluminium and the analysis of ferrozirconium, 1912, A., ii, 96.

Wunder, Max, and A. Schapiro, fusion of certain rare earths with sodium carbonate, and the separation of tungsten from iron, glucinum, and aluminium, 1912, A., ii, 1097.

Wunder, Max, and A. Stoicoff, volumetric estimation of iron in alloys potassium permanganate in phosphoric acid solution, 1912, A.,

ii, 1215.

Wunder, Max, and V. Thuringer, separation of nickel and palladium by dimethylglyoxime, 1912, A., ii, 691.

action of dimethylglyoxime on plat-

inum, 1912, A., ii, 1102. Wunder, Max, and T. Wenger, separation of glucinum from aluminium

[iron, chromium], 1912, A., ii, 687. Wunder, Max. See also Louis Duparc,

and Tcharviani. Wunderlich, Aemilius, violarutin (violaquercitrin), 1908, A., i, 438.

fagopyrum-rutin, 1908, A., i, 559. rhamnosides from Capparis spinosa and Globularia alypum, 1908, A., i, 559.

Wunschheim, Oskur R. von, hæmolysis in vitro and in vivo, 1906, A., ii, 97.

Wurl, Erich. See August Michaelis. Wurm, Erich. See Emil Abderhalden. Wurmser, René. See Jean Bielecki, and

Victor Henri.

Wurstemberger, Rodolphe von. See Fritz Ullmann.

Wurzelmann, M. See Stanislaus von Kostanecki.

Wuth, Berthold, A., i, 681. indigo-yellow, 1911,

Henri, thio-derivatives of Wuyts, camphor, 1903, A., i, 428.

action of disulphides on organo-magnesium haloids; synthesis of mixed sulphides, 1906, A., i, 257

mechanism of the action of sulphur and of selenium on organo-magnesium derivatives, 1909, A., i, 380.

formation of peroxides in the oxidation of organo-magnesium compounds,

1909, A., i, 448.

dehydration of alcohols by means of sulphonic acids and the influence of phenols on this reaction, 1912, A., i, 598.

Wuyts. Henri, and G. Cosyns, action of sulphur on organo-magnesium compounds, 1903, A., i, 686.

Wuyts, Henri, and Al. Stewart, pre-paration of hydrogen selenide, 1909,

A., ii, 229.

Wuyts, Henri. See also (Mile.) R. Dalebroux.

Wuyts, L., volumetric estimation of phosphoric acid soluble in 2% citric acid solution, 1911, A., ii, 656.

Wybauw. See Vandeweyer.

Wyk, H. J. van, the system: perchloric acid and water, 1906, A., ii, 79.

See Arthur Friedl. Wyler, Max. Wynne, A. J. See A. Robertson.

Wynne, William Palmer. See James Stuart Hills.

Wyrouboff, Grégoire N., solubility of Prussian blue, 1903, A., i, 18. thorium metoxide, 1903, A., ii, 81.

rubidium dichromate, 1908, A., ii, 181. theory of valency and constitution of

salts, 1908, A., ii, 368. double nitrates of alkali and cerium

metals, 1908, A., ii, 385. silicotungstates of indium, 1908, A., ii, 386.

chromic acid, 1909, A., ii, 740. thorium selenate, 1910, A., ii, 417.

Wyrouboff, Grégoire N., and Auguste Verneuil, chemistry of the rare earths, 1906, A., ii, 88; 1907, A., ii, 26.

Wys, Jacob Jan Alexander, rare oils, 1903, A., i, 602.

the iodine absorption number of cod liver oil, 1903, A., ii, 250.

the iodine number of sesame oil, 1903, A., ii, 341.

Wysman, H. P., and J. J. Reijst, detection of cocoanut oil in butter, 1906, A., ii, 402.

Wysoczański, Br. See Bronislaw Radziszewski.

Wyss, Hans von, behaviour of bromides in the body, 1906, A., ii, 876. the behaviour of bromides in the

human and in animal organisms. III., 1908, A., ii, 875.

Wyss, Hans von, E. Herzfeld, and O. Rewidzoff, a reaction of amyl alcohol, 1910, A., ii, 462.

Y.

Yagi, S., a saponin-cholesterol compound, 1911, A., i, 140.

Yakimoff, W. L., stability of atoxyl, 1908, A., i, 492.

Yakuwa, G. See Wilhelm Völtz. 4 M

Yamada, Jiro. See Karl Bernhard Lehmann.

Yamakawa, Makoto. See Umetaro Suzuki. Yamamoto, Kiyoshi. See Masamichi Kimura.

Yamamoto, Toyoji, the fusion curves of the system: naphthalene-phenol, 1908, A., ii, 928.

Yamano, Y., can aluminium salts enhance plant growth? 1905, A., ii, 344.

Yamasaki, Eüchi, the rate of dissolution of metallic copper in aqueous ammonia, 1911, A., ii, 383.

Yamasaki, J. See Fritz Foerster.

Yamasaki, Jingoro, relation between carbonic acid and lead acetate in aqueous solution, 1907, A., ii, 953.

Yamasaki, Jingoro. See also Yukichi

Osaka.

Yates, A. G. See James Martin Beattie.

Yates, Joseph. See Robert Howson Pickard.

Yégounoff, Michel, diffusion of solutions and molecular weights, 1906, A., ii, 338.

diffusion of solutions of copper sulphate in gelatin, 1907, A., ii,

apparatus for [the study of] diffusion in solid media, 1908, A., ii, 465.

molecular weight and form of substances; work of molecular weight, 1909, A., ii, 387.

Yllner, C. A., chemistry of the wood dextrins, 1912, A., i, 163.

Yockey, Harry, assay of Babbit metal, 1906, A., ii, 581.

[volumetric estimation of] antimony in Babbit and type metals, 1906,

A., ii, 903.

Yoder, Peter A., polarimetric method for the estimation of malic acid and its application to cane and maple products (sugars), 1911, A., ii, 1141.

Yokota, Kōtarō, excretion of phloridzin, 1904, A., ii, 358.

Yokote, Chiyonosuke, production of volatile phosphorus compounds in putrefaction, 1904, A., ii, 579.

Yokoyama, Haruhei, why are poor sandy soils often easily injured by liming? 1908, A., ii, 621.

is artificial calcium carbonate more effective than limestone meal? 1909, A., ii, 926.

Yorke, Warrington, behaviour of opsonin and serum proteins during pressure filtration, 1907, A., i, 740.

Yorke, Warrington, and Charles Harold Smith, effects of injection of antitoxic and antibacterial sera on the opsonic power of the blood, 1906, A., ii, 557.

Yoshida, Tanzo, hydrochloric acid content of gastric juice in anchylostomiasis, with special reference to its relationship to anæmia and appetite, 1909, A., ii, 167.

the formaldehyde titration of aminoacids in urine, 1910, A., ii, 164.

Yoshida, Tsuneta. See Keijirō Asō.
Yoshikawa, Junji, behaviour of benzoic acid in the organism of fowls in presence of glycine, 1910, A., ii, 880.

influence of phloridzin on the distribution of nitrogen in the urine of starved rabbits, 1912, A., ii, 71.

Yoshikawa, Junji. See also Takeo Saito.

Yoshimoto, S., the precipitation of sugars by cupric hydroxide, 1908, A., i, 766.

autolysis, 1909, A., ii, 250.

chemistry of cancer, 1909, A., ii, 1040.

the influence of lecithin on metabolism, 1910, A., ii, 321.

Yoshimoto, S. See also Theodor Brugsch.

Yoshimura, Kiyohisa, the chemical composition of tamari-schöyu, 1909, A., ii, 928.

some of the organic bases present in cabbages, 1910, A., ii, 440.

composition of protein from the seeds of Pinus koraiensis, 1910, A., ii, 442.

occurrence of organic basic substances in yellow *Boletus*, 1910, A., ii, 887.

putrefaction bases from the decomposition of soy beans (Glycine hispida), 1910, A., ii, 1103.

the composition of malt-embryos, 1911, A., ii, 325.

composition of bananas, 1911, A., ii, 526.

betaines of nipecotinic acid and of pipecolic acid, 1912, A., i, 497.

the organic bases in the flesh of wild rabbits, 1912, A., ii, 66.

Yoshimura, Kiyohisa, and Georg Trier, the occurrence of betaines in the vegetable kingdom, 1912, A., ii, 478.

Yoshimura, Kiyohisa. See also Umetaro Suzuki.

Yoshisaka. See André Wahl.

Young, Charles Robert, optically active derivatives of l-methoxy- and d- dimethoxy-succinic acids; preliminary note, 1912, P., 143.

Young, Charles Robert. See also Thomas

Purdie.

Young, Fred Armstrong, and Julius Eduard Lehmann, the blood issuing from the dog's suprarenal, 1908, A., ii, 767.

Young, F. B., critical phenomena of ethyl ether, 1910, A., ii, 1032.

Young, George, C-phenyl-s-triazole, 1905.

T., 625; P., 131.

Young, George, and Ben Caudwell. apparatus for supply of carbon dioxide in the estimation of nitrogen in organic compounds by the absolute method, 1907, A., ii, 394.

Young, George, and Samuel Irwin Crookes, contributions to the chemistry of the amidines; 2-aminothiazoles and 2-imino-2:3-dihydrothiazoles; 2iminotetrahydrothiazoles and 2-amino-4:5-dihydrothiazoles, 1905, P., 307; 1906, T., 59.

George, and Albert Ernest Young, Dunstan, contributions to the chemistry of the amidines. Part II. Anilinobenzoxazole and the supposed anilodihydrobenzoxazole, 1908, T., 1052;

P., 136.

Young, J. See David Spence.

Young, Roland Francis, and Bertram Francis Baker, cement analysis, 1903, A., ii, 44.

Young, Sydney, the vapour pressures and boiling points of mixed liquids.

Part III., 1903, T., 68. on mixtures of constant boiling point,

1903, T., 77.

boiling points of homologous compounds, 1905, A., ii, 231.

vapour pressure of a pure liquid at constant temperature, 1906, A., ii,

opalescence in fluids near the critical temperature, 1907, A., ii, 9.

orthobaric volumes in relation to pressure and temperature, 1908, A., ii, 813.

specific volumes of the saturated vapours of pure substances, 1910,

A., ii, 271.

Young, Sydney, and (Miss) Emily C. Fortey, the vapour pressures and boiling points of mixed liquids. Part II., 1903, T., 45.

Young, Stewart Woodford, mechanical stimulus to crystallisation in supercooled liquids, 1911, A., ii, 261.

Young, Stewart Woodford, and W. E. Burke, composition and solubility of the hydrates of sodium thiosulphate, 1905, A., ii, 32.

hydrates of sodium thiosulphate, 1906,

A., ii, 281,

supercooled liquids, 1907, A., ii, 433. Young, Stewart Woodford, and R. J. Cross, the mechanical stimulus to crystallisation. II., 1911, A., ii, 865.

Young, Stewart Woodford, and - John Pearce Mitchell, supercooled fusions and solutions of sodium thiosulphate,

1905, A., ii, 31.

Young, Stewart Woodford, and W. H. Sloan, modification of the freezing point method, 1904, A., ii, 649.

Young, William John, the organic phosphorus compound formed by yeast-juice from soluble phosphates; preliminary notice, 1907, P., 65.

the hexosephosphate formed by venstjuice from hexose and a phosphate,

1910, A., i, 12.

the composition of the hexosephosphoric acid formed by yeast-juice. II., 1911, A., i, 422.

Young, William John, See also Arthur Harden, and Jocelyn Field Thorpe.

Youssoufian. See Albin Haller.

Youtz, Lewis Addison, estimation of antimony, 1903, A., ii, 513.

Herroun and Weller's process for the volumetric estimation of antimony, 1904, A., ii, 150.

purity and volatility of precipitated antimony sulphide, 1908, A., ii, 780.

Ystgaard, A., decomposition of crude phosphates for manurial purposes, 1904, A., ii, 511.

Yvon, Paul, aniline antimonyl tartrate,

1910, A., i, 163.

aniline arsenyl tartrate, 1910, A., i, 310.

Z.

Zaar, Bruno. See Franz Sachs, and Friedrich Wilhelm Semmler.

Zaar, Karl. See Paul Jacobson.

Zabel, B. See Peter Schrumpf. Zach, Karl, See Emil Fischer.

Zachariades, N. See Philippe Auguste Guve.

Zacharias, Procopios, theory of the dyeing process, 1903, A., i, 193; 1905, A., i, 74, 293.

Zachoder, (Mlle). See H. Cantoni. Zänker, Waldemar. See Rudolf Nietzki. Zahn, Christian. See Wilhelm Manchot.
Zahn, Kurt. See Carl Paal, and Theodor Zincke.

Zahn, Otto. See Albin Köhler.

Zailer, Viktor, and Leopold Wilk, influence of plant constituents on the physical and chemical properties of soils, 1908, A., ii, 60.

Zaitschek, Arthur, formation and composition of fat in hens, 1903, A., ii,

740.

nitrogen and protein in fæces, 1903, A., ii, 743.

digestibility of chitin and the nutritive value of insects, 1904, A., ii, 750.

Zaitschek, Arthur, and Felix von Szontagh, solubility of milk and casein in pepsin-hydrochloric acid, 1904, A., ii, 749.

Zaitschek, Arthur. See also Franz Tangl, and Stephan Weiser.

Zak, Emil, action of the proteolytic ferment of Bacillus pyocyaneus, 1907, A., i, 996.

experimental and clinical observations on disturbances of sympathetic innervation (adrenaline-mydriasis) and on intestinal glycosuria, 1910, A., ii, 529.

coagulation of blood, 1912, A., ii,

1065.
Zakrzewski, C. See Alois F. Kovarik, and Heike Kamerlingh Onnes.

Zalackas, C., antidote to nicotine, 1905, A., ii, 339.

Zaleska-Mazurkiewicz, Zofja, and Augustin Bistrzycki, synthesis of ωωdiphenyl-1:4-naphthaquinomethane (p-naphthafuchsone) and of allied compounds, 1912, A., i, 467.

Zaleski, Jean, mesoporphyrin, 1903, A.,

i, 217, 375.

compounds of mesoporphyrin with iron and manganese, 1905, A., i, 105. Dennstedt's method of elementary

analysis applied to the hæmoglobin derivatives, 1908, A., ii, 132.

Zaleski, Jean. See also J. Merunowicz. Zaleski, W., changes in the protein phosphorus of plants, 1903, A., ii, 94.

protein formation in ripening seeds, 1905, A., ii, 549.

proteolytic enzyme of ripening seeds, 1905, A., ii, 549.

rôle of enzymes in the conversion of organic phosphorus compounds in germinating seeds, 1906, A., ii, 881.

decomposition of phosphorus compounds in ripening seeds, 1907, A.,

ii, 385.

Zaleski, W., decomposition of nucleic acid in germinating seeds, 1907, A., ii, 904.

autolytic production of ammonia in

plants, 1907, A., ii, 904.

synthesis of proteins in plants, 1907, A., ii, 904.

the effect of light on the formation of protein in plants, 1909, A., ii, 424.

the changes undergone by the nucleoprotein phosphorus in plants, 1909, A., ii, 604.

the part played by oxygen in the formation of protein in plants, 1910, A., ii, 149.

rôle of reduction processes in the respiration of plants, 1910, A., ii, 990.

the respiration enzymes of plants, 1911, A., ii, 323.

rôle of nucleo-proteins in plants, 1911, A., ii, 819.

metabolism in ripening seeds, 1912, A., ii, 194.

Zaleski, W., and W. Israilsky, the influence of mineral salts on the protein changes in plants, 1910, A., ii, 335

Zaleski, W., and Elisabeth Marx, the action of phosphates on the postmortal respiration of plants, 1912, A., ii, 975.

Zaleski, W., and A. Reinhard, the influence of mineral salts on the respiration of germinating seeds, 1910, A., ii, 148.

action of salts on the respiration of plants and on the respiration enzymes, 1910, A., ii, 990.

the fermentative oxidation of oxalic acid, 1911, A., ii, 760.

the respiration of plants, 1911, A., ii, 1021.

alcohol consumption in the respiration of plants, 1912, A., ii, 796.

Zaleski, W., and Anna Rosenberg, the function of the plant catalases, 1911, A., ii, 643.

Zaleski, W., and N. Tutorski, the artificial nutrition of seedlings, 1912, A., ii, 974.

Zalewski, J. See W. Sobolewa.

Zalinski, Edward Robins, thuringite and chamosite from Thuringia, 1904, A., ii, 571.

[a mineral associated with turquoise in New Mexico], 1909, A., ii, 588.

Zaloziecki, Roman, nitration of the low boiling fractions of Galician petroleum, 1903, A., i, 616. Zaloziecki, Roman, and Joachim Hausmann, peat wax, 1907, A., i, 674. composition of Galician mineral oils,

1907, A., ii, 883.

Zaloziecki, Roman, and Heinrich Klarfeld, optical activity of mineral oils in connexion with the question of their origin, 1908, A., ii, 48.

Zambonini, Ferruccio, crystallography of

epidote, 1903, A., ii, 84.

zeolites from the neighbourhood of Rome, 1903, A., ii, 656.

Piedmontese minerals, 1904, A., ii, 52.

04.

[augite] from Canale Monterano, Province Rome, 1904, A., ii, 826.

crystallised slag from Hettstedt; composition of melilite, 1905, A., ii, 834.

constitution of titanite, 1906, A., ii, 370.

[palmerite] new hydrated aluminium phosphate, 1906, A., ii, 554.

scheelite from Traversella, 1906, A., ii, 620.

galena formed during the last eruption of Vesuvius, April 1906, 1906, A., ii, 766.

epidote from the neighbourhood of Chiavriè near Condove in the Valley of Susa, 1906, A., ii, 774.

of Susa, 1906, A., ii, 774. radioactivity of Vesuvian cotunnite,

1907, A., ii, 663.

delorenzite, a new mineral, 1908, A., ii, 604.

study of hydrated silicates, 1909, A., ii, 154.

crystallography of some inorganic compounds, 1910, A., ii, 610.

the nature of the pseudonepheline from Capo di Bove, near Rome, 1910, A., ii, 1078.

muthmannite, a new mineral, 1911,

A., ii, 734.

application of the content of uranium and lead of some minerals to the determination of the ages of the rocks containing them, 1911, A., ii, 959.

identity of bacumlerite with chloro-

calcite, 1912, A., ii, 652.

Zambonini, Ferruccio, and George Thurland Prior, struverite, a new mineral, 1907, A., ii, 364.

identity of guarinite and hiortdahlite, 1909, A., ii, 677.

Zambonini, Ferruccio. See also George Thurland Prior.

Zambonini, Tomaso. See Luigi Mascarelli, and Giuseppe A. Plancher. Zamorani, M. See Ciro Ravenna. Zanda, Giovanni Battista, influence of caffeine on the ureopoëtic system of the liver, 1911, A., ii, 1017.

the influence of various alkaloids on the capacity of the liver for the formation of urea in vitro, 1912, A., ii, 280.

Zanetti, Carlo Umberto, non-prevalence of potassium salts in the spleen of marine fishes, 1903, A., ii, 740. ovimucoid and serum-mucoid. II.,

1904, A., i, 128.

Zanetti, Joaquin Enrique, action of oxychlorides of silicon on sodium salts of fatty acids, 1912, A., i, 935.

Zanetti, Joaquin Enrique, See also Gregory Paul Baxter, Charles Loring Jackson, and Henry Augustus Torrey.

Zanfrognini, Antonio, colorimetric estimation of adrenaline, 1910, A., ii, 467.

Zangerle, Josef, naphthindole bases, 1910, A., i, 430.

Zangger, N. H., new and simple method for determining the Avogadro number, 1912, A., ii, 22.

1912, A., ii, 22. Zangrilli, Giuseppe. See Arrigo Mazzucchelli.

Zani, Vito, physical and chemical properties of some varieties of antimony trisulphide, 1910, A., ii, 219.
 Zanichelli, Luigi. See Attilio Purgotti.

Zanotti, Venturo, some complex carbohydrates, 1904, A., ii, 836.

Zaribnicky, Franz, peritoneal exudation in a carp, 1909, A., ii, 686.

chemical composition of horse lymph, 1912, A., ii, 573.

the fat of the smegma of the horse, 1912, A., ii, 961.

Zart, Arthur. See Max Conrad.

Zassouchine, (Mlle.) O. See (Mlle.) E. Kollegorsky.

Zaubitzer, Rudolf. See Karl Auwers. Zavadovsky, A. See Nicolai M. Kijner. Zavrieff, David Christoforovitsch, dis-

Zavrieff, David Christoforovitsch, dissociation of calcium carbonate, 1907, A., ii, 768; 1909, A., ii, 401.
theory of catalytic phenomena, 1910,

A., ii, 284. Zawadzki, Jósef. See Ludwik Bruner,

Zawadzki, Josef. See Ludwik Bruner, and Fritz Haber.

Zawidzki, Jan [Wiktor Tomasz] con, amphoteric character of cacodylic acid, 1903, A., i, 801; 1904, A., i, 232

saponin froth, 1903, A., ii, 281. arsenious acid, 1903, A., ii, 422.

basic properties of cacodylic acid and of carbamide, 1904, A., i, 564.

Duhem's "Regnault Law," 1904, A., ii, 237.

Zawidzki, Jan [Wiktor Tomasz] von. equilibria in the system NH4NO3 + AgNO₃, 1904, A., ii, 389.

pseudo-acids, 1904, A., ii, 475.

physical constants of pure pyridine, 1906, A., i, 381.

simple apparatus for demonstrating the dissociation pressure of solid and liquid substances, 1908, A., ii, 261.

forms of the partial and total vapour pressure curves of binary mixtures,

1909, A., ii, 968.

absorption spectra of potassium cobaltous thiocyanate in organic solvents,

1910, A., ii, 562.

Zawidzki, Jan von, and A. Schagger, the heat of solution of fused mixtures of potassium and sodium nitrate, 1911, A., ii, 257.

Zay, Carlo Edoardo, peppermint oil from Piedmont, 1903, A., i, 355.

Zbijewski, Z. See Józef Buraczewski. Zdarek, Emil, volumetric estimation of thymol, 1903, A., ii, 111.

the mesenterial fat of Thalassochelys corticata and Cyprinus carpio, 1903, A., ii, 499.

the eggs of Acanthias vulgaris, 1904,

A., ii, 495.

contents of a cystic tumour of the breast, 1908, A., ii, 1059.

distribution of fluorine in the human organs, 1910, A., ii, 1085.

Zdarek, Emil, and Richard von Zeynek, amount of iron in the sarcommelanin

of man, 1903, A., i, 218. Zdobnický, Wenzel. See Julius Stoklasa. Zebrikoff, (Mme.) Lydie. See Charles

Eugène Guve.

Zebrowski, Eduard von, the secretory function of the parotid in man, 1906, A., ii, 103.

Zecchini, Filippo, relation between electrolytic dissociation and refractive power, 1905, A., ii, 661.

transformation of yellow into red phosphorus, 1907, A., ii, 681.

Wilhelm Zechentmayer, Karl. See Manchot

Zedner, Julian, chemical composition of the nickel oxide electrode in the Jungner-Edison accumulator, 1906, A., ii, 65.

chemical and physical behaviour of the nickel oxide electrode in the Jungner-Edison accumulator, 1906,

A., ii, 595.

nickel oxide electrode in the Jungner-Edison accumulator, 1908, A., ii, 12. Zedner, Julian. See also Otto Ruff.

Zedtwitz. (Graf) Armin. See Karl Andreas Hofmann.

Zegla, Paul, the diastatic ferment of the liver, 1909, A., ii, 329.

Zeh, Wilhelm. See Johannes D'Ans.

and Hermann Finger.

Zehenter, Josef, barium and lead uranyl acetates and the corresponding uranates, 1904, A., ii, 344.

o-hydroxytolylsulphone, 1912, A., i,

444.

Zehetmayr, A., estimation of sulphur in pyrites; roasted pyrites and sulphates, 1910, A., ii, 802.

Zehnder, Ludwig, volumenometer for small quantities of substance, 1903,

A., ii, 198.

Zeidler, Fritz. See Arthur Michael, and Robert Pschorr.

Zeidler, H. See Milan Josef Stritar. Zeidler, Karl. See Josef Herzig.

Zeisel, Simon, formation of cork, 1911, A., i, 768; 1912, A., i, 237.

Zeisel, Simon, and Béla von Bittó, condensation products of acetaldehyde containing six and ten atoms of carbon, 1908, A., i, 761.

Zeisel, Simon, and M. Daniek, conversion of isobutyl alcohol into a-methylglyceraldehyde, 1910, A., i, 92.

Zeisel, Simon, and Richard Fanto, estimation of glycerol in wines by the iodide method, 1904, A., ii, 95.

Zeisel, Simon, and A. Nowak, palladium hydroxylamines, 1907, A., ii, 276.

Zeisel, Simon, and Johann Wittmann, solanin, 1904, A., i, 80.

Zeitschel, [Franz] Otto, nerol and its preparation from linalool, 1906, A., i, 521.

[preparation of bornyl acetate], 1909, A., i, 245.

See also Arnold Blu-Zeitschel, Otto. mann, Albert Hesse, and Hugo von Soden.

Zeleny, Anthony. See John Zeleny.

Zeleny, John, and Roy H. Smith, vapour pressure of carbon dioxide at low temperatures, 1907, A., ii, 21.

Zeleny, John, and Anthony Zeleny, temperature of solid carbon dioxide and its mixtures with ether and alcohol at different pressures, 1907, A., ii, 152.

Zelikoff, Iwan, mechanism of the dehydration of menthol by organic acids, 1903, A., i, 184; 1904, A., i,

514.

Zelinsky, Nicolai D[mitrievitsch], synthesis of menthane- and camphanecarboxylic acids, 1903, A. i, 185.

Zelinsky, Nicolai D[mitrievitsch], new synthesis of camphorearboxylic acid, 1903, A., i, 229.

chemical rôle of catalysts. I., 1903,

A., i. 802.

preparation of organic acids from petroleum, 1904, A., i, 811. cyclononanone and cyclononane, 1907,

A., i, 780.

scission of the trimethylene ring by catalytic reduction, 1908, A., i, 15. cyclohexanylethyl alcohol and cyclo-

pentanylcarbinol, 1908, A., i, 727. cyclopentanecarboxylic acid chlorocyclopentane, 1908, A., i,

dehydrogenation by catalysis, 1911,

A., i, 958.

selective catalysis: a new tetrahydrobenzene [cyclohexene], 1911, A., i,

catalytic conversion of 1-methylcyclopentane-3-one into methylcyclopentane, 1911, A., i, 988.

catalytic reduction in a vacuum, 1911,

A., i, 988.

catalytic isomerisation of a-pinene,

1911, A., i, 997.

absorption of ultra-violet light by radioactive elements, and the degradation products of these elements, 1912, A., ii, 524.

Zelinsky, Nicolai D., A. Annenkoff, and J. Kulikoff, preparation of the free esters of amino-acids, 1911, A., i, 773.

Zelinsky, Nicolai D., and B. Arzibacheff, hexahydrophenylglycine, 1907, A., i, 691.

Zelinsky, Nicolai D., and Nikolaus Glinka, simultaneous reduction and oxidation by catalysis, 1911, A., i, 870.

Zelinsky, Nicolai D., and Alexander I. Gorsky, isomeric dihydrobenzenes and optically active dihydrotoluene, 1908, A., i, 619.

cyclohexadienes. II., 1908, A., i, 722. Δ1:3-dihydrobenzene [Δ1:3-cyclohexadi-

ene], 1911, A., i, 847.

Zelinsky, Nicolai D., and Johannes Gutt, new synthesis of suberic acid by means of organo-magnesium compounds, 1907, A., i, 676.

hexahydrobenzaldehyde, 1907, A., i,

constitution of cyclobutene, 1908, A., i, 14.

ethylcyclobutane, 1908, A., i, 617. abnormal products of the fission of cyclohexanecarboxylic acid, 1908, A., i, 638.

Zelinsky, Nicolai D., and N. Isgarischeff. electrolytic dissociation constants of cyclo-aliphatic acids, 1909, A., i, 26.

Zelinsky, Nicolai D., and Evgenij Ste panowitsch Prschevalsky, studies in the hexene and heptene series, 1908,

A., i, 845.

Zelinsky, Nicolai D., and Nicolai Andrée. vitsch Rosanoff, ultra-violet absorption spectra of nitro-compounds, 1911, A., ii, 1044.

Zelinsky, Nicolai D., and N. Schlesinger, 1:4-diaminohexahydroterephthalic acid, 1907, A., i, 704.

1:4-dihydroxyhexahydroterephthalic

acid, 1907, A., i, 704.

synthesis of a pyrrolinecarboxylic acid, 1907, A., i, 720.

behaviour of trimethylene dibromide towards zinc dust and acetic acid. 1908, A., i, 594.

Zelinsky, Nicolai D., and D. Schwedoff. ethvl hexahydrobenzoylacetate,

1907, A., i, 704.

saturated compounds of the cyclohexane group, 1908, A., i, 864. Zelinsky, Nicolai D., and George L.

Stadnikoff, a simple general method for the synthesis of a-amino-acids, 1906, A., i, 425. synthesis of alanine and α-amino-

butyric acid, 1908, A., i, 607.

synthesis of a aminonitriles, 1908, A., i, 770.

1-aminocyclopentane-1-carboxylic acid, 1911, A., i, 974.

Zelinsky, Nicolai D., and M. N. Ujedinoff, 1:2-dimethylcyclopropane, 1912, A., i, 16.

Zeller, Martin, and Alb. Jodlbauer, sensitisation of catalase, 1908, A., i, 239.

Zeller, Traugott, simple method of estimating the nitrogen as nitrates and nitrites in mixtures and in presence of organic matter, 1909, A., ii, 264. method of estimating very small amounts of nitrogen, 1910, A., ii, 70.

See also Walther Zeller. Traugott.

Borsche.

Zellner, Julius, the fatty oil of Sambucus racemosa, 1903, A., ii, 234.

fly agaric (Amanita muscaria), 1905, A., ii, 550; 1906, A., ii, 572; 1911, A., ii, 425.

chemistry of the higher fungi. I. Trametes suaveolens, 1908, A., ii.

chemistry of the higher fungi. III. Fungus diastase, 1909, A., i, 543.

chemistry of the higher fungi. Polyporus ignarius, 1909, A., ii, 175. Zellner, Julius, chemistry of the higher fungi. IV. Maltases and ferments which decompose glucosides, 1909, A., ii, 922.

chemistry of the higher fungi. V. blight (Ustilago Maize mandis tulasne), 1910, A., ii, 886.

chemistry of the higher fungi. Relations of the higher parasitic fungi and their substrate, 1910, A.,

chemistry of the higher fungi. VII. Hypholoma fasciculare, 1912, A., ii, 195.

chemistry of the higher fungi. VIII. Wheat rust (Tilletia levis and T. tritici), 1912, A., ii, 196.

Zellner, Julius. See also Wilhelm Heinisch.

Zeltner, Albert. See Hans Rupe.

Zeltner, Joseph, action of magnesium on esters of brominated fatty acids; new synthesis of \(\beta\)-ketonic esters, 1908, A., i, 243, 759.

synthesis by means of organo-metallic compounds, 1908, A., i, 401.

Zeltner, Joseph, and Sergius Nikolaivitsch Reformatsky, the action of magnesium on the esters of bromoacids and on a mixture of these esters and aldehydes, 1907, A., i, 23.

Zeltner, Joseph, and B. Tarassoff, preparation of ethers, 1910, A., i, 316.

Zembisky, K. See Leo Pissarjewsky. Żemczwznyj. See Schemtschuschny.

Zemjatschensky, Petr A., calcite from the Crimea, 1903, A., ii, 27. silicomagnesiofluorite, a new mineral from Finland, 1906, A., ii, 681.

Zemplén, Géza, surface tension aqueous solutions, 1906, A., ii, 728; 1907, A., ii, 155.

the distribution of urease in the higher

plants, 1912, A., ii, 674. Zemplén, Géza. See also Emil Abderhalden, Emil Fischer, and Hans Hugo Pringsheim.

Zemplén, Gyözö, determination of the coefficient of internal friction of gases by a new experimental method, 1906, A., ii, 272.

Constantin, magnesite Zengelis, Greece, 1903, A., ii, 28.

chemical reactions at very high temperatures, 1904, A., ii, 232. detection and estimation of minute

quantities of mercury, 1905, A.,

vaporisation of solid substances at the ordinary temperature, 1905, A., ii, 143; 1906, A., ii, 831.

Zengelis, Constantin, the periodic system and the methodical classification of the elements, 1906, A., ii, 276.

apparatus for dissolving and evaporating to dryness, 1907, A., ii, 128. conservation of weight, 1909, A., ii,

permeability of glass for vapours, 1910, A., ii, 504.

a delicate reaction for hydrogen, 1910, A., ii, 1106.

some lecture experiments, 1912, A., ii. 246.

Zenneck, Jonathan, the decomposition of nitrogen peroxide in the electrical glow, 1912, A., ii, 16.

Zenneck, Jonathan, and B. Strasser. decomposition of nitrogen peroxide in the electrical glow, 1912, A., ii, 127.

Zenovici, (Mlle.) Théodosie. See Stefan Minovici.

Zeppa, Pietro. See Luigi Balbiano. Zerban, Fritz, radioactive thorium, 1904,

A., ii, 41; 1905, A., ii, 170. Zerban, Fritz, and W. P. Naquin estimation of reducing sugars, 1908, A., ii, 902.

Zerban, Fritz. See also Charles Baskerville, and Karl Andreas Hofmann.

Zerbes, Georg, electrolytic reduction of difficultly reducible organic substances at thallium cathodes, 1912, A., ii, 1038.

Zerewitinoff, Th., quantitative estima-tion of hydroxyl groups by means of organo-magnesium compounds, 1907, A., ii, 509.

estimation of active hydrogen in organic compounds, 1908, A., i, 593.

crystalline compound of magnesium methiodide and amyl ether, 1908, A., i, 616.

organic salts of violuric acid, 1910, A., i, 143.

estimation of active hydrogen in organic compounds by means of magnesium methyl iodide, 1911. A., i, 101; 1912, A., i, 841.

estimation of moisture in various substances by means of magnesium methyl iodide, 1911, A., ii, 1026.

Zerewitinoff, Th., and Iwan von Ostromisslensky, barium oxide as a reducing agent; reduction of nitrobenzene to nitroso- and azo-benzene, aniline, phenazine, and ammonia, 1911, A., i, 849.

Zerner, Ernst, benzoyleuxanthone, 1910, A., i, 693.

ethyl derivatives of acetone, 1911, A., i, 523.

Zerner, Ernst, ethylation of acetone, 1911, A., i, 950.

Zerner, Ernst. See also Guido Goldschmiedt, Otto Morgenstern, and Carl L. Wagner.

Zerner, Theodor. See Carl Liebermann. Zernik, Franz, "exodin," 1904, A., i, 902.

stovaine, 1905, A., ii, 491.

Zernik, Franz. See also Carl Mannich. Zernoff, Wladimir, α-iodopropionic acid, 1904, A., i, 136, 216.

Zeschko, Ludwig, a new chemical theory, 1903, A., ii, 590.

Zeynek, Richard (Ritter) von, blue colouring matter from the fins of Crenilabrus pavo, 1903, A., i, 304.

the homogeneous nature of hematin and attempts to remove iron from blood colouring matter, 1907, A., i, 167.

pyridine compound of hæmochrom-

ogen, 1911, A., i, 95.

chemical investigation of atheromatous aortæ; composition of deposits in calcified aortæ, 1911, A., ii, 219.

Zeynek, Richard von. See also Emil Zdarek.

Zickendraht, Hans, surface tension of fused sulphur, 1906, A., ii, 846.

fluorescence of sodium vapour, 1908, A., ii, 910.

investigation of the sodium spectra, 1910, A., ii, 171.

Zickgraf, Goswin, oxidation of lysine, 1903, A., i, 13.

estimation of iron in urine, 1903, A., ii, 46. oxidation of gelatin by permanganate,

1904, A., i, 462.

Zickgraf, Goswin. See also Friedrich Kutscher.

Ziegenbein, Hans, evaluation of digitalis leaves, 1903, A., ii, 118.

Ziegler, Hugo. See Otto Fischer. Ziegler, J. See Heinrich Bechhold. Zieglwallner, F. See H. Erhard.

Zielstorff, Willy [Adalbert Karl], action of calcium cyanamide, 1905, A., ii, 477.

Zielstorff, Willy. See also August Morgen, and F. Westhausser.

Ziem, Max. See Ernst Deussen. Zienkowski, Franz. See Stefan Moycho, and Georg Wagner.

and Georg Wagner. Zieren, A. See David Reichinstein. Ziersch, Paul, carbazole derivatives, 1909, A., i, 961.

Ziersch, Paul. See also Emil Fromm.
Zies, Emanuel George. See Harmon Northrop Morse.

Ziesel, Max. See August Michaelis. Ziffer, Friedrich. See Alfred Eisenstein.

Zilg, Adalbert. See August Michaelis. Zilkens, Franz. See Alfred Werner.

Zilwa, Lucian Arnold Emmanuel de, composition of pancreatic juice, 1904, A., ii, 574.

Zimányi, Karl, vashegyite, a new basic aluminium phosphate from Hungary, 1909, A., ii, 900.

variscite, from Vashegy, Hungary, 1910, A., ii, 307.

Zimmer & Co. See Vereinigte Chininfabriken Zimmer & Co.

Zimmer, Max. See Erwin Rupp.

Zimmer, Otto, viscosity of ethylene and carbon monoxide and its variation at low temperatures, 1912, A. ii, 627.

Zimmerli, Adolf. See Martin Onslow Forster.

Zimmermann, Friedrich. See Wilhelm Biltz, Hartwig Franzen, Paul Jannasch, and Rudolf Schenck.

Zimmermann, Hermann. See Alexander Herzfeld.

Zimmermann, Max Richard, isonitrosobenzyl cyanide, 1903, A., i, 91.

Zimmermann, Max Richard. See also Richard Möhlau.

Zimmermann, Richard. See Leon Asher. Zimmermann, Rudolf. See Max Siegfried.

Zimmermann, Siegfried, metallic nitrosocompounds and nitric oxide, 1906, A., ii, 82.

Zinberg, S., estimation of copper in steels, 1912, A., ii, 299.

Zincke, [Ernst Carl] Theodor, dinitrophenylpyridinium chloride and its products of change, 1904, A., i, 448; 1905, A., i, 467.

action of bromine and chlorine on phenols; substitution products, ψ bromides, and ψ -chlorides. XVI. Hexabromo- ψ -bromide of p-isopropylphenol, 1906, A., i, 737.

action of pyridine on 2-chloro-3:5dinitrobenzoic acid, 1910, A., i, 556. new series of aromatic sulphur com-

pounds, 1911, A., i, 368. trinitrophenylpyridinium chloride,

1912, A., i, 303.

constitution of the bromides of pisopropylphenol and p-sec.-butylphenol, 1912, A., i, 443.

sulphur aryl chlorides [aryl chlorothiols], 1912, A., i, 762.

action of nitric acid on halogen derivatives of o-alkylphenols, 1912, A., i, 964.

Zincke, Theodor, and Edmund Birschel. action of bromine and chlorine on phenols; substitution products, bromides, and ψ -chlorides. XX XXIV. Tetrachloro- and tetrabromodihydroxybenzhydrol and their transformation products, 1908, A., i, 781.

Zincke, Theodor, and Karl Böttcher, tetrabromo-p-cresol ψ-bromide.

XV., 1906, A., i, 166.

tetrachloro-p-cresol V-chloride. XVIII., 1906, A., i, 739.

Zincke, Theodor, and Wilhelm Breitwieser, action of nitric acid on halogen derivatives of o-alkylated phenols. II., 1911, A., i, 215.

Zincke, Theodor, and Wilhelm Broeg, pentachloro- and heptachloro-m-

hydroxybenzaldehyde, 1909, A., i, 33. Zincke, Theodor, and Rudolf Brune, quinonoid sulpho-derivatives, 1908, A., i, 336.

sulphur derivatives of o-cresol, 1911,

A., i, 197.

Zincke, Theodor, and Max Buff, hydroxytoluic acids. II. 4-Hydroxy-otoluic acid, 1908, A., i, 643.

Zincke, Theodor, Max Buff, and Wilhelm Emmerich, action of nitric acid on the halogen derivatives of p-alkylphenols. II. Action of nitric acid on the bromoderivatives of p-cresol, 1905, A., i, 879.

Theodor, Ernst Ellenberger, Adolf Kuchenbecker, Philipp Malkomesius, and Anton Maué, action of nitric acid on aminosulphonic acids; nitroamines, diazo-compounds,

indazoles, 1905, A., i, 486. Zincke, Theodor, and Fr. Farr, sulphur o-nitrophenyl chloride [o-nitrochlorothiolbenzene] and its transformation

products, 1912, A., i, 763.

Zincke, Theodor, and Hans Fischer, hydroxytoluic acids. I. 4-Hydroxy-o-toluic acid, 1907, A., i, 132.

Zincke, Theodor, and Karl Fries, action of bromine on p-dihydroxystilbene,

1903, A., i, 178.

action of chlorine on di-p-hydroxystilbene and di-p-aminostilbene, 1903, A., i, 179.

action of chlorine on di-p-aminotolane and tetrachlorodi-p-hydroxytolane, 1903, A., i, 181.

2:3-dihydroxynaphthalene, 1904, A.,

i, 1008.

Zincke, Theodor, and Wilhelm Frohneberg, dithioquinol, 1909, A., i, 643. p-thioeresol, 1910, A., i, 314.

Zincke. Theodor, Wilhelm Frohneberg, and J. Kempf, action of bromine and chlorine on phenols: substitution products, \u03c4-bromides and \u03c4-chlorides. XXV. A ψ -bromide from p-cresol containing sulphur and its transforma-

tions, 1911, A., i, 439. Zincke, Theodor, and Wilhelm Geibel, bromine derivatives of p-hydroxystilbene. XIX., 1906, A., i, 739. condensation products of m- and p-

cresol with acetone, 1912, A., i, 442. Zincke, Theodor, and Wilhelm Glahn,

preparation of quinonoid sulphur compounds, 1907, A., i, 698.

Zincke, Theodor, and Johannes Goldemann, action of bromide and chlorine on phenols: substitution products, ψ-bromides and ψ-chlorides. XXIII. Action of bromine on di-p-hydroxyphenylmethylethylmethane: \u03c4bromides and quinones of p-sec. - butyl-

phenol, 1908, A., i, 780.

Zincke, Theodor, and Max Grüters, action of bromine and chlorine on phenols: substitution products, bromides and \u03c4-chlorides. XIV. Action of bromine on p-diphenoldimethylmethane : 4-bromides and quinones of p-isopropylphenol, 1906,

A., i, 172. Zincke, Theodor, and O. Hahn, action of bromine and chlorine on phenols; action of bromine on isoeugenol (3-methoxyp-propylenephenol), 1904, A., i, 41.

Zincke, Theodor, and August von Hedenström, action of bromine and chlorine on phenols: substitution products, ψ bromides, and V-chlorides. XX. Action of bromine on o-cresol, 1907, A., i, 124.

Theodor, Kurt Henke, W. Zincke, Wollenberg, and E. Wugk, action of bromine on the alkyl and aryl derivatives of di-p-hydroxydiphenylmethane, 1909, A., i, 23.

Zincke, Theodor, G. Heuser, and Wilhelm Möller, dinitrophenylpyridinium chloride and its products of change,

1904, A., i, 921.

Zincke, Theodor, and Conrad Hohorst, action of bromine chlorine on phenols: substitution products, \u03c4-bromides and \u03c4-chlorides. XXII. ο-ψ-Bromides and o-methylenequinones from o-hydroxyisoduryl alcohol, 1907, A., i, 614.

Zincke, Theodor, and Leopold Hunke,

action of tertiary amines on tetrachloro-p-cresol ψ-bromide. XVII.,

1906, A., i, 738.

Zincke, Theodor, and P. Jörg, p-aminothiophenol [p-aminophenyl mercaptan], 1909, A., i, 789; 1911, A., i, 39, 285.

Zincke, Theodor, and J. Kempf, sulphur derivatives of p-cresol, 1911, A., i,

287.

Zincke, Theodor, and Wilhelm Klostermann, action of nitric acid on halogen derivatives of o-alkylphenols, 1907,

A., i. 322.

Zincke, Theodor, and R. Krügener, action of bromine and chlorine on phenols: substitution products, 4bromides, and ψ -chlorides. X. Action of bromine on p-dihydroxydiphenylmethane, 1904, A., i, 401.

Zincke, Theodor, and Adolf Kuchenbecker, action of bleaching powder on diazo- and isodiazo-compounds,

1904, A., i, 455.

action of hydrogen chloride and hydrogen bromide on azobenzenedisulphonic acids, 1904, A., i, 458.

Zincke, Theodor, and Kurt Heinrich Meyer, transformation of cyclopentene derivatives into indene derivatives,

1909, A., i. 591.

Zincke, Theodor, and Gottfried Mühlhausen, hydroxybenzylideneacetone and dihydroxydibenzylideneacetone, 1903, A., i, 265.

additive compounds of hydrogen bromide and aromatic carbonyl compounds, 1905, A., i, 289.

arvlamine derivatives of furfuraldehyde and their conversion into pyridine compounds, 1906, A., i,

Zincke, Theodor, and Siegmar Münch, action of bromine and chlorine on phenols: substitution products, \u03c4bromides and \psi-chlorides. XII. ψ-Bromo-p-dihydroxystilbene, stilbenequinone, and their products, 1905, A., i, 55.

Zincke, Theodor, and Wilhelm Pfaffendorf, tetrachloro-o-cresol and its conversion into perchloroindone, 1912,

A., i, 964.

Zincke, Theodor, and Wilhelm Prenntzell, action of o-nitrobenzaldehyde on dimethylaniline in presence of hydrochloric acid, 1906, A., i, 110.

Zincke, Theodor, and Hans Reinbach, action of nitrie acid on tri- and tetrabromo-p-ethylphenols, 1905, A., i,

Zincke, Theodor, and Heinrich Rollhaüser, 4-amino-o-tolyl mercaptan, 1912, A., i, 549.

Zincke, Theodor, and Ernst Scharff, ketochlorides and quinones of heterocyclic compounds and their transformation products. III. Ketochlorides and quinones of phenyl-4-aziminobenzene [2:1:3-benzotriazole], 1910, A., i, 140.

Zincke, Theodor, Wilhelm Schneider, and Wilhelm Emmerich, action of nitric acid on halogen derivatives of p-alkylphenols. I. Chloro-derivatives of p-cresol and their behaviour towards

nitric acid, 1903, A., i, 756.

Zincke, Theodor, and Friedrich Schreyer, dinitrophenylpyridinium chloride and its transformation products. V. Action of acetic anhydride on pyridine dye bases, 1907, A., i, 625.

Zincke, Theodor, and Franz Schütz, 4amino-1-naphthyl mercaptan, 1912,

A., i, 257, 348.

Zincke, Theodor, and Franz Schwabe, 4-hydroxy-1:4-dimethyl-1-trichloromethyldihydrobenzene, 1908, A., i,

tribromoresoquinone, 1909, A., i, 241. Zincke, Theodor, and Karl Siebert, action of o-nitrobenzaldehyde on phenols in presence of hydrogen chloride, 1906, A., i, 515.

Zincke, Theodor, and Rüdger Suhl, action of carbon tetrachloride and aluminium chloride on p-cresol and its derivatives,

1908, A., i, 37.

Zincke, Theodor, and Willi Tropp, ditertiary alcohols from phenanthraquinone, 1908, A., i, 786.

diacetophenone, dideoxybenzoin, and

dibenzil, 1909, A., i, 35.

Zincke, Theodor, and Hans Wagner, action of bromine and chlorine on phenols; substitution-products, ψbromides and \u03c4-chlorides; tetrachlorop-dihydroxytolane, 1905, A., i, 342.

Zincke, Theodor, and Wilhelm Walter, action of bromine and chlorine on phenols; substitution products, ψ-bromides, and ψ-chlorides. XI. Action of bromine on 4-hydroxydiphenylmethane, 1904, A., i, 1005.

Zincke, Theodor, and G. Weisspfenning, action of pyridine on 1:3-dichloro-4:6-dinitrobenzene, 1910, A., i,

585.

4:6-dinitrophenyl-1:3-dipyridinium chloride and 4:6-dinitro-3-aminopyridinium chloride, 1912, A., i, 302.

action of hydrogen sulphide on dinitrophenylpyridinium and dinitrophenyldipyridinium chlorides, 1912, A., i, 302.

Zincke, Theodor, and Walter Würker, action of secondary aromatic amines on dinitrophenylpyridinium chlor-

ide, 1905, A., i, 241.

dinitrophenylpyridinium chloride and its transformation products. IV. The action of aliphatic amines on dinitrophenylpyridinium chloride, 1905, A., i, 923.

Zincke, Theodor, and E. Wugk, action of chlorine, bromine, and nitric acid p-hydroxytetraphenylmethane,

1909, A., i, 22.

Zincke, Theodor, and Kurt Zahn, 1:2phenylmethylglycols [a-phenylpropylene aß-glycols], 1910, A., i, 316.

Zinewsky, Saul. See Alexei

Faworsky.

Zinggeler, Ernst. See Alfred Werner. Zink, Josef, condensation of naphthalaldehydic acid with ketones, 1903, A., i, 172.

Zink, Julius, detection of heated milk by means of the guaiacum test, 1903,

A., ii, 458.

Zink, William A. H. See Arthur E. Hill.

Zinke, Gustav, experimental investigation of some metasilicates, 1912, A., ii,

Zinn, J. B. See Harmon Northrop Morse. Zinno, Silvestro, synthesis of tartaric acid, 1904, A., i, 12.

Zinsser, Adolf, extent to which fats are decomposed in the stomach, 1905, A., ii, 732.

Zinsser, Gustav. See Robert Stollé. Zipfel, Hugo, indole reaction, 1912, A., ii, 793.

Zipkin, M., white precipitate, 1910, A.,

Zipser, Arthur, condensation products of rhodanic acid and allied substances with aldehydes, 1903, A., i, 273.

Zipser, Arthur. See also Rudolf Andreasch.

Zipser, W. See Alfred Werner.

Zirker, J. N., top-dressing with magnesium sulphate, 1908, A., ii, 625. Zirngibl, E. See Andreas Lipp.

Zisterer, Josef, the difference in nutritive value of proteins in relation to their

composition. I., 1910, A., ii, 425. Zisterer, Josef. See also Erwin Voit. Zitek, Artur. See Robert Kremann. Zitelmann, Georg. See Carl Paal.

Zitowitsch, the effect of alcohol on digestion, 1908, A., ii, 404.

Zivkovič, Petar, new method of formation of ethers of glycerol and phenols, 1910, A., i, 245.

Żłobicki, Ladislas, the influence of radium on the electrolytic conductivity of colloidal solutions, 1908, A., ii, 451.

Marguerite. See Zlokasoff. Ullmann.

nerzlikar, Franz, constitution of α-pyrocresol, 1910, A., i, 763. Zmerzlikar, Zobel, Samuel. See William Alexander

Osborne.

See Fritz (Edler) von Zöhls, Arthur. Konek-Norwall.

Zöller, Heinrich. See Kurt Brand. Zoellner, Clemens. See Walter Kropp.

Zörnig, Willy. See Arthur Kötz. Zoethout, William D., effects of salts on the tonicity of skeletal muscle, 1904, A., ii, 190.

production of contact irritability without the precipitation of calcium

salts, 1904, A., ii, 190.

influence of electrolytes on muscular tone, 1904, A., ii, 272.

the influence of sodium chloride and calcium chloride in the potassium contraction, 1909, A., ii, 251.

Zohlen, Otto, action of methyl sulphate on Michler's ketone and on auramine,

1903, A., i, 118.

Zoja, Ludwik, physico-chemical investigation of the reactions between eggalbumin and acetic acid, 1909, A., ii, 130.

Zoneff, Nikolaus. See Pavel

Petrenko-Kritschenko.

Zopf, Wilhelm [Friedrich], compounds from lichens, 1903, A., i, 762; 1904, A., i, 1020; 1905, A., i, 212, 789; 1906, A., i, 672; 1907, A., i, 218.

fern secretions. I. Glandular secretions of Gymnogramme chrysophylla and G. calomelanos, 1906, A., i, 871.

chemical monograph of the Cladoni-

aceæ, 1908, A., ii, 526.

XVII. compounds from lichens. Substances present in lobulated lichens (Peltigeraceae), 1909, A., i,

Zoppellari, Ivo, relation of electrolytic dissociation to refractive power: nonelectrolytes in solution, 1905, A., ii, 493.

See Mieczyslaw Centners-Zoppi, M. zwer.

Zorin. See Nicolai N. Ljubavin.

Zorn, L. See Victor Grignard.

Zortman, Israel Hyman, See Julius Berend Cohen, and Arthur Hantzsch. Zotier, V., volumetric estimation of phenolphthalein, 1911, A., ii, 163.

Zrzawy, Julius, modified gas-burettes. 1905, A., ii, 55.

Zschimmer, Eberhard, physical properties of glass as functions of the chemical composition, 1905, A., ii,

Zsigmondy, Richard, amicroscopic gold

nuclei. I., 1906, A., ii, 679. separation of silver by colloidal gold from reduction mixtures containing silver. II., 1906, A., ii, 679.

the structure of the gel of silicic acid; the theory of dehydration, 1911,

A., ii, 880.

Zsigmondy, Richard, and Wilhelm Bachmann, jellies; ultramicroscopic study of soap solutions and jellies, 1912, A., ii, 1149.

Zsigmondy, Richard, Wilhelm Bach-mann, and (Miss) Elizabeth Findlay Stevenson, apparatus for determining the vapour-pressure isothermals of the gel of silicic acid, 1912, A., ii, 641.

Zsigmondy, Richard, and Richard Heyer, the purification of colloids by dialysis, 1910, A., ii, 942.

a new dialysor, 1911, A., ii, 260.

Richard, Ernst Wilke-Zsigmondy, Dorfurt, and Antoni von Galecki, application of ultra-filtration to analytical chemistry, 1912, A., ii, 382.

Zsigmondy, Richard. See also Friedrich

Nicolaus Schulz.

Zsuffa, Milan, some derivatives of acenaphthenequinone, 1910, A., i, 861.

Zsuffa, Milan. See also Carl Liebermann.

Zubkowskaia, (Mme.) N., conditions of equilibrium in the system: zinc sulphate-ammonia-water, 1907, A., ii, 940.

Zublena, Silvio, transformations of the quinine salt of isobutyldicyanogluta-

conimide, 1906, A., i, 983.

Zuboff, Pawel Vasilevitsch, determination of the heats of combustion of alcohols of the aliphatic series and of an oxime, 1904, A., ii, 159.

determination of the heat of combustion with the calorimetric bomb by Berthelot's method, 1904, A., ii,

382.

use of oxygen, prepared electrolytically, in experiments with Berthelot's calorimetric bomb, 1907, A., ii, 230.

Zucchi, S., iron in diabetic urine, 1905, A., ii, 469.

Zuckmayer, F., the uptake and value of calcium and phosphoric acid in the intestine, 1912, A., ii, 1069.

Zulkowski, Karl, and Franz Cedivoda. decomposition of insoluble calcium phosphates by ammonium citrate solutions, 1903, A., ii, 451.

Zumbusch. Emilie. Ludwig

Vanino.

Zumbusch, Leo (Ritter) von, characterisation of the sarcommelanin of man. 1903, A., i, 217.

analysis of vernix caseosa. I., 1909, A., ii, 505.

Zumpfe, Karl, action of dilute sulphuric acid on butyronepinacone, 1904, A., i,

Zunino, Virgilio, action of potassium hydroxide on epichlorohydrin in presence of monohydric phenols, 1909, A., i, 299.

Zuntz, Nathan, specific dynamic action of proteins, 1908, A., ii, 606.

an explanation of Chauveau's experimental results, which indicate the diminished value of fats as compared with carbohydrates as source of energy in muscular work, 1912, A., ii, 1069.

Zuntz, Nathan. See also Adolf Loewy. Markoff, and Hermann von

Schrötter.

Zunz, Edgard, digestion and absorption in the stomach and small intestine, 1903, A., ii, 159.

surface tension and adsorption, 1909,

A., ii, 976.

the proteoses, 1911, A., i, 1050.

amount of aliphatic amino-nitrogen in the blood of mammals and its proteoclastic power, 1912, A., ii, 851.

Zurbriggen, B. See Augustin Bistrzycki.

Zurkowski, B. See Léon Marchlewski. Zwayer, Felicia, Stanislaus von Kostanecki, and (Frl.) M. Szwejkowska, function of the double chromophore CO·C:C, 1908, A., i, 443.

Zweifel, Paul, the poison of eclampsia, 1906, A., ii, 472.

Zwerger, Rudolf, action of bromine on the isomeric cinchonine bases, 1903, A., i, 513.

action of chloralammonia on ethyl disodiomalonate, 1904, A., i, 91.

See also Zdenko Zwerger, Rudolf. Hanns Skraup.

Zwiauer, Karl. See Adolf Franke. See Alexander Zwicker, Hermann. Gutbier.

Zwicky, K. See Emil Bosshard.

Zynen Wartel, H. G. F., phytochemical observations regarding hydrocyanic acid, 1907, A., ii, 289.

CORRECTIONS.

Alexandroff, A. See Th. Rudakoff, and Vetcheslav E. Tistschenko, should be Vetscheslav E. Tischtschenko.

Angelo, Antonino d'. See Angelo Angeli, and Vincenzo Castellana, should be See Angelo Angeli, Vincenzo Castellana, and Alberto Peratoner. Aston, Francis William, and Hubert E. Watson, should be Herbert Edmeston

Watson.

Bischoff, Carl Adam, Eduard Bilsen, . . . Johann Teletoff, should be Ivan Teletoff.

Brunner, Heinrich, and V. Vuillellmier, should be V. Vuilleumier.

Centnerszwer, Miccayslaw, and Johann Teletoff, should be Ivan Teletoff. Coehn, Alfred, and Alexandra Wassiljewa, should be Alexandra Feofiluktovna

Vasilieva. Cox, Alvin Joseph. See also . . . John Maxson Stillmann, should be Stillman.

D'Angelo, A., should be Angelo, Antonino d',

De Souza, David Henriques, add protection of trypsin from destruction by heat, 1912, A., i, 60.

Doroschewsky, Antony G., and Adam W. Rakowsky, should be Adam Vladimirovitsch Rakowski.

Duclaux, Jacques, and (Mme.) E. Wollmann, should be (Mme.) E. Wollman.

Ehrlich, Felix, and P. Pistschimuka, should be P. S. Pishtschimuki.

Federoff, Eugraph Stepanowitsch von, should be Evgraph Stepanowitsch von. Finnemore, Horace, the constituents of Canadian hemp. Part II., Cynotoxin; preliminary note, 1909, P., 76, should be P., 77. Folli. See Paul Pellaccani, should be Paul Pellacani.

Grigoréeff, A. A. See Vetchesláv E. Tistshenko, should be Vetschesláv E. Tischtschenko.

Grigoréeff, G. N. See Vetcheslúv E. Tistshenko, should be Vetscheslúv E. Tischtschenko.

Gushoff, M. See Vetcheslav E. Tistshenko, should be Vetscheslav E. Tischtschenko.

Hofmann, H. O., and W. Mostowisch, should be Wl. Mostowitsch.

Jones, Walter. See also . . . Carl Vögtlin, should be Carl Voegtlin. Junghans, Erhard, should be Junghaus, Erhard.

Konowaloff, W. K. See Wladimir W. Tschelinzeff, should be Wladimir Tschelinzeff.

Konstantinoff, Nicolaus S., and Wladimir A. Smirnoff, should be Wladimir I. Smirnoff.

Kraale, G., should be Kraule, G.

Krasowsky, N. See also Nicolai A. Waljaschko. should be Nicolai A. Waliaschko. Kurnakoff, Nicolai S., and Nicolaus J. Stepanoff, should be Nikolas Ivanowitsch Stepanoff.

Lo Surdo, Antonino, supposed change in weight during chemical reactions, 1904, A., ii, 720, should be 1904, A., ii, 720; 1907, A., ii, 445.

Makower, Walter, and Sydney Russ, should be Sidney Russ.

Manguba, B. V. See Hypolyt A. Trephilieff, should be Ippolit Alexejevitsch Treflieff.

Markownikoff, Wladimir W., and Wladimir Smirnoff, should be Vasili Alexandrovitsch Smirnoff.

Münziger, A., should be Münzinger, A.

Neuberg, Carl, and Hugo Pollak, should be Hermann Pollak.

Pfeiffer, Paul, A. Fornet, . . . and Iuser Spiro, should be Luser Spiro.

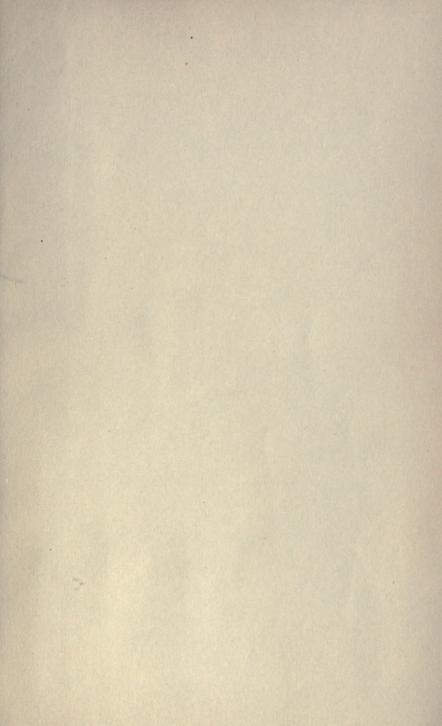
Phelps, Isaac King, and Edward Ward Tillotson, should be Edwin Ward Tillotson.

Rabtsevitsch-Zubkovsky, I. L. See also Vetchesláv E. Tistschenko, should be Vetschesláv E. Tischtschenko.

Reijst, J. J. See also H. P. Wijsman, should be H. P. Wysman.

Schmidt, Ernst, Dirk Hendrik Brauns, and Nicolai A. Waljaschko, should be Nicolai A. Waliaschko.







Chemical Society, London Journal

C6

Index A 1903-12 cop.3

Physical & Applied Sci.

Serials

PLEASE DO NOT REMOVE CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY



